Seattle-Tacoma International Airport

Safety Management System Manual

This approval pertains to all contents of this manual as presented by the Seattle-Tacoma International Airport Operations Department.

Accountable Executive initials are only applicable to represent documented changes within the Manual. All pages not carrying a revision date are original and carry the date of:

9 February 2023

DRAFT

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Page Amendment Log

Date of Amendment	Page(s) Changed and Description	Airport Approval	Agency Approval

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Definitions

Aircraft accident – An occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight and all such persons have disembarked, and in which any person suffers death or serious injury, or in which the aircraft receives substantial damage. As defined in title 49 CFR 830.2

Accountable Executive – A person designated by the airport to act on its behalf for the implementation and maintenance of the airport's Safety Management System. The accountable executive has sufficient control of the airport's human and financial resources for airport operations to enact mitigations and change cultural norms. The Accountable Executive retains ultimate responsibility for the safety performance

Airport Safety Management System – An integrated collection of processes and procedures that ensures a formalized and proactive approach to system safety through risk management

Behavior Based Safety - Creates a partnership between the organization and its employees that focuses on a positive "want to be safe" attitude to instill ownership and accountability toward personal and co-worker safety. Shapes the environment and attitudes to establish a common language and concern for safety.

Gap Analysis – A comparison between existing systems, processes, and procedures and SMS requirements

Hazard – A condition that could foreseeably cause or contribute to an accident, incident, injury or damage to an individual, equipment or property

Hazard Assessment – A systematic, comprehensive evaluation of a change, operation, system, or safety issue

Incident – An occurrence other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operations. As defined in title 49 CFR 830.2

Movement Area –The runways, taxiways, and other areas of an airport that are used for taxiing, takeoff, and landing of aircraft, exclusive of loading ramps and aircraft parking areas. As defined in title 14 CFR 139.5

Non-movement Area – The area, other than that described as the movement area, used for the loading, unloading, parking, and movement of aircraft on the airside of the airport (including ramps, apron areas, and on-airport fuel farms)

Operational Safety Risk Management (OSRM) - The day-to-day, operationalized implementation, application, and practice of SRM at SEA

Responsible Executive – The Responsible Executive is directly responsible to the Accountable Executive for the day-to-day operations of the SMS and has the responsibility and authority to oversee the quality of the Safety Management System, and establish and modify the policies, procedures, and practices of the system

Risk – The composite of predicted severity and likelihood of the potential effect of a hazard. Severity is the measure of how bad the results of an event are predicted to be; usually determined by the worst credible outcome. Likelihood is the estimated probability or frequency, in quantitative or qualitative terms, of a hazard's effect; it is often an expression of how often an effect is expected to occur

Risk Analysis – The process during which a hazard is characterized for its likelihood and the severity of its effect or harm. Risk analysis can be either quantitative or qualitative; however, the inability to quantify or the lack of historical data on a particular hazard does not preclude the need for analysis

Risk Mitigation – Any action taken to reduce the risk of a hazard's effect

Safety - "The state in which the possibility of harm to persons or of property damage is reduced to, and maintained at or below, an acceptable level through a continuing process of hazard identification and safety risk management." - ICAO SMM Third Edition, 2012

Safety Assurance – The process management functions that evaluate the continued effectiveness of implemented risk mitigation strategies, support the identification of new hazards, and function to systematically provide confidence that an organization meets or exceeds its safety objectives through continuous improvement

Safety Evaluation – Procedures to monitor performance with safety objectives, SMS requirements, or initiatives

Safety Objectives – A measurable goal or desirable outcome related to safety

Safety Policy – The statement and documentation adopted by the airport that defines its commitment to safety and provides its overall safety vision

Safety Promotion – The combination of safety culture, training, and communication activities that support the implementation and operation of an SMS

Safety Risk Management (SRM) – A formal process within an SMS that describes the system; identifies the hazards; and analyzes, assesses, and mitigates the risk

System – Interrelated parts or components that interact to produce a desired outcome

Acronyms

AC	Advisory Circular	GSE	Ground Service Equipment
ACM	Airport Certification Manual	GSP	Ground Service Provider
ACRP	Airport Cooperative Research Program	ICAO	International Civil Aviation Organization
FAA	Federal Aviation Administration	POS	Port Of Seattle
FBO	Fixed-Base Operator	PPS	Project Proposal Summary
FOD	Foreign Object Debris or Damage	SMS	Safety Management Systems
FOIA	Freedom Of Information Act	SPI	Safety Performance Indicator
GIS	Geographical Information Systems	SRM	Safety Risk Management

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Section 1

Introduction

1.0 SMS Manual Purpose Introduction

This Safety Management System (SMS) manual provides the framework for Seattle-Tacoma International Airport's (SEA) SMS program. This manual establishes a systems approach to safety management which benefits both the safety and business aspects of SEA. It describes the essential components of SMS and incorporates the International Civil Aviation Organization (ICAO) and Federal Aviation Administration (FAA) policies for airport SMS.

This Manual contains the organization, responsibilities, standards, policies, processes and procedures required to implement and operate an SMS at the Seattle-Tacoma International Airport (SEA).

1.1 Applicability

All individuals with access to the movement and non-movement areas of the airport must follow the policies and procedures identified in this Manual. Every individual with this access has a responsibility for safety. All tenants will ensure that employees with access to the areas identified in Section 1.2 receive proper training or awareness of their roles and responsibilities under the airport's SMS.

1.2 Scope

All processes and procedures developed under SEA's SMS apply to the movement and non-movement area. SMS initiatives do not apply, at this time, to landside operations including inside the terminals.

1.3 Use and Distribution

This Manual is available in support of SEA's SMS via the Port of Seattle's (POS) external and internal websites. Manual changes and alerts will be announced during the monthly SEA Safety Manager's Committee, Station Manager's meeting and via e-mail. It is each stakeholder's responsibility to have readily available access to the most current version of the manual via electronic or hard copy means. .

1.4 Authority

The SMS program operates under the authority of the POS' Aviation Division Airport Operations Department. All comments, questions, and concerns should be addressed to the SMS Manager.

1.5 Introduction to SMS

1.6.1 What is SMS?

According to the draft Advisory Circular 150/5200-37A (2012), SMS is defined as a "systematic approach to managing safety, including the necessary organizational structures, accountabilities, policies, and procedures." More specifically, SMS is a systematic, comprehensive process for managing risks and safety via a data driven, business-oriented approach. SMS sets goals, implements policies, develops processes, and tracks and measures performance. It concerns itself with organizational safety rather than strictly conventional health and safety issues. The functional result of SMS is to proactively manage risk, detect and correct safety hazards before they result in an accident or incident, and reduce the impact/cost of incidents. SMS is a quality management system for Safety.

SMS is comprised of 4 components including 1) Safety Policy, 2) Safety Risk Management, 3) Safety Assurance, and 4) Safety Promotion. A brief overview of the 4 components is presented in Figure 1 and the following paragraphs.

Figure 1 - SMS Components

1) Safety Policy: (See Section 2) Policy serves as the overarching guide to SMS and includes the development of the oversight and objectives of the SMS program including top management's commitment to safety and the invitation to all stakeholders to also participate in the program. Policy also includes responsibilities and accountabilities for the Accountable Executive, SMS Manager, and other divisions/departments identified in airport's safety organizational structure, as well as a definition of duties for safety committees and their participants. In addition, Policy outlines the method in which data

will be collected, analyzed, and reported within the organization in relation to the safety objectives.

2) Safety Risk Management (SRM): (See Section 3) SRM is a set of standard processes to identify hazards formally in a proactive manner, analyze and assess potential risks, and design appropriate risk mitigations. The SRM processes and procedures should be scalable as appropriate for the airport's operating environment. SRM processes should also promote communication among stakeholders and a positive safety culture within and around the airport.

3) Safety Assurance: (See Section 4) Assurance serves as the checks and balances for the SMS. This is done by establishing processes and procedures to review and verify the effectiveness of the SMS program. This should be done by implementing and monitoring safety performance indicators, establishing a confidential hazard reporting system, and reporting pertinent safety information to the Accountable Executive. A key outcome of Assurance is continuous safety improvement.

4) Safety Promotion (Culture): (See Section 5) Promotion establishes processes to foster a safety culture to include safety training for all individuals with access to the airfield and communication of important safety information. Through these efforts, all individuals will understand their responsibilities under the SMS and accept and trust SMS initiatives. Safety culture is not easy to quantify, but an airport will know it is headed in the right direction when people report hazards.

1.6.2 Just Culture: Concept and Philosophy

A just culture balances the need for an open and honest reporting environment with a quality learning environment and culture, and is dependent on the willing participation of the workforce to report their errors and incidents.

Just culture requires a change in focus from errors and outcomes to system design and management of the behavioral choices of all employees. That in many cases, individual actions are indicative of an underlying systemic/organizational gap or an environment in which unsafe practices or actions are uninterrupted or unchallenged. Such gaps can include;

- Rule breaking for organizational benefit
- Acceptance of practices away from safe operating standards or unchallenged reckless behavior
- Overemphasizing operational performance above safety
- A lack of interventions or controls to support safe operations (supervision)
- Rushed or insufficient training or assuring sufficient proficiency

To accomplish this balance, an atmosphere of trust is needed, in which people are encouraged to provide essential safety-related information, and which is clear about where the line is drawn

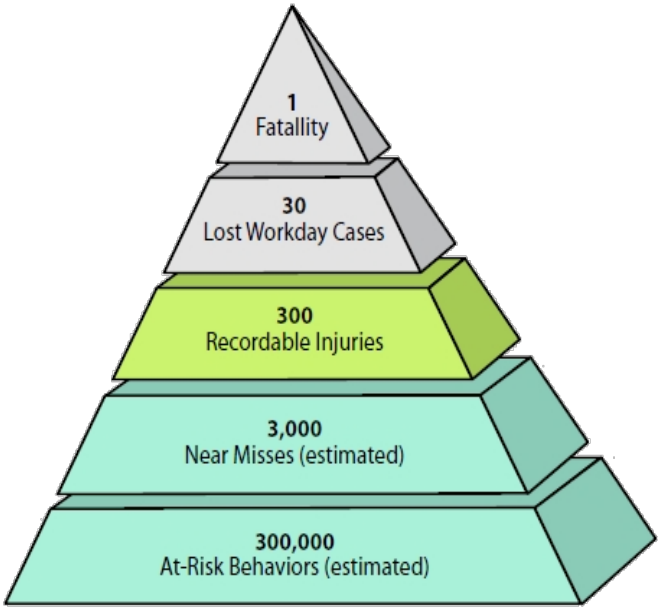
between acceptable and unacceptable behavior. SEA's SMS is intended to accomplish such a balance and has incorporated the following practices to support this philosophy:

- **Behavior Based Safety** engagement to all stakeholders to instill a positive safety attitude
- **Seattle Airfield Enforcement (S.A.F.E)** program to apply a progressive disciplinary program that accounts for the severity of actions and recognizes safe behavior over time.
- **Certified Service Provider Program (CSPP)** to effectively assess company processes to recognize and mitigate organizational gaps and hold companies accountable for such gaps.
- **787-SAFE hazard reporting** system to allow for anonymous reporting of hazards and incidents.
- **Rules & Regulations changes** and updates to clearly communicate behavior expectation and consequences.

1.6.3 Predictive = Proactive = Preventative

Risky behavior and near-misses lead to injuries and accidents. Safety Management Systems are predicated on the principle that by being more aware and predictive about our safety culture and environment, we can proactively intervene and prevent the escalation of such behavior from becoming an incident or accident. This principle is incorporated throughout SEA's SMS, and supports increased awareness and predictability in its:

- Hazard & Incident Reporting and trend analysis
- Active interventions, standards, controls and practices
- Data management system
- Post incident reviews & debriefs
- Incident investigations & causal analyses
- Safety audits & observations
- Risk Assessments & collaborative decisions
- Stakeholder engagement & outreach



Herbert William Heinrich Safety Pyramid

Section 2

Safety Policy & Governance

2.0 Safety Policy Introduction

Providing direction for SEA's SMS program is the Safety Policy Statement that guides and commits the organization, management, employees, and influences tenants to safe operations. The SEA Safety Policy is comprised of program values and is backed by quantifiable program objectives. The Safety Policy provides the shape and content of the SMS program and includes a commitment to safety by SEA's top management. The Safety Policy objectives align with the SMS Assurance component as part of the overall program evaluation and assessment process. Additionally, the Safety Policy works in conjunction with the identified roles and responsibilities of the assigned SMS team to ensure accountability at all levels of the organization.

2.1 SEA Policy and Objectives

The Safety Policy defines the fundamental approach to managing safety that will be adopted within the organization. It also provides an opportunity for management to further define the organization's commitment to safety and overall safety vision, and empowers the organization to fulfill the values, commitments, and objectives of management.

2.1.1 Policy Statement

The Current SEA Safety Policy is included as Appendix A

2.1.2 Policy Values, Commitments and Objectives

Safety objectives are defined by the Executive Advisory Committee and approved by the Accountable Executive (AE) to guide SEA efforts to continually improve levels of safety performance. These goals and objectives are established and refined annually based on systemic risks, trends, and associated Safety Performance Indicators (SPI)

The SPI are used to measure, monitor and asses the trends toward the defined objectives, to verify organizational safety progress and determine the need for further action. More specific safety objectives shall be defined by individual organizational unites to support the airport safety objectives or to address specific safety issues under the responsibility of the department or workgroup.

The current and approved safety objectives, along with supporting SPI, are listed in Appendix B.

2.2 Safety Roles and Responsibilities Introduction

Effective operation of SEA's SMS program requires collaboration and communication among a diverse and dedicated group of individuals with qualifications and experience in both safety and airport operations. Involvement and commitment to SMS and overall safety performance is required from all levels of the organization.

SEA has established an SMS team comprised of executive leadership/sponsorship, operational roles such as Airport Duty Managers (ADM) and Airport Operations Specialists (AOS), and dedicated SMS-specific roles, including the SMS Manager and SMS Specialist. SEA's SMS team is augmented with stakeholder involvement from other Port of Seattle aviation and corporate divisions as well as through Federal Aviation Administration (FAA), airline, Ground Service Providers (GSP) and other airport tenant participation.

This section outlines the roles, responsibilities, and relationships of all SMS participants and provides details regarding specific functions, duties, and areas of ownership for SEA SMS team members.

2.2.1 SMS Organization Chart

The organization chart presented in Figure 3 illustrates the SMS management and reporting structure.

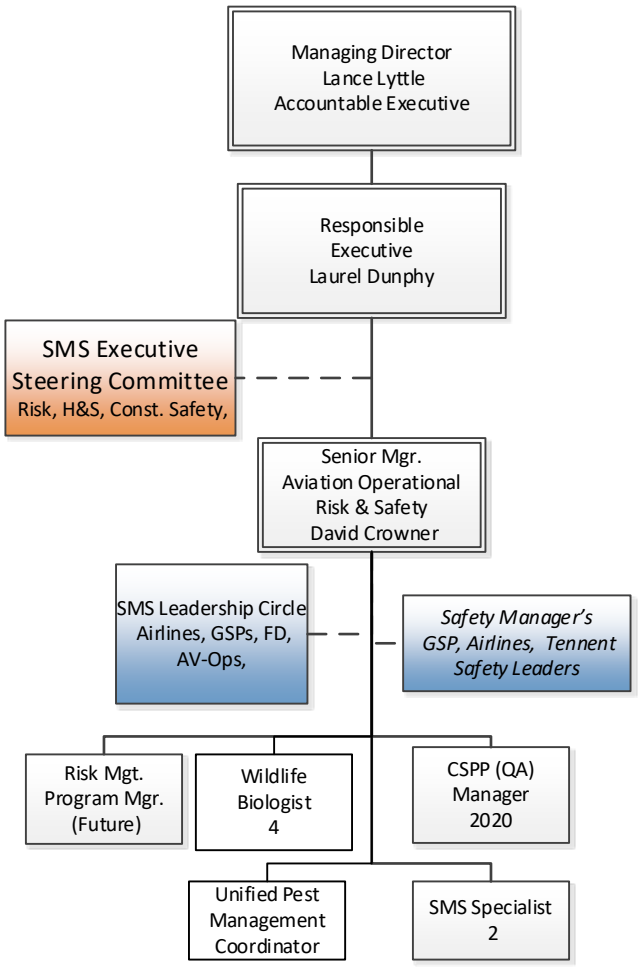


Figure 3 - SEA SMS Organization Chart

2.2.2 Roles and Responsibilities

Aviation Managing Director (Accountable Executive)

The Accountable Executive ensures the necessary assets and financial support are available for successful SMS development, implementation, operation, and continuous improvement.

In carrying out those duties, the Accountable Executive is responsible for:

- Approve, endorse, accept and promote the Safety Policy Statement.
- Ensuring suitable, qualified and competent persons are employed in operational and safety critical roles
- Advocate for and provide adequate resources to ensure effective implementation and management of the SMS and mitigation of risks.
- Establish strategic safety policies, objectives and review them on an annual basis
- Ensure that all managers are aware of and held accountable for their roles and responsibilities under the SMS.
- Building alliances and partnerships that promote and encourage a positive safety culture and ownership of safety.
- Reviewing SMS related data provided by the SMS Manager

Director – Airport Operations (Responsible Executive)

The Director – Airport Operations is the Responsible Executive and is responsible for the operation and effectiveness of the Airport SMS, its implementation, and oversight of SMS related activities and initiatives. The Responsible Executive reports to the Accountable Executive.

In carrying out those duties, the Director – Airport Operations is responsible for:

- Ensure stable, qualified and competent persons are employed in operation and safety critical roles
- Provide leadership in safety-related issues by participating in safety significant events
- Promote, encourage and monitor the safety culture at SEA Airport
- Secure necessary funding and resources to successfully implement and maintain the SMS program and identified mitigations
- Act as the airport's "Safety Champion" actively supporting airport safety policies
- Assure that all key post holders are aware of their safety responsibilities
- Establishing and supporting Safety Management Policies, Goals and Objectives
- Chair Executive Advisory Committee

Senior Manager, Aviation Safety Management Systems (SMS Manager)

The Senior Manager, Aviation Safety Management Systems is accountable to the Responsible Executive for reporting safety risks identified within the SMS, Safety performance of staff assigned to them, guiding and monitoring section manager in their

safety responsibilities, monitoring and reporting the effectiveness of the SMS and it processes to improve the level of safety at the airport.

In carrying out these duties, the Senior Manager, SMS is responsible for:

- Developing and maintaining SMS policies and objectives in accordance with Port of Seattle and Aviation Operations Safety Mission, Vision and Strategic Goals
- SMS Program Management, oversight and accountability
- Developing and meeting Safety Performance Indicators and Metrics
- Fostering alliances to ensure program alignment with internal and external safety programs, agencies, and POS divisions/departments (Risk, Health & Safety, Legal, Construction, Environmental, Planning)
- Stakeholder and airline liaison, communication, collaboration and coordination
- SMS promotion and advocacy within the Aviation industry and communities
- Monitor the effectiveness of safety risk controls
- Ensuring compliance with industry Best Practices, regulations. standards and advisories
- Developing SMS training curriculums and education programs
- Develop and implement Behavior Based Safety programs to instill a strong personal connection and positive attitude around safety
- Leading, and responsible for, continuous safety improvement at SEA
- Establishing annual budget, resources and obtaining executive level support and approval
- Promoting and maintaining a “Just Culture” to balance trust, to encourage reporting of safety reporting, with strict but fair consequences for unacceptable behavior

SMS Specialist

The SMS Specialist is responsible for overall support of the SMS program. The SMS Specialist reports to the Senior Manager, Aviation SMS.

In carrying out those duties, the SMS Specialist is responsible for:

- Accident/Incident/Hazard response, field investigation, analysis & reporting
- Root Cause analysis and preliminary action/mitigation plan development
- Construction safety coordination with AV-Maintenance
- Stakeholder engagement and relationship building
- ADM Safety-related process and practice improvement and coordination
- Performing Preliminary Hazard Assessments
- Providing Safety Risk Assessment support and assistance
- Supporting Safety meetings
- Ensuring follow up and follow through of all action and mitigation plans and assignments, including issuing work orders
- Reviewing & validating ADM incident/accident reports for completeness, accuracy and policy adherence
- Managing S.AF.E enforcement program

- 787-SAFE hotline management
- Database management and integration
- Airfield Safety Newsletter
- Safety promotion & promotional activities
- Hazard trend analysis development and reporting
- Attending and recording Safety meetings
- SMS dashboard and SharePoint site management

SMS Quality Assurance Manager (CSPP Manager)

The SMS Quality Assurance Manager is responsible for overall development, management and operation of several quality assurance programs. The SMS Quality Assurance Manager reports to the Senior Manager, Aviation SMS.

In carrying out those duties, the SMS QA Manager is responsible for:

- ISAGO program oversight
- Certified Service Provider Program
    - GSE Inspection Program
        - Periodic GSE Inspections & Audits
        - Derelict equipment management & disposal
        - Red-tagging of inoperable equipment
    - Company accountability & compliance assurance
- Construction Safety Phasing Plan review & approval
- Safety audit and compliance programs
- Review standards, practices & procedures for compliance with industry best practices

SMS Risk Management Program Manager (Future)

The SMS Risk Management Program Manager is responsible for the overall management and oversight of the safety risk management program to ensure collaborative risk-based decisions are incorporated into the airport's decision and change management processes. The SMS Risk Management Program Manager reports to the Senior Manager, Aviation SMS.

In carrying out these duties, the SMS Risk Management Program Manager is responsible for:

- Safety Risk Management panel facilitation, and coordination to ensure collaborative risk-based decisions
- Safety Risk Management Documentation and dissemination
- Mitigation coordination and completion
- Participate in stakeholder SRA panels
- Develop and disseminate safety related SOGs, SOPs, LOAs, Ramp Use plans, Pilot Communications, AFD, NOTAMs, FCRs, to ensure clear awareness of safety-related issues, hazards and compliance standards.
- Evaluate risks associated with operational change proposals.
- Manage hazard reporting program and ensure timely response and corrective actions

Port of Seattle Personnel and Divisions with SMS Collateral Duties

Leadership Commitment:

The entire SEA leadership is committed to ensuring a safe operating environment and in providing the necessary resources, tools, knowledge and structures to maximize the safety performance of the organizations they lead and to support the airport's safety management program/s and initiatives.

Further, SEA leadership will:

- Illuminate the vision,
- Make collaborative, risk-based, decisions
- Endorse and promote a proactive safety culture
- Be genuinely committed to the safety of our employees and stakeholders,
- Be transparent and open to scrutiny of safety performance through monitoring and communications
- promote a sound assessment of safety issues while providing an opportunity for open communication at all levels.

SEA leadership commitment is affirmed in Appendix XX

Although engagement by all employees and staff is essential to achieving a common safety culture, and everyone has a role, the SEA SMS program is comprised of employees and divisions who execute critical SMS functions as a part of their overall responsibilities. The following is a partial list of SEA employees and divisions for whom there are SMS collateral duties:

- Managing Director, Aviation (SMS Accountable Executive)
- Director, Aviation Operations (SMS Responsible Executive)
- Airport Duty Managers and ADM in Charge
- Airport Rescue & Fire Fighting (ARFF)
- Risk Management & Legal
- Construction Management
- Aviation Operations
- Training
- Aviation Security
- Aviation Maintenance
- Planning
- Construction Mgt.
- Manager, Airport Certification
- Airport Operations Specialist (AOS)
- Emergency Preparedness
- Aviation Security
- ACC Staff
- Health & Safety

In carrying out those duties, they are responsible for:

- Hazard and Incident Reporting
- Safety Data reporting and support
- Process/procedural integration and alignment
- Application and adherence of controls
- Quality Assurance/Quality Checks
- CSPP and PPS for construction
- Airfield Surveillance, oversight & enforcement
- Training collaboration and participation

Safety Committees

SEA's SMS program is comprised of a diverse set of stakeholders that provide a conduit for identifying, communicating, and resolving safety issues and that focus on building stronger safety relationships. The SEA SMS Manager oversees the following committees:

1) SMS Executive Advisory Committee

   The SMS Executive Advisory Committee meets quarterly and is comprised of top management level representatives from the airport. The committee is chaired by the SMS Accountable Executive. The objective of the SMS Executive Advisory Committee is to provide policy and program guidance and to discuss "big picture" safety issues.

2) SEA-TAC Safety Leadership Circle

   The SEA-TAC Safety Leadership Circle is comprised of SEA's top-level management from the Airport, Airlines and tenants, who meet quarterly to review airport-specific safety trends and activities. The committee is chaired by the Senior Manager, Aviation Safety Management Systems. The group is focused on overall airfield safety as a priority, but also discusses safety issues associated with construction projects, fire and police issues, maintenance issues and other general SEA safety items. The meeting is facilitated by SMS Manager and reports on SMS activities, airfield accidents and incidents, citation information and performance against KPIs.

3) SEA Safety Manager's Committee

   The SEA Safety Manager's Committee is comprised of airport and tenant High level safety representatives including senior operations managers, maintenance representatives, airline station managers, safety managers, safety trainers, and other safety related staff such as SEA Construction and Health & Safety representatives. The committee is co-chaired by the SEA SMS Manager and an Airline Safety Representative and is convened monthly as the primary forum to discuss safety SMS related information, including potential hazards, risk mitigation plans, safety issues, safety policies, and other safety topics. Both airport and tenant personnel are expected to attend the meetings to provide expertise or advisements to the group.

4) Task/Project specific Safety Working Groups

   On an as needed basis, working groups are established to address specific areas of concern and reach consensus regarding effective means of control or mitigation of an issue. Current working groups include – Bagwell working group The FOD, Bagwell Safety, and Airside Safety ADMs attend the meetings and provide reports, including follow-up information from past meetings, relating to each subject

A current list of committee participants is included in Appendix J and revised as participants change.

Section 3

Safety Risk Management

3.0 Safety Risk Management Introduction

Safety Risk Management (SRM) is fundamental to SEA's SMS. SEA subscribes to the International Civil Aviation Organization (ICAO) Safety Management Manual (SMM) guidance that "Hazard identification and safety risk management are the core processes involved in the management of safety." To this end, SEA has established SRM processes intended to effectively identify and mitigate safety risks to the lowest acceptable level according to FAA and industry guidelines.

3.1 SEA SRM Processes

3.1.1 Operational Safety Risk Management (OSRM)

This is the day-to-day, implementation, application, and practice of SRM at SEA. OSRM provides direction for SEA employees to operate safely and make time-critical safety assessments, decisions, and mitigations.

3.1.2 Safety Risk Assessment (SRA)

This is the detailed application of SRM to a specific safety concern at SEA. An SRA involves executing the five-step process with an assembled panel of subject matter experts and the subsequent production and approval of associated SRA documentation.

Figure 6 illustrates the relationship between SMS, SRM, and SRA.

1. **Safety Risk Assessments (SRA) = Product(s)**
2. **Operational Safety Risk Management (OSRM) = Process(es)**
3. **Safety Management System (SMS) = Program**

Both the OSRM and SRA processes fall within the SMS pyramid and are key SRM processes. OSRM provides guidance for time-critical hazard identification and risk assessments during typical day-to-day airport operations while SRAs focus on the application of SRM to a specific concern and produces a defined outcome and structured documentation.

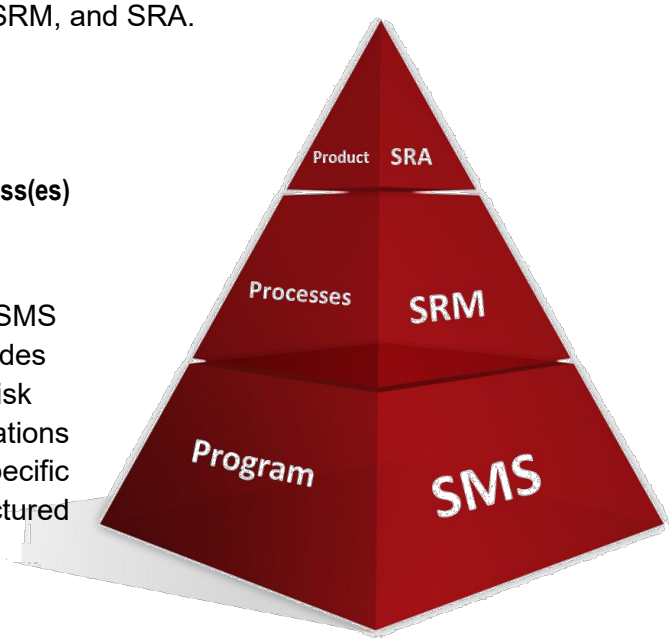


Figure 6 - SMS, SRM, and SRA Relationships

3.2 SEA SRM Elements

3.2.1 Hazard Identification

SEA's SRM requires hazard identification and participation from all employees and tenants as part of both the OSRM and SRA processes. Examples of hazard sources at SEA include, but are not limited to:

- Equipment such as GSE
- Projects and changes including construction activities
- Operating environment (i.e., weather)
- Human factors such as fatigue
- Human-machine interface
- Standard operating procedures (SOPs) and variances
- Third party operators

Hazards are identified proactively and reactively (examples below) and both identification mechanisms are applied within OSRM and SRA. Proactive hazard identification is SEA's preferred approach.

Proactive Hazard Identification Tools:

- Self-inspections
- Trend and KPI analysis
- Hazard reporting
- Brainstorming and "what if" sessions
- Scenarios with cause and effect processes
- Change analysis

Reactive hazard identification occurs following a safety-related event, such as an accident or incident. SEA performs reactive hazard identification during root cause analysis with the intent of assessing and mitigating existing risks.

Reactive Hazard Identification Tools:

- Trend analysis (post-accident or incident reviews)
- Accident and incident investigations and interviews

3.2.2 Root Cause Analysis

SEA performs root cause analysis following accidents, incidents, and other safety-related occurrences such as near misses/hits. The intent of root cause analysis is to identify underlying hazards, assess the risks, and mitigate those risks to an acceptable level.

SEA employs the "5 Why's" and fish bone techniques in root cause analysis. This method attempts to identify the cause and effect relationships that underlie a specific hazard. The "5 Why" technique requires the SEA SMS team to pose the question "Why?" a minimum of

five times relative to the hazard or safety event for which the root cause analysis is being conducted.

3.2.3 SEA Risk Matrix

The SEA Risk Matrix located in Appendix B and is used to assess the risk level and evaluate mitigation requirements based upon established risk tolerance thresholds. SEA SMS measures risk using the composite of both the severity of the hazard's effect and the likelihood of that potential effect. Each is determined independently of the other, with severity identified first. Using the severity and likelihood classifications in the SEA Risk Matrix, the level of risk is determined.

Severity is classified based on the worst credible outcome.

Likelihood is classified based on the frequency with which the risk is reasonably expected to occur. Likelihood is determined by applying and analyzing quantitative data to the greatest extent possible.

3.2.4 SEA Risk Tolerance

SEA's SMS risk tolerance establishes the level of risk that can be knowingly accepted and, by extension, the associated requirements for mitigating risks as presented Appendix B and Figure 8 below. SEA's SMS risk tolerance is represented directly on the SEA Risk Matrix in the

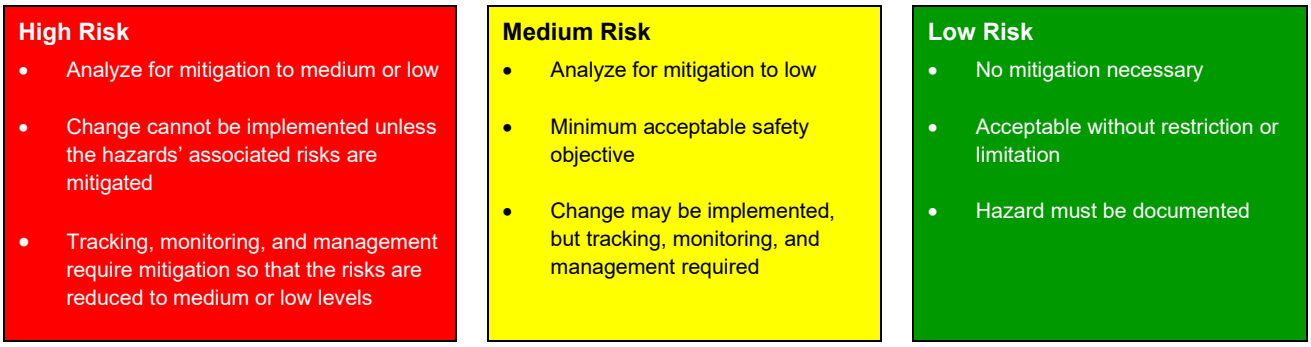


Figure 8 – SEA Risk Tolerance

3.2.5 Risk Mitigation and Monitoring

SEA prioritizes mitigations based on level of risk, with high risk hazards always given the highest priority. Within a given category, mitigations are further prioritized based on the assessed level. For example, L5 risks are mitigated before L1 risks and M17 risks take preference over M12 risks.

SEA requires that all high-level risks are mitigated, according to the FAA's 2007 AC 150/5200-37 definition which states, "High risk – Unacceptable level of risk: The proposal

cannot be implemented, or the activity continued unless hazards are further mitigated so that risk is reduced to medium or low level. Tracking and management involvement are required, and management must approve any proposed mitigating controls."

The SEA SRM requires a Risk Mitigation Plan when the identified hazard and associated risks are classified as **high** risk. All Risk Mitigation Plans must include a Mitigation Monitoring Plan.

The Mitigation Monitoring Plan defines the performance measures that will be taken to ensure the effectiveness of the mitigation, persons responsible for validating the performance measures, and the duration of the monitoring activities. Monitoring must last through the lifecycle of the change, project, or a period not less than six months after the mitigation has been implemented.

3.2.6 SRM Data Collection and Tracking

SEA SMS requires recording of SRM-related data into the SMS software program for tracking and monitoring. Data collected because of the SRA process is captured in the SMS Software following the completion of the SRA session and during the creation of the final report. Data collected through the OSRM process is captured on an ongoing basis, as hazards are identified, risks assessed, and mitigations are planned during daily operations. The SMS Manager for is responsible for data entry and tracking guidance and procedures.

3.3 Operational Safety Risk Management (OSRM)

SEA's SMS requires all employees to engage in proactive safety management as a core or collateral job responsibility. As such, OSRM is performed continuously throughout daily operations at SEA. SEA's OSRM provides a time-critical and efficient application of SRM best practices. The three primary steps involved in OSRM are:

1) Identify hazards
2) Analyze and Assess associated risks
3) Define mitigation and monitoring plan

3.3.1 OSRM Step 1 – Identify Hazards

Hazards are identified at SEA through a variety of mechanisms that include, but are not limited to:

- Self-inspections
- Accident or incident investigations and root cause analysis
- Tenant hazard reports or concerns

Because of the numerous identification mechanisms and variety of tenants involved in daily operations at SEA, hazard reports are sent to the Operations team for action.

SEA employees and tenants may report hazards via the 787-SAFE hotline that directs calls to the Airport Communications Center (ACC). Upon receipt of a hazard call, ACC staff creates a hazard report in the SMS Software. Employees and tenants may also communicate hazards directly to an ADM, the SMS Manager, the SMS Specialist, or other Operations staff. Depending on the type of hazard reported during the call, an ADM, the SMS Manager or SMS Specialist may be dispatched immediately to investigate. However, all reported hazards are entered into an SMS database and investigated by the SMS Manager or the SMS Specialist.

3.3.2 OSRM Step 2 – Analyze and Assess Risks

Due to the time-critical nature of OSRM, risks are analyzed and assessed immediately upon identification. The SEA SMS members and/or Operations staff who received the hazard report applies their technical/safety expertise and professional judgment to quickly and efficiently identify associated risks, analyze the risk, assess the severity and likelihood of the worst credible outcome, and determine the risk level using the SEA Risk Matrix. The result of the risk assessment is entered the SMS Software.

3.3.3 OSRM Step 3 – Define Mitigation and Monitoring Plan

Following the risk analysis and assessment, SEA SMS members and/or Operations staff determines the type and extent of mitigation planning required, based upon the risk level.

3.3.4 OSRM Authority

Due to the number of stakeholders and channels for hazard reporting, the SMS Manager is not expected to be involved with every OSRM process. The SMS Manager and SMS Specialist will review all logged hazards and associated risks to ensure completeness in reporting, timeliness of mitigations, and general adherence to the OSRM process.

The SMS Manager or SMS Specialist additionally provides subject matter expertise for the OSRM process by assisting personnel in assessing and analyzing risks and in determining appropriate mitigation and monitoring activities. In the event of disagreement or conflict on hazard identification or risk assessment, the SMS Manager makes the final determination or convenes a panel of experts to review the hazard.

Only the SMS Accountable Executive can accept a high risk level and has the ultimate authority, and responsibility, to assure the implementation and activation of associated mitigation measures and provisions of the mitigation plan/s,

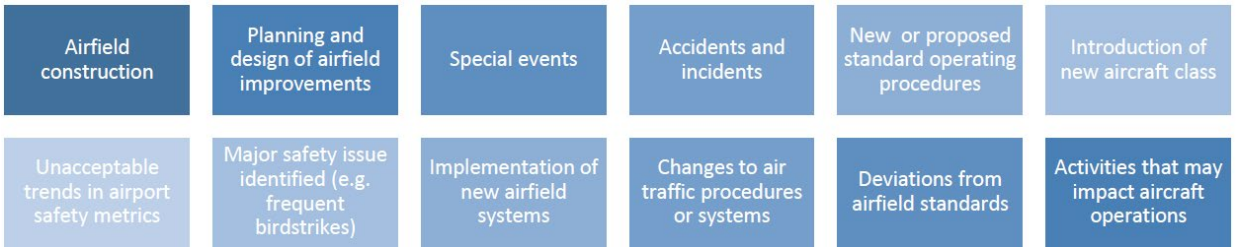
3.4 Safety Risk Assessment

The SRA process is a detailed application of SRM to a specific concern, identified hazard or suite of hazards at SEA, typically associated with a project. Unlike the time-critical focus of OSRM, the SRA is a prescriptive and intensive process that provides time, focus, and collaboration among a group of concerned stakeholders on a subject. SRAs use the same

core set of processes and best practices as OSRM but is applied in a more structured and detailed manner.

3.4.1 SRA Triggers

Because of the time commitment, stakeholder involvement, and level of precision required, SRAs are reserved for specific cases. SEA SMS applies the following guidelines to determine when an SRA is required either proactively or reactively. This list is not intended to be all inclusive but to provide guidelines in determining cases for which an SRA is required. Examples of SRA triggers are illustrated below and triggers more specifically defined in Appendix K



Proactive SRA initiation

Required when major changes are anticipated to FAA Part 139, facilities, personnel, or policies that fall within SEA SMS jurisdiction. These instances include, but are not limited to:

1) **Per Advisory Circular 5370-2F,** construction projects or heavy maintenance activities in the movement and/or non-movement areas of the airfield that will produce an operational impact,
2) **Construction projects or major maintenance activities** in the SEA terminal,
3) Construction or major maintenance activities on the SEA terminal and/or landside,
4) Introduction of a new airline, Ground Service Provider (GSP), or other airfield-based tenant to SEA
5) Introduction of a new tenant into the terminal or landside operations at SEA
6) Introduction of a new major piece of equipment into the operation,
7) A change in management or operational structure or staffing, reduction in workforce
8) SEA SMS or other operational policy changes
9) FAA regulation changes impacting SEA operations, movement or non-movement areas
10) When SEA SMS Management personal acknowledge that a part of the system needs to be assessed; in lieu of data or a proposed change

Reactive SRA initiation

Required when a risk has been realized or an accident/incident has occurred within SEA operations, facilities, or an occurrence involving policies or personnel has been identified. These instances include, but are not limited to:

1) An accident or incident for which the investigation and root cause analysis determines mechanical failure, poor system design, and/or physical limitations of the facility(s).
2) Trends in KPI that fall outside the acceptable limits set by the SMS Manager and or the Accountable Executive,
3) Unsatisfactory time to complete corrective action or risk mitigation plans (Outside of normal accepted practices or assigned mitigation(s) and monitoring)
4) The identified need of SEA SMS and other management staff to analyze all or part of the SEA system. SRAs may be used for any aspect of the airport operation and are not necessarily limited to the defined SMS jurisdiction.

3.5 SRA Initiation

Once an SRA trigger has been identified, the SRA process is initiated based on the following guidelines and the SMS manager's discretion and approval:

1) The SRA is sponsored by the SEA management team member that ultimately owns the perceived/identified issue or change. The issue/change owner must be a manager or director in the SEA organization and be responsible for the system that is affected by the condition change and/or the portion of the system being analyzed.
2) The SRA Sponsor must notify the SEA SMS Manager of the intent to conduct the SRA prior to assembling or preparing for a SRA Panel. The SMS Manager ensures no duplicate panels have been assembled, assures the integrity of the process, and aids the SRA Sponsor as needed.
3) In conjunction with the SMS Manager, the SRA Sponsor is responsible for identifying and assembling the appropriate stakeholders, or panel participants, for a minimum of one session.
4) Panel participants consist of Subject Matter Experts (SME) for the system component and/or operations areas addressed in the SRA. Panel participants are expected to provide relevant information and make requisite decisions during the SRA process and, as such, must have sufficient operational expertise, safety experience, and training to participate in the SRA. The SRA Sponsor must exercise professional judgment in selecting panel participants. If questions or disputes arise regarding panel participant selection, the SEA SMS Manager will make the final determination.
5) The SRA Sponsor is responsible for securing a qualified SRA Facilitator, acceptable to the SEA SMS manager. The SRA may be facilitated by the SMS Manager or a third party (consultant). The SRA Sponsor shall not facilitate the SRA.
6) The SRA Sponsor is responsible for securing meeting facilities and creating and distributing invitations to panel participants. At a minimum, SRA invitations must include the following information:

- Topic and Purpose
- Date(s), Time(s), and Location(s)
- SRA Sponsor Name and Contact Information
- Description of System, Change, or Hazard

7) The SRA Sponsor is responsible for completion of the standard SEA SRA Planning Checklist and SRA Agenda. The SRA Sponsor ensures that panel participants are provided with necessary directions, information, and supporting materials in advance of all sessions.
8) The SRA Sponsor must keep the SEA SMS Manager informed of all relevant SRA decisions and apprised of SRA preparation and documentation status.

3.6 SRA Panels

Although each SRA will incorporate different inputs and produce unique results, SEA adheres to the following five-step process for each assembled panel:

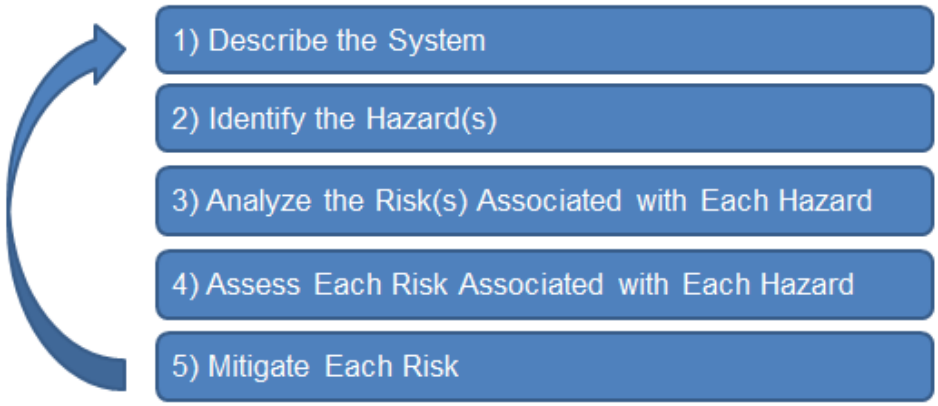


Figure 10 - SRA Process

3.6.1 SRA Step 1 – Describe the System

The SEA SRA process uses the 5M Model for describing the system. At the outset of the SRA session, the SRA Facilitator leads the panel through a prescriptive set of questions, facilitates discussion, and ensures that the answers to each question are thoroughly documented. See Appendix C for additional information on the 5M Model.

The SRA Facilitator leads the panel in specifically identifying what will be “bounded out” or what will *not* be included in the system for review and assessment. The SRA Facilitator and SRA Sponsor validate that the scope of the assessment is aligned with the initial intention and ensure that the bounded-out components are documented.

All documentation is captured in a visible format (such as white board or large note paper) that may be easily accessed and referred to during the remainder of the process.

3.6.2 SRA Step 2 – Identify the Hazards

FAA AC 150/5200-37 specifically requires four elements that must be available and used for hazard identification. These elements are incorporated into the SEA SRA process:

1) Operational Expertise:
   - Provided by SRA Panel participants.

2) Training in SMS:
   - Provided by SRA Sponsor and SRA Facilitator's detailed understanding of the process.
3) Hazard Analysis Tool:
   - Provided via the SRA process, SRM documents, and supported by SMS training.
4) Adequate Documentation:
   - Provided through the SEA requirement for succinct and precise documentation of the SRA process and results.

During the hazard identification step, the Facilitator will lead the panel participants in identifying existing and potential hazards.

Existing hazards are those that already exist in the system, prior to any system change. Part 139 addresses many hazards and associated risks that typically exist in the Airport Operations Area (AOA). Although the FAA addresses many of the hazards through Part 139, SEA recognizes that additional hazards may exist on the airside. Therefore, the SRA Panel is required to specifically identify existing hazards and risk mitigation steps currently in place through Part 139 and to identify additional, SEA imposed mitigations.

Potential hazards are those that may arise when a change is proposed to a known system. At SEA, changes in employee responsibilities, tenants, procedures, or new construction projects are all considered system changes that introduce potential hazards.

Panel participants collaboratively identify existing and potential hazards by applying the FAA hazard definition to both existing and future system conditions. If conditions exist (or are expected to exist) that can lead to injury, illness, or death to people or damage to or loss of a system, equipment, or property, or damage to the environment, it must be considered a hazard. The Facilitator ensures that all identified hazards are captured on the worksheet found in Appendix D.

3.6.3 SRA Step 3 – Analyze the Risk(s) Associated with Each Hazard

Using the list of identified hazards, the SRA Panel analyzes all risks associated with each hazard. The panel collectively analyzes outcomes such as incidents, accidents, or regulatory violations that can be reasonably anticipated based upon the described system and the identified hazards. The SRA Facilitator ensures that, at this point in the process,

risks are identified by the panel but that no assessment or classification of the risks is performed. The SRA Facilitator ensures that all risks are captured on the SEA SMS Hazard Identification, Risk Assessment, and Analysis Worksheet found in Appendix D.

The number of risks associated with each hazard may be extensive. Therefore, after the panel has identified all risks, the panel may collectively elect to focus the remainder of the SRA on a selection of the risks. This is acceptable; however, the panel must agree that all risks have been identified before eliminating any from consideration. In all cases the panel's professional judgment and experience will be relied upon and the SRA Facilitator will ensure all risks are included in the SRM documentation.

3.6.4 SRA Step 4 – Assess the Risk(s) Associated with Each Hazard

Prior to this step, the SRA Facilitator must ensure that the panel participants are equipped with the following:

1. List of risks associated with each hazard
2. SEA Risk Matrix Chart which includes the Severity and Likelihood Classifications

For each identified risk, the SRA Panel assesses the severity of the worst credible potential outcome, using the SEA Severity Classifications. The SRA Panel then assesses the likelihood of the same risk, using the SEA Likelihood Classification. Once both severity and likelihood are classified, the risk is plotted on the SEA Risk Matrix and the risk level of low, medium, or high is determined and recorded. The SRA Facilitator ensures that the risk level for each identified risk is thoroughly documented in the SEA SMS Hazard Identification, Risk Assessment, and Analysis Worksheet.

3.6.5 SRA Step 5 – Mitigate and Monitor Each Risk

The SRA Panel determines which risks require mitigation, based upon the risk assessment performed. The panel applies the SEA Risk Tolerance thresholds to identify risks requiring mitigation, defines measures that will be taken to lower the risks level, and establishes a full mitigation plan. During the SRA session(s), the SRA Panel identifies initial risk mitigation approaches and develops the Risk Mitigation Plan.

The SRA Facilitator verifies that mitigation monitoring is completed as part of risk mitigation documentation. The SRA Panel will collaborate and define the monitoring plan. In the event that the SRA session(s) have ended, the SRA Sponsor, SRA Facilitator, and SMS Manager may collaborate and develop the mitigation monitoring plan. In this case, the SRA Facilitator distributes an after-the-fact copy of the mitigation plan to SRA Panel participants, solicits, and incorporates feedback.

3.7 SRA Documentation and Acceptance

Following the completion of the panel, the SRA Facilitator and/or SMS Manager completes the SRA Final Report. At a minimum, the final report must include:

1) Cover page (Tile, SRA Sponsor, SRA Facilitator)
2) Definition of the System
3) Identified Hazards
4) Risk Analysis
5) Risk Assessment
6) Mitigation Plan
7) Monitoring Plan
8) Required Appendices:
    - Hazard Worksheet
    - Severity and Likelihood Classification Chart
    - Risk Matrix
    - Supporting Documentation, relevant to the SRA topic

The SMS Manager performs an initial review of all documentation, provides recommendations for changes, and/or clarifies items with the SRA Facilitator and SRA Sponsor. The SMS Manager verifies that the SRA process was followed and documented correctly and initiates the acceptance and approval process.

Following the completion of the SRA Panel, SEA requires formal review, approval, and acceptance of the results by the appropriate manager or stakeholder. Acceptance of the results indicates that a responsible party certifies that the SRA was conducted correctly, the results are appropriate, and that the party or parties responsible for mitigation implementation and monitoring are capable of doing so. The SMS Manager facilitates documentation acceptance based on the following:

1) If the SRA process produced a hazard that was assessed as a high risk level, the SMS Accountable Executive must be the accepting party. The SMS Manager provides a complete and final copy to the SRA Sponsor as well.

2) If the SRA process produced a hazard that was assessed as a medium or low risk level, the SMS Manager provides the SRA documentation to the SRA Sponsor for acceptance. The SRA Sponsor must review and sign the SRA document, thus accepting the residual risk, regardless of whether the risk was reduced to a low risk level.
3) No other person within SEA can accept SRA documentation and results, unless need dictates that the acceptance authority is delegated to another manager or director within the organization.

All SRA related documents are retained electronically in the airport's shared network for the life of the change, operation, or as long as mitigations are being implemented.

In addition to the final, documented report process above, the following information is entered into the SMS Software system for ongoing tracking and monitoring:

1) Individual reports for each identified hazard.
2) Risk assessment details for each associated risk.
3) Corrective action correlating to the detailed SRA risk mitigation plan, including:
    - Action required
    - Owner
    - Mitigation plan approval date and authority
    - Associated work order number(s)

3.9 Safety Risk Communications

The OSRM & SRA processes are completed by communicating the safety issues and risk mitigations with all stakeholders. Sharing this information educates personnel to develop a keen awareness of hazards and associated risks which then creates a stronger safety culture throughout SEA.

This communication can be done in the following ways:

1) Safety Recognition and/or Awards programs
2) At the Monthly SEA Safety Action Committee meeting
3) SEA Safety Newsletter/Bulletin
4) E-mails

Section 4

Safety Assurance

4.0 Safety Assurance Introduction

To effectively focus on the principle of continuous improvement, SMS requires a strong and comprehensive Assurance program. Such a program requires both Quality Control (QC) and Quality Assurance (QA) elements. QC involves monitoring and recording results of specific safety-related activities and includes self-inspections, checklists, and tracking results. QA involves program-level evaluations and audits to ensure the SMS program is:

1) Meeting defined safety goals and targets
2) Performing as expected
3) Documenting successes
4) Identifying opportunities for improvement

This Section provides the tools and methods to ensure that SEA has a safe operating environment and that the SMS program is effective. To that end, this Section is directly tied to the objectives documented and published in Section 2 (SMS Policy). Should the policy objectives change, it is necessary to update this Section and other related SMS program documents.

4.1 Safety Performance Monitoring - Quality Control (QC)

QC involves monitoring and recording the results of specific safety-related inspections. Due in large part to SEA's current expertise in Part 139 and other regulatory inspection programs, this Section will not provide significant detail about inspection methods and the importance of conducting regular self-inspections. It is important in the context of this SMS Manual to understand the different self-inspections that will comprise the QC components and to understand that QC is only one component of SEA's overall SMS Assurance plan.

4.1.1 Quality Control Self-Inspections

SEA conducts the following self-inspections in support of SMS QC activities:

1) Ramp Self-Inspection - See Appendix F
2) Bagwell Self-Inspection - See Appendix F
3) FOD Self-Inspection - See Appendix G
4) Part 139 Self-Inspection - Airport Certification Manual (ACM) and ADM Standard Operating Guidelines (SOGs)

4.1.2 Quality Control Outputs

The data and information collected through the QC self-inspections is critical to ensure the SMS program meets its identified targets and goals. To fully realize the benefit and to leverage the additional effort undertaken by SEA in conducting self-inspections, results are systematically recorded upon completion of inspections. All quality control inspections include an associated checklist that is completed and recorded within 48-hours of inspection. Annually, the SMS team, as part of the Program Evaluation and Audit process, reviews current data sources and inspection processes to determine if current data sets will be used to monitor the SMS program and if additional data resources are necessary to support the SMS program.

4.2 Safety Performance Monitoring - Quality Assurance (QA)

To evaluate the successes and opportunities for improvement of the SEA SMS program, it is necessary to identify and measure against a specific set of goals. QA involves validating SMS actual performance against specific targets, identifying and aggregating corresponding metrics, and conducting periodic program audits to verify that the program itself is functioning as effectively and efficiently as possible. In essence, the QA component is designed to assist the SMS team in answering the fundamental question, “Is SMS doing what we said it was going to do?”

This section includes information regarding the manner and mechanisms by which the SEA’s SMS program answers the above question including:

1) Specific QA checkpoints and requirements to determine whether goals and targets are being met.
2) Global SMS program audits and peer reviews to determine whether the program is meeting its intent and whether the goals and targets remain appropriate and relevant.
3) Documentation and outputs of QA functions to ensure that lessons learned, and findings are preserved for future reference.

4.2.1 Regular Quality Assurance Checkpoints

To validate the SMS program is meeting its goals and targets, the SMS team conducts regularly scheduled QA checkpoints using the SMS Safety Scorecard presented in Appendix G. At these checkpoints, defined validation criteria and metrics (where feasible) are used to compare actual results to the program’s targets and goals.

4.2.2 Quality Assurance Checkpoint Output

To maximize the benefit of the QA checkpoints and ensure focus on continuous improvement, formal documentation of the checkpoint findings, identified trends, successes, lessons learned, and opportunities for improvement are authored. The information captured is thoroughly

documented and archived for easy access and reference for future evaluations and is retained in the SMS program's electronic files for overall program management documentation.

4.2.3 SMS Global Program Evaluations

As discussed above, the SMS QA checkpoints are designed to ensure that the overall SMS program is meeting its specified goals, objectives, and targets. However, to deliver on the vision of continuous improvement, it is also critical to regularly examine the SMS program broadly, at a global level, to verify that the program as a whole is functioning as expected and meeting its overall intent. These evaluations can be done via the following:

1) Internal Program Evaluations: The intent of the internal program evaluation is to assess the overall effectiveness of the SMS program. As such, the focus of the evaluation is on information sharing and continuous improvement, rather than on following a stringent set of processes. Very similar to the QA checkpoint output, the results of the internal program evaluation are formally documented. The information is thoroughly documented and archived so that it can be easily accessed and referenced in the future.

2) Peer or Third-Party Evaluations: Since the SEA SMS team is heavily involved in all of the day-to-day operations of the program, it may be difficult to approach QA checkpoints and internal program evaluation objectively as the program evolves. An effective strategy to assist in obtaining objective feedback on the SMS program is to conduct a peer or third party evaluation. In the peer review or third party evaluation, SEA identifies another airport, or a third party consultant to review the program. Regarding peer evaluations, the SEA team may review the SMS programs at the other airport(s) in exchange or reciprocally.

4.3 Confidential Hazard Reporting System

SEA values the feedback of employees along with tenants and has established confidential hazard reporting systems to encourage all too freely communicate (anonymously-if desired) safety concerns and be involved in the problem-solving process. The SMS Manager or Specialist is responsible for processing and tracking the safety concerns generated through SEA's confidential hazard reporting system. SEA has established the following methods to communicate concerns:

1) Safety Reports: Confidential Hazard Report Form (CHRF) located in Appendix H is used to report safety hazards and/or incidents to include suggestions for program improvement either in paper form or electronically.

2) Safety Hot Line: 787-SAFE can be used to report a safety hazard or incident.

4.3.1 Confidential Hazard Report Form (CHRF)

The Confidential Hazard Report Form (CHRF) is the basic method to communicate safety related concerns to SEA's SMS team. Information communicated in this form is not used by SEA SMS to pursue disciplinary action against the reporting source and is considered a "Safe from Reprisal" form of communication.

SEA employees and tenants can also use the CHRF to provide input about a safety hazard/concern at SEA or suggestions for improvement. While input is normally unsolicited, SEA's SMS team may occasionally solicit input from employees and tenants about the effectiveness of modified procedures or solicit opinions about proposed changes. Unless these solicitations require the use of a form developed specifically for the survey, employees or tenants can respond using the CHRF. Copies of the CHRF are available on SEA's website at https://www.portseattle.org/form/sea-tac-airport-confidential-haz.

SEA employees or tenants, who submit a CHRF and identify themselves on the form, may be contacted for further information from the SMS Manager or Specialist (as needed). SEA employees or tenants who are not comfortable disclosing their identity on the CHRF may leave the identifying fields blank when reporting a hazard or providing suggestions. This CHRF is processed in the same fashion as if it carried the identifying information. However, the following minimum information must be submitted:

1) Date and Time
2) Type of report (Hazard Report or Suggestion)
3) A description of the concern, issue, or event

Following completion of the CHRF, the employee or tenants submit it via paper or electronically form to the SMS Manager or Specialist via the instructions printed at the bottom. The SMS Manager or specialist will review all CHRFs daily to identify safety hazards/concerns requiring immediate action to mitigate any associated risks. Otherwise, SEA's SMS Manager or Specialist will conduct an initial investigation to determine the validity of the report and to gain additional information concerning the report's subject matter. The SMS Manager or Specialist will document relevant information on the CHRF.

Once the SMS Manager or Specialist completes the initial investigation and the report is determined to be valid, they will identify all associated contributing factors and forward a copy of the CHRF (de-identified) to the responsible division head or stakeholder (if applicable). The SMS Manager or Specialist discusses the issue with the responsible parties and either determines the appropriate corrective actions to be taken, retains the issue for discussion at the next scheduled Safety Action Committee meeting, or calls a special meeting of the committee to discuss the safety issue. Once the SMS Manager or Specialist receives confirmation the appropriate corrective actions have been accomplished, it will be logged on CRF and the report closed.

The SMS Manager or Specialist is responsible for tracking and updating the status of each open CHRF and will track the status of each report in the SMS database. SEA SMS program will maintain electronic files of all CHRFs in the SMS database indefinitely to conduct trend analysis.

4.3.2 SEA Safety Hot Line

787-SAFE Hotline Logo

SEA has established a 24-Hour Safety Hot Line for employees or tenants to make identifiable or anonymous hazard reports via 206-787-SAFE (7233) to the Airport Communications Center (ACC). ACC will document each call received using the hazard reporting process in the SMS database. The report will then be processed in the same manner as discussed above.

4.4 Safety Information Reporting & Activities

The SMS Manager reports weekly, monthly and quarterly on the following regarding the SMS program:

On a weekly basis (Email):

- Airfield Safety Numbers & Scorecard
- Summary of incidents

On a monthly basis:

- SMS performance in meeting safety objectives
- Status of on-going mitigation and corrective actions required under SRM
- Breakdown of company incident rates

On a Quarterly basis (E-newsletter):

- Trends
- Audit findings
- Issues & education
- Status and findings of audits

Section 5

Safety Promotion (Culture)

5.0 Safety Promotion Introduction

Collaboration, communication and shared knowledge, beliefs and values are critical to SEA's SMS. SEA operates a comprehensive SMS Promotions program through which SEA communicates SMS information, ensures understanding of core SMS components, and encourages participation and collaboration from both the employee and stakeholder community. SMS is communicated throughout SEA via formal and informal channels. Communication strategies include:

- Written and widely published Policy Statement.
- Formal and Informal Training and Safety Orientation Programs.
- Periodic organizational gatherings (safety committee meetings, department meetings, etc.).
- Organizational communiqués (newsletters, bulletin board postings, posters, websites, etc.).
- Routine and special reporting to internal and external stakeholders.
- Hazard, incident, and accident reporting and associated score cards and feedback.

5.1 Promotion Components

SEA SMS Promotion consists of three distinct components:

1) Safety Culture: This may be thought of as SEA's collective norms, standards, perceptions, and behaviors with respect to safety. Management's support of a positive safety culture is critical to the SMS program's success. In addition, impacting the tenant's safety culture requires collaboration and joint development of a safety consciousness through the actions of SEA employees and management. As SEA management and employees continue to represent the SMS program, it is extremely important for a consistent message and associated actions to be visible internally and externally.

2) Training and Orientation: All SEA employees and tenants must understand SEA's safety philosophy, policies, procedures and practices, and they must understand their roles and responsibilities within the safety management framework. To do this, all stakeholders will be provided with SMS training and/or orientation which include information on how to report a hazard or accident/incident.

3) Promotional Materials and Methods: Publication of safety policy statements, procedures, newsletters, and bulletins alone will not develop a positive safety culture. The attitudes and actions of SEA management and SMS team are a significant factor in the promotion of safe work practices and the development of a positive safety culture. SEA management and SMS team fosters a Just Culture by limiting impediments to free-flowing communication and through a policy of non-

punitive hazard and issue reporting.

5.2 Safety Culture

SEA accepts and employs safety culture as defined by the ICAO SMM 3rd Edition that "Culture is characterized by the beliefs, values, biases and their resultant behavior that are shared among members of a society, group or organization." SEA considers the following as elements of a positive safety culture specifically for SEA employees:

- Commitment to safety as a behavior and way of life by top management.
- Unambiguous expectations by each level of management and peers that, for all employees, safety-oriented life and work habits are the norm and are practiced on and off the job.
- Clear, easily understood operating procedures, followed without deviation.
- A system for collecting, analyzing, and exchanging incident data related to safety.
- A system for tracking incident and accident data, analysis of trends, and feedback of results.
- Non-retribution for submission of incident, accident, or hazard data.
- Migration to a points-based enforcement system.
- Retraining without penalty or stigma when safety is involved.
- Peer acceptance that accidents are preventable, regardless of operations.
- Peer acceptance that safety is a lifestyle – it is a part of the SEA culture.

SEA strives to foster a positive and collaborative safety culture, consisting of five interacting components:

1) Just Culture: SEA fosters a Just Culture by limiting impediments to free-flowing communication and through a policy of non-punitive hazard and issue reporting. SEA understands that SMS and other airport operations are managed by humans who make mistakes from time to time. SEA supports a non-punitive approach to reporting in order to increase each individual's willingness to report. Increased reporting allows SEA to gather the most information possible and to identify trends and implement systematic changes.

2) Informed Culture: SEA generates an informed culture through the creation and distribution of SMS training and the promotions materials and methods described in this section. SEA strives to provide consistent, thorough, and frequent communication about all SMS activities to the largest number of SEA employees and stakeholders possible.

3) Flexible Culture: SEA believes in continuous improvement in SMS. The SEA SMS program is structured to adapt and change to incorporate additional items,

activities, or stakeholders and to eliminate structures, programs, and processes that are not effective.

4) Learning Culture: SEA promotes learning from all safety-related experiences and communication and collaboration among all SMS stakeholders to foster system-wide improvements.

5) Reporting Culture: SEA permits anonymous reporting of safety-related information through the Confidential Reporting Form (CRF) and 787-SAFE hotline in order to increase participation in reporting. SEA also promotes reporting safety-related information through the SRM program (both OSRM and SRA) and self-inspection programs. SEA is fully committed to gathering data and information to the greatest degree possible and leveraging data to improve safety.

5.3 SMS Training and Orientation Program (Future)

The SMS training and orientation program is designed to provide an overview of SMS to all SEA employees and tenants and to develop and retain expertise in SMS team members. The SMS program distinguishes between SMS employee training and tenant orientation. SEA is invested in SMS and in the professional and personal growth of its employees and provides in-depth training to enhance SMS effectiveness and safety awareness. SEA focuses on orienting tenant employees with SEA's SMS program and communicating expectations for tenant participation and contribution to SEA's just safety culture. SEA expects tenants to provide detailed and specific job safety and internal SMS program training to their employees.

5.3.1 SEA Employee SMS Training

The SEA SMS employee training program includes the following courses:

- SMS Basic investigation principles
- SRM for SEA Management
- SRM for SEA Operations SMS Team members
- Safety Assurance for SEA Operations SMS Team members
- Human Factors
- Root Cause Analysis

5.3.2 Employee SMS Training Data Collection and Tracking

SEA requires recording of SMS employee training activities into the Learning Management System (LMS) for tracking and monitoring. Attendance at SMS training courses is captured into LMS immediately following the completion of the course by the course instructor.

Due to the number of employees, the SMS Manager is not expected to be involved with all SMS training courses and if necessary, external, qualified instructors may be engaged to provide the course instruction. The SMS Manager and SMS Specialist regularly review all of the training records to ensure completeness in reporting, attendance status, and general adherence to SMS training requirements. The SMS Analyst also assists with data entry for training (as needed) and collaborates with the SEA Training Department for logistics and data reporting.

Data collected in LMS includes, but is not limited to:

1) Attendee name
2) Course ID
3) Course title
4) Completion status
5) Completion date

5.3.3 SEA Tenant SMS Orientation

The SEA SMS Orientation introduces SEA's SMS program, educates about the importance of individual responsibility and contribution to the overall safety culture, and instructs tenants on the hazard identification and reporting processes.

5.3.4 Tenant SMS Orientation Data Collection and Tracking

Completion of the SMS Orientation is captured in LMS upon completion of the AOA training course. The SMS Manager and SMS Specialist regularly review all of the training records to ensure completeness in reporting, attendance status, and general adherence to SMS training requirements. The SMS Analyst also assists with data entry for training (as needed) and collaborates with the SEA Training Department for logistics and data reporting.

5.4 Promotional Materials and Methods

SEA actively promotes the SMS program, through a variety of materials and methods, to increase the effectiveness, visibility, and participation in all SMS components throughout all SEA stakeholder communities.

5.4.1 Materials and Methods

1) Communication: The SMS Manager, Specialist, and Analyst (as needed) are expected to spend a significant portion of their time on the airfield, ramp and bagwell talking to employees and tenants about safety and any issues along with observing operations for any safety concerns. The SMS Manager and Specialist serve as the leaders and ambassadors to promote a Just Safety Culture. Discussing safety with employees and tenants where they work is probably the most effective and direct means to promoting the SMS program.

2) Bulletins/Newsletters: SEA's SMS Manager and Specialist serve as the primary distributors of safety-related information such as hazard reports, risk assessments, safety analyses, investigation reports, audit reports, safety alerts, scorecard results, etc. The SMS team distributes relevant information throughout the organization via safety messages, bulletins, and reports. These are distributed through multiple means and methods including meetings and email distribution lists.

3) Internet/Intranet: SEA provides safety information to employees and tenants through both the Intranet (employees) and Internet (tenants). Each site includes safety information, archives of safety bulletins, the safety scorecard as well as forms, templates, and other documents for safety management. Also, each site provides a link to the SMS reporting site for hazard, incident, and accident reporting.

4) 787-SAFE Hotline: SEA has established a hotline specific to SMS. The 787-SAFE phone number is available 24 hours per day and 7 days per week for all stakeholders to report hazards, incidents, accidents, or to discuss other safety-related information. The hotline is manned by ACC staff, trained in SMS reporting and hazard management triage

   SEA creates and distributes a variety of promotional materials to ensure that the airport-wide stakeholder community is informed of the existence and purpose of the 787-SAFE hotline. All materials are branded in a standard manner with the following call in number:

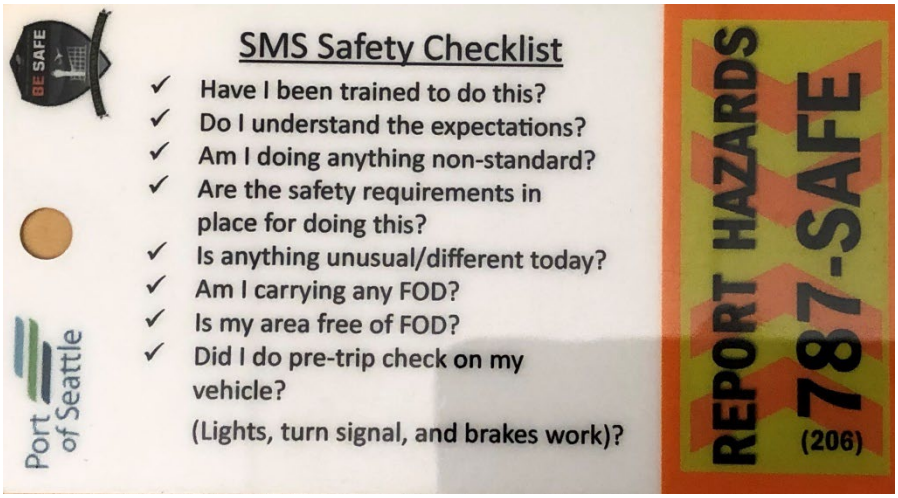


Figure 11 – Promotional Safety material

787-SAFE hotline promotional materials may include, but are not limited to:

- Posters
- Lanyards
- Stickers (small and large sizes)

6.4.2 Additional Promotions

The SEA promotion program is dynamic and evolving based upon effectiveness, current safety trends, SMS performance measurement based on KPIs, and feedback from the airport safety community. The following is a list of examples of SMS promotions. Any item on this list may be initiated or discontinued at any time, and additional items may be added as necessary:

- "Safety Aware" lanyards distributed to badge holders upon successful completion of the SMS Awareness Overview orientation.
- FOD awareness posters and stickers.
- SMS Checklist Lanyard Cards.
- SMS brochures listing basic SMS and safety-related information.
- S.AF.E brochures listing SEA's Rules and Regulation enforcement and citation information.

Section 6

Appendices

Appendix A – SEA SMS Safety Policy Statement

SEA Seattle-Tacoma International Airport

SEATTLE-TACOMA INTERNATIONAL AIRPORT
AIRPORT SAFETY MANAGEMENT SYSTEM POLICY

June 15, 2020

Safety Management System Our Fundamental Safety Practice & Culture

Safety is one of our highest priorities and is integral to all our processes and practices. Seattle-Tacoma International Airport's Executive management team is committed to the adoption, implementation and incorporation of a Safety Management System (SMS) into our, and our stakeholder, business processes, practices and culture. We are dedicated to continuously improve, communicate and deliver effective policy guidance and the allocation of the resources necessary to enact such practices and controls.

All levels of management are accountable for the delivery of the highest level of safety performance, starting with the Managing Director. Airport employees and tenants should systematically integrate safety into leadership, managerial, and work practices at all levels to continuously conduct the business of Sea-Tac International Airport safely. The application of an effective Safety Management System (SMS) is integral to all Airport activities.

SMS is a formalized, proactive, approach to managing safety through the application of organization-wide, cross-functional safety policies, application of formal methods of identifying hazards, analyzing and mitigating risk, and ensuring continuous safety improvement. As a proactive, comprehensive and systemic approach, the objective of SMS is to provide a structured management approach to control safety risks and to assure a safe operating environment and constitutes our "Standard of Care".

SEA is further committed to:

- Continuous promotion and improvement of our safety culture
- Encouragement of confidential hazard reporting by all employees and tenants
- Incorporation of safety and risk-based decision making into all policies, process and practices
- Ensuring all employees are aware of their responsibilities and accountabilities in the execution of and participation in the SMS
- Providing trained personnel and other resources necessary to ensure the effectiveness of the SMS
- Analyzing and managing risk(s) associated with airport-related operations, incidents, or accidents

To properly elucidate this responsibility and that of SMS within our organization, I am appointing Laurel Dunphy as our SMS Responsible Executive. Laurel will act on behalf of the Airport for the implementation, oversight and assurance of the Airport's Safety Management System with ultimate responsibility for the safety of operations conducted under our Operating Certificate. Under Laurel's leadership and in conjunction with the SMS Manager, the Airport Operations team will oversee and manage Sea-Tac's SMS effort.

To ensure the requisite holistic approach is maintained, the SMS Manager is charged with ensuring that SMS is administered collaboratively with clearly identified cross-functional roles and responsibilities inclusive of all the affected parties and stakeholders' concerns.

Lance Lyttle
Managing Director, Aviation
SMS Accountable Executive

Laurel Dunphy
Director, Airport Operations
SMS Responsible Executive

Appendix B – SEA Safety Risk & Tolerance Matrixes

SEA Leadership Safety Commitment:

The health and safety of our employees, stakeholders, customers, and tenants is our highest priority. We, the leadership of the Seattle Tacoma International Airport (SEA), are committed to and fully support the adoption, continuous improvement and assurance of airport safety and implementing and supporting SMS within our respective areas of control and influence, through:

- The development and endorsement of strong safety policies, procedures & practices
- Ensuring all employees are competent and trained to safely perform their functions.
- Being present, aware and engaged with our workforce to assure effective compliance with safe operating practices and open communications.
- Integrated and proactive risk-based decision making in all policies and practices
- Active Participation in safety significant events, risk assessments and collaborative decisions
- Promote, encourage and monitor a positive safety culture and related initiatives and mitigations
- Assure a "just culture" in which reporting of incidents, mistakes and errors is encouraged
- Acquiring and approving the necessary resources and support for Safety and the SMS program
- Address and mitigate hazards as soon as possible and as reasonably feasible

Lance Lyttle, Managing Director, Aviation
SMS Accountable Executive _____

Laurel Dunphy, Director, Aviation Operation
SMS Responsible Executive _____

Aviation Chief Operating Officer _____

Jeffery Brown, Director, Facilities & Capital Dev. _____

Stuart Mathews, Director, Aviation Maintenance _____

Wendy Reiter, Director, Public Safety & Security _____

James Jennings, Director, Airline Services _____

Theresa Cummings, Director, Health and Safety _____

Appendix C – SEA Safety Risk & Tolerance Matrixes

SEVERITY

People	No to slight injury	Injury w/ Medic Response	Injury with transport	Multiple injuries or fatalities	Mass Casualty
Conunity Of Operations (COOP)	No impact	Minor Disruption to Normal Ops Recovery time = immediate	Major Disruption to Normal Ops Recovery time = 24-48 hours	Sever Disruption to Normal Ops Recovery time = > 48 hours	Widespread Regional Disruption to Ops Recovery time = indefinite
Environmental	No impact	Non Reportable-Containable minimal volume or hazardous material	Reportable – Non-Containable minimal volume of hazardous material	Reportable – Containable moderate volume of hazardous material	Reportable – Non-Containable significant volume of hazardous material
Perception/ Reputation	No impact	Minimal media inquiries	Local Media coverage	Local and national media coverage for > 48 hours	Widespread international media coverage and reduction of air travel
Assets	< $50K	$50K - < $1million	$1 million - $100 million	$100 Million to $ 1 Billion	Over $1 Billion

LIKELIHOOD

Likely to occur:	Severity / Likelihood	Minimal 5	Minor 4	Major 3	Hazardous 2	Catastrophic 1
once a day or multiple times per week	**Frequent A**	L5	M13	H20	H22	H25
multiple times per year or once per month	**Probable B**	L4	M12	M15	H21	H24
once a year or multiple times within 5 years	**Remote C**	L3	L8	M14	M17	H23
once in every five years or multiple times within 10 years	**Extremely Remote D**	L2	L7	L10	M16	M19
only once in 10 to 100 years	**Extremely Improbable E**	L1	L6	L9	L11	M18

High Risk

- Analyze for mitigation to medium or low
- Change cannot be implemented unless the hazards' associated risks are mitigated
- Tracking, monitoring, and management require mitigation so that the risks are reduced to medium or low levels

Medium Risk

- Analyze for mitigation to low
- Minimum acceptable safety objective
- Change may be implemented, but tracking, monitoring, and management required

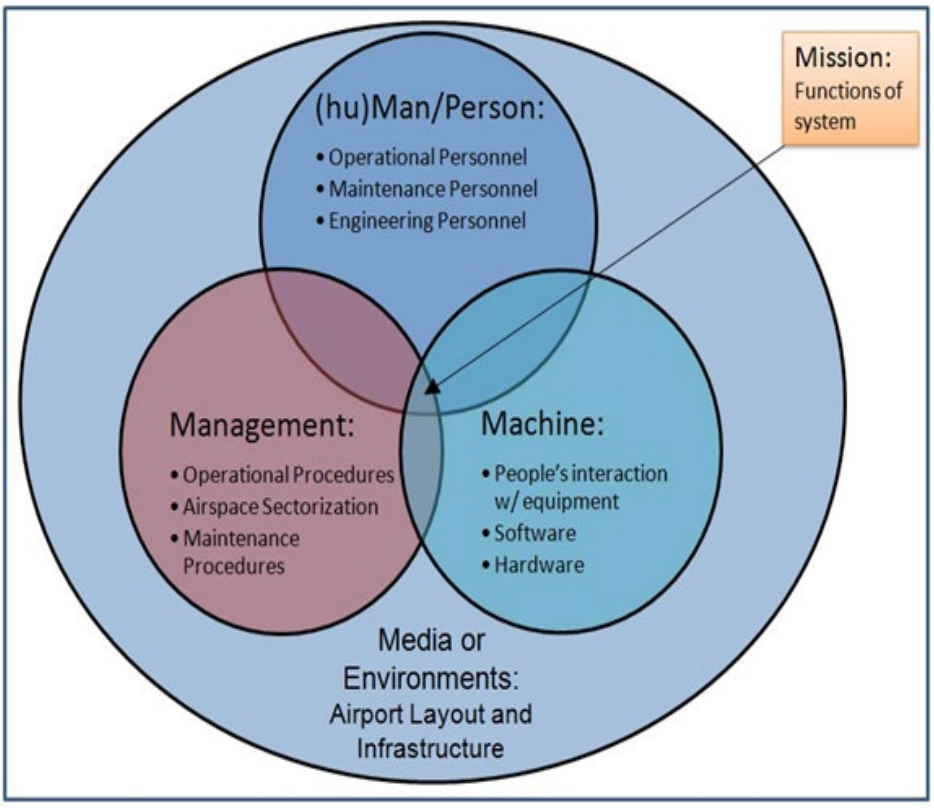
Low Risk

- No mitigation necessary
- Acceptable without restriction or limitation
- Hazard must be documented

Appendix D – The 5M Model

The 5M Model is used to deconstruct the proposed change or condition for analysis to distinguish elements that are part of, or impacted by, the proposed change or condition. These elements later help identify sources, causes, hazards, and current and proposed hazard mitigations. The 5M Model analyzes five elements for impacts: Mission, Man, Machine, Management, and Media. These elements are defined as follows:

- Mission – A defined role of the SRM panel, describing, in detail, the operation or change.
- (hu)Man/Person – The human operators or maintainers.
- Machine – The equipment used in the system, including hardware, firmware, software, human-to-system interface, and avionics.
- Management – The procedures and policies that govern the system's behavior.
- Media – The environments in which the system is operated and maintained.



DRAFT FAA AC 150/5200-37A, 2016

Appendix E - SEA SMS Hazard Identification, Risk Assessment, and Analysis Worksheet

#	Hazardous Condition	Consequence	Risk Assessment			Mitigation	Residual Risk (if any)	Responsible Party
			Severity	Likelihood	Result			
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								

Appendix F – Ramp and Bagwell Self-Inspection checklist

Ramp Inspection Checklist

Date: _____

Inspector: _____ Location _____

Time: _____ General Conditions: _____

For FOD Issues, please refer to FOD Checklist — H - Hazard

Hazard Category	Conditions	H	Location	Party Responsible for Correction	Reported To (Date/Name)	Date Corrected (Date/Name)	Inspected By (Date/Initials)
Human Factors	Personnel wearing reflective outer garment	☐					
	Driving without a blue badge on ramp						
	Other personnel hazard	☐					
Fire Safety	Open flames	☐					
	Smoking	☐					
	Blocking fire hydrants	☐					
	Wheeled fire extinguisher at POS gates	☐					
	Other fire safety hazards	☐					
Environmental	HAZMAT spills/leaks	☐					
	Illegal discharge into storm drain	☐					
	Flammables not stored in a fire storage locker	☐					
	Open containers with HAZMAT material	☐					
	Used absorbent not properly disposed of	☐					
	Damaged containers w/o secondary containment	☐					
	Wildlife hazards/attractants	☐					
	Other environmental hazards	☐					
Vehicular Movement	Failure to give way to aircraft and or emergency vehicles	☐					
	Crossed zipper lines	☐					
	Movement area violation	☐					
	Driving between aircraft and marshaller	☐					
	Towing too many carts (6 max)	☐					
	Failure to secure cargo, mail, or FOD producing items	☐					
	Driving outside designated driving lanes	☐					
	Other operational safety Issues	☐					
Aircraft Servicing	Failure to give way to wing walkers	☐					
	Deicing	☐					
	Failure to secure cargo, mail, or FOD producing items	☐					
	Above idle engine run-up at gate	☐					
	Other operational safety Issues	☐					
Tenant Construction	Improper construction barricading	☐					
	FOD produced by construction	☐					
	Damaged barricades or lighting	☐					
	Other construction hazards	☐					
Properties	Damage to airport property	☐					
	Equipment not stowed properly	☐					
	Other property Issues	☐					
GSE	GSE with appropriate markings identifying company organization	☐					
	GSE brakes/chocks utilized	☐					
	Operational headlights or brake lights	☐					
	Jet bridges and jetway stairs stowed properly	☐					
	Jet bridge roll up doors closed between operations	☐					
	Leaking or malfunctioning equipment	☐					
	Illegally parked vehicle/equipment	☐					
	Other GSE/vehicle Issues	☐					

Bagwell Inspection Checklist

Date:		Location	
Inspector:		General Conditions:	
Time:			
For FOD Issues, please refer to FOD Checklist			H - Hazard

Hazard Category	Component	H	Location	Party Responsible for Correction	Reported To (Date/Name)	Date Corrected (Date/Name)	Inspected By (Date/Initials)
Human Factors	Personnel wearing reflective outer garment	☐					
	Other personnel hazards	☐					
Fire Safety	Open flames	☐					
	Smoking	☐					
	Blocking fire hydrants	☐					
	Other fire safety hazards	☐					
Environmental	HAZMAT spills/leaks	☐					
	Flammables not stored in a fire storage locker	☐					
	Open containers with HAZMAT material	☐					
	Used absorbent not disposed of properly	☐					
	Damaged containers w/o secondary containment	☐					
	Other environmental hazards	☐					
Vehicular Movement	Towing too many carts (4 max)	☐					
	Driving without a blue badge	☐					
	Failure to secure cargo, mail, or FOD producing items	☐					
	Speeding	☐					
	Other operational safety Issues	☐					
Construction	Improper construction barricading/coning	☐					
	Garbage produced by construction	☐					
	Other construction hazards	☐					
Properties	Damage to airport property	☐					
	Equipment not stowed properly	☐					
	Other property issues	☐					
GSE	GSE with appropriate markings identifying co.	☐					
	GSE in good working order	☐					
	Brakes on GSE equipment utilized	☐					
	Leaking or malfunctioning equipment	☐					
	Operational headlights and brake lights	☐					
	Illegally parked vehicle/equipment	☐					
	Other GSE/vehicle Issues	☐					
Lighting	Adequate lighting for operations	☐					
	Lights missing or damaged	☐					
Surface Signs	Location signs	☐					
	Direction signs	☐					
	Other sign issues	☐					

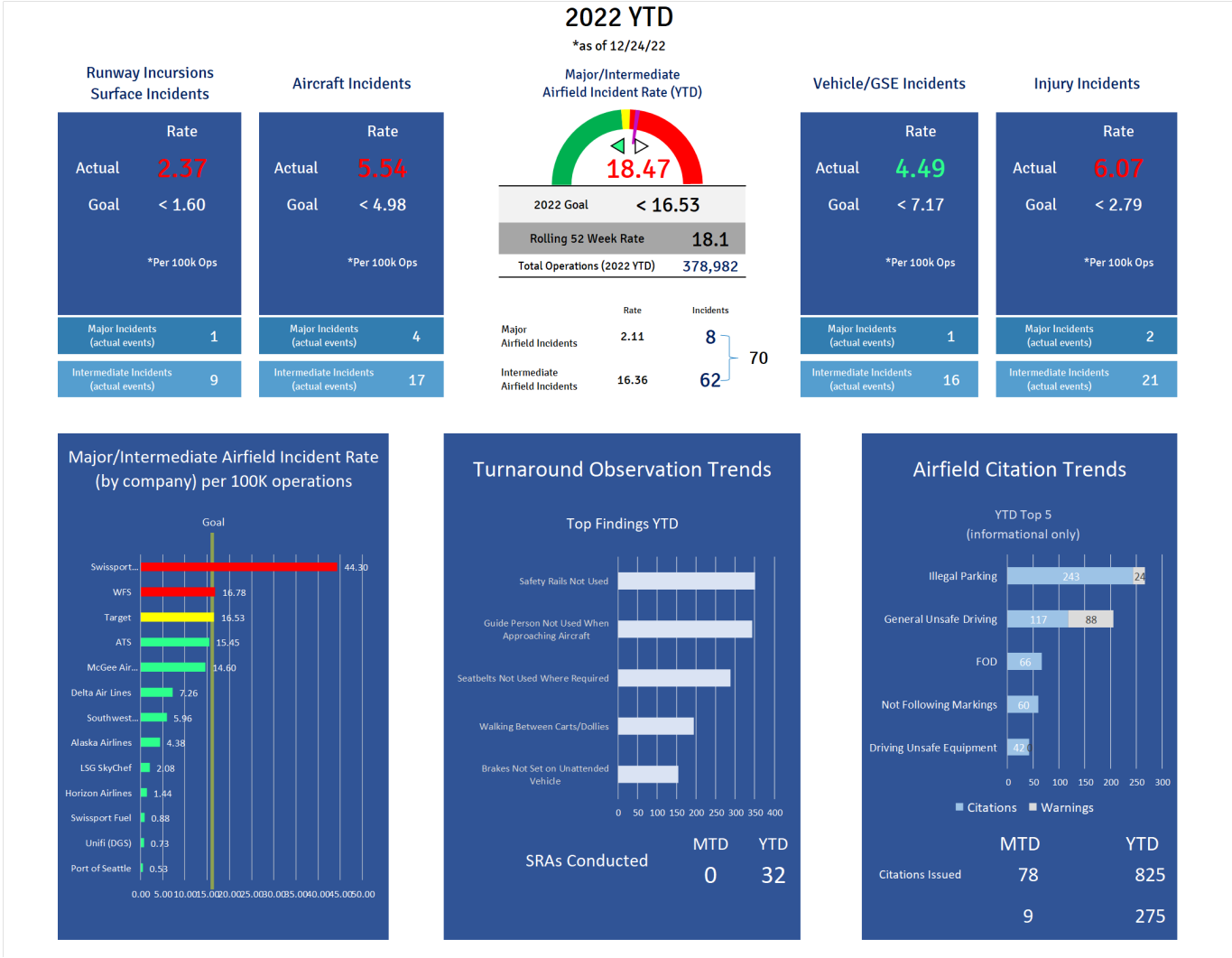
Appendix G – FOD Inspection Checklist

FOD Inspection Checklist				
Date: _____			**Inspection Zone:** _____	
Inspector/Time: _____			**U - Unsatisfactory**	
Deficiency Category	**Conditions**	**U**	**Location**	**Party Responsible for Correction**
FOD Buckets	Bucket not appropriately secured	□		
	Bucket does not have lid, or lid is not closed or securely fastened	□		
	Bucket is overflowing	□		
	Bucket utilized for non-FOD waste (i.e. aircraft service waste)	□		
FOD Cans	Can is overflowing	□		
	Can does not have lid, or lid is not closed or securely fastened	□		
	Can is utilized for non-FOD waste (i.e. aircraft service waste)	□		
Dumpsters and Compactors	Dumpster/compactor lid is not closed	□		
	Garbage and other waste left beside dumpster/compactor	□		
	Dumpster overflowing	□		
	Residual waste not cleaned or picked up after dumpster or compactor emptied	□		
GSE/Vehicles	GSE/vehicles not stored in the correct location	□		

	GSE stored without brakes or chocks	□		
	FOD hazard on/in GSE (i.e. plastic wrap in cart, broken pallets, loose waste in tugs)	□		
	GSE/vehicle damage creating FOD	□		
General	Small litter and/or soft FOD found on Ramp	□		
	Large and/or hard FOD found on Ramp			
	FOD creating noticeable wildlife hazard	□		
	Other FOD-producing hazard	□		
	Construction-related FOD	□		
	Cleaning 10 ft. from building not performed	□		
Bagwell	Vacuum and/or sweeping not performed	□		
	Mop within 10 ft of entry not performed	□		
	Garbage cans overflowing	□		
	Garbage and other waste left beside garbage cans	□		
	Availability of garbage cans	□		

Other Deficiencies/Comments:

Appendix H – SMS Scorecard



Appendix I – Confidential Hazard Reporting Form

Port of Seattle
Seattle Tacoma International Airport

BE SAFE
SAFETY IS EVERYBODY'S BUSINESS

Confidential Hazard Reporting Form

This form should be used to report any hazard or safety concern that has caused or could cause an accident or incident. Place in any labeled "Hazard Reporting Dropbox" on the airport or send to SEA's SMS Manager at XXXXXX@portseattle.org. If hazard is an emergency or needs immediate action, contact the Airport Communication Center (ACC) at 787-SAFE (7233).

HAZARD or EVENT DESCRIPTION

(To be completed by person reporting hazard or event)

Date: / / **Time:** **AM/PM**

Location: _____

Description: _____

_____

_____

_____

_____

Witnesses: _____

Reporter Name (optional): _____

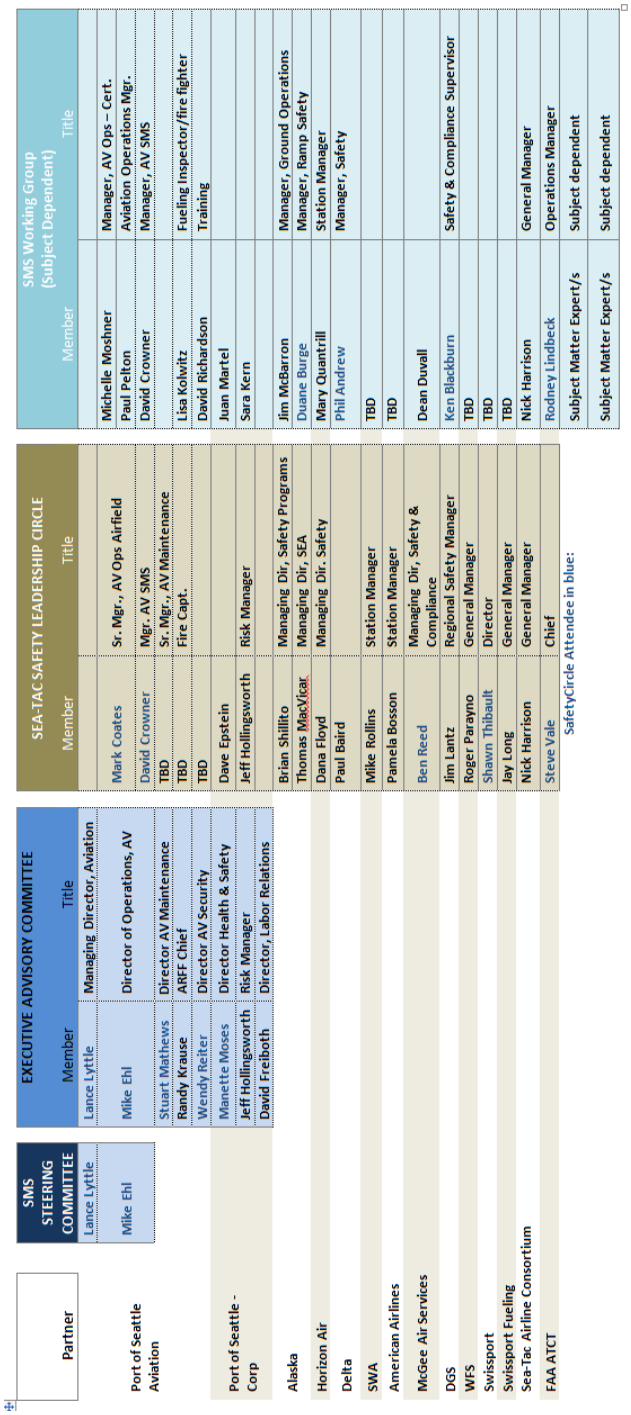
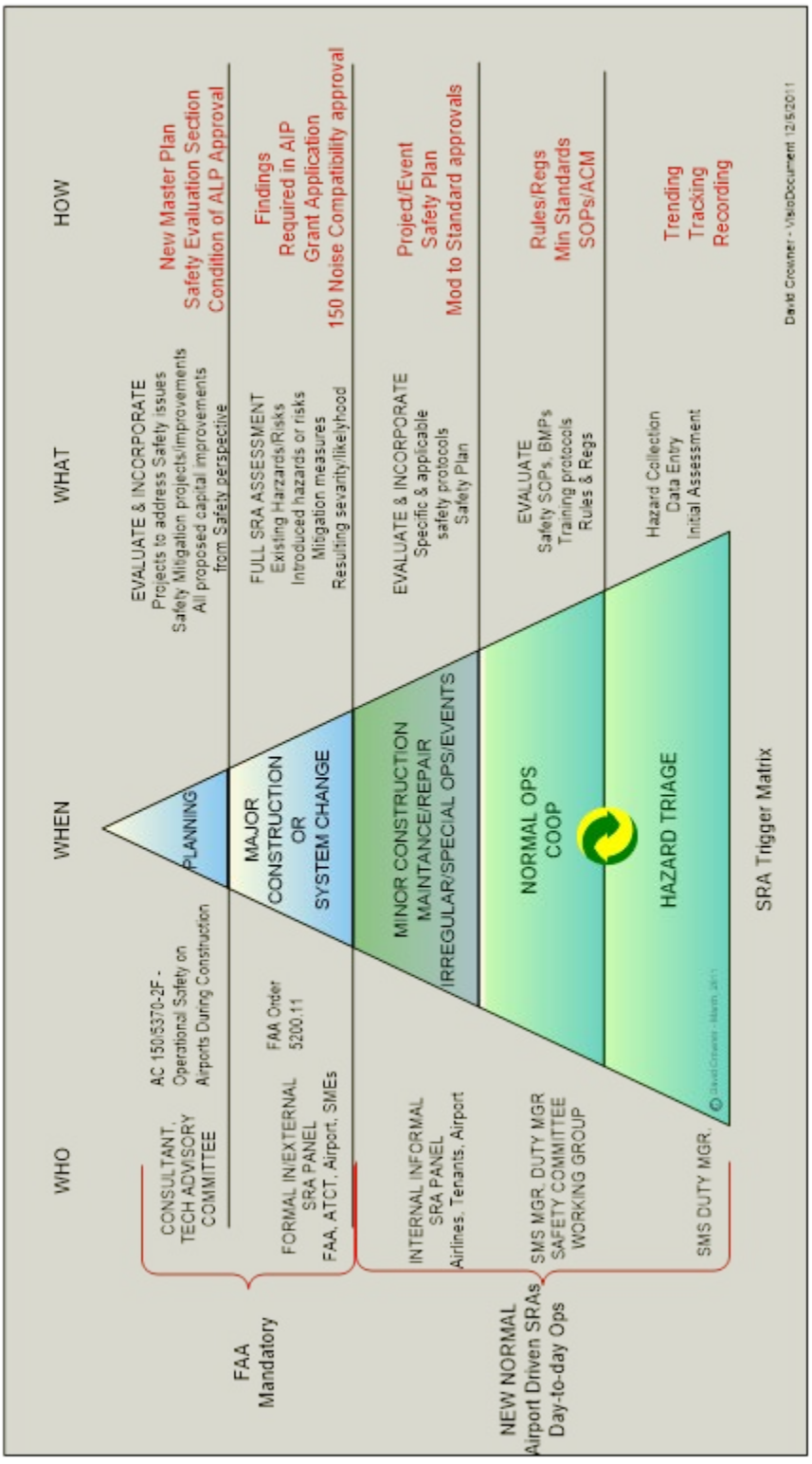
Reporter Company & Position (optional): _____

Contact Number/E-mail Address (optional): _____

Confidentiality Commitment

You can choose to report anonymously by omitting name, position, and other identifying details. If you provide your name, only the SMS Manager or Specialist will see it and potentially use it to gather additional information about the hazard or event and discuss follow-up actions (if required). Under NO circumstances will your identity be disclosed to any person or organization without your express permission. However, these confidentiality commitments DO NOT APPLY to any willful disregard of regulation or negligent acts committed on the airport.

Appendix J – SMS Committees – Current



Appendix K – SRA/M triggers