



Seattle-Tacoma International Airport SMS Roles and Responsibilities

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Define Safety Manager’s roles and responsibilities including Safety Committee functions, where applicable.

While roles and responsibilities of a ‘Safety Manager’ may vary at each airport, a core set of duties will be developed to help guide airports to determining who in the organization may best serve the SMS program. This includes development of a Safety Committee’s functions including authority and reporting capabilities. These roles will be reviewed with regard to the current Part 139 activities within the airport’s organization for assessment of future impact of SMS on Part 139 staffing and management. To complete this task, the airport will develop a comprehensive set of duties; develop options for shared and single Safety Management position; develop Safety Committee activities and sample process flows for reporting; and, provide guidance on how to engage current staff in Safety Committee activities. If changes are made to the airport’s SMS as a result of the findings under this task, the airport should report on those changes.

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1. Introduction

The success of a Safety Management System (SMS) relies on qualified, experienced, and competent staffing. At the core of a SMS is the Safety Manager who typically provides program and project oversight, strategies, staff management, operational integration, and the culture inherent in the SMS. At large airports, a SMS is not likely to succeed without the full-time commitment of a Safety Manager. Collectively, existing staff cannot take on the various management and tactical tasks of a Safety Manager as collateral duties. This recommendation is largely due to the need to manage the many, individual efforts (projects) that make up the SMS. The Safety Manager can provide oversight and serve as a central point of contact to coordinate staff activities and monitor the SMS as a whole.

In selecting a Safety Manager, three core areas of proficiency and expertise should be met. These include Technical, Management, and “Soft” skills (see Section 3.0 Core Skills). The Safety Manager must be qualified in each of these areas to ensure program success. And, since a key aspect of the Safety Manager’s role is to communicate and champion the SMS, soft skills are considered equally important as the technical and management skills.

This document reflects research, findings, and relevant information to help guide airports to the successful engagement and deployment of a SMS team including tenant responsibilities on SMS Committees. In addition to core skill sets for a Safety Manager and Safety Specialist are roles and responsibilities for both primary and collateral duty staff. The inherent success of an SMS relies on participation throughout the organization; the role of the Safety Manager is to enlist the assistance of additional resources and stakeholders to implement and operationalize the program. The Safety Manger alone cannot make an SMS succeed, but the collection of resources, skills, and knowledge the Safety Manager brings to the program can guide and shape the disparate efforts more effectively.

A SMS can be comprised of an intricate set of processes and procedures; however, through solid interpersonal relationships, effective communication among staff, collaboration, and clear guidelines to roles and responsibilities, the SMS team can overcome many of the complexities.

2. SMS Committees and Stakeholders

As part of a SMS program committees create a community, a conduit for communicating and resolving safety issues, and an opportunity to develop stronger safety relationships. Most airports conduct safety meetings in a variety of formats and functions. Committees should include representatives who have adequate expertise to either make decisions or assign a subject matter expert to assist in decision making. A SMS committee's primary function is to ensure safety is improved through hazard identification and analysis and corrective measures. Success of a SMS Committee is founded on trust and on an agreement that safety is a collective goal.

The diagram on the following page represents the existing and proposed committees to support the SMS at Sea-Tac. The groups are placed in context of formal and informal communication paths from committees, to subcommittees, to key stakeholder groups. At the core of the program are SMS-specific committees (Sea-Tac Safety Action and future Landside and Terminal Safety Committees).

Also included in the illustration are two new subcommittees that support the SMS program through staff participation in risk assessments and foreign object debris (FOD) programs. FOD and risk programs require close collaboration between the airport and tenants and merit a smaller, focused team to build continuity and resolve issues quickly and effectively. Aside from these subcommittees, no new committees will be developed to support the SMS. Members of the subcommittees are expected to be a subset of the core Sea-Tac Safety Action Committee which will provide continuity, safety awareness, and integrated communication.

Surrounding the committees are relevant stakeholder groups who are established at Sea-Tac and who will have review and approval functions for some of the SMS committee activities, budgets, and policies. Specific committee functions are described further in the next section.

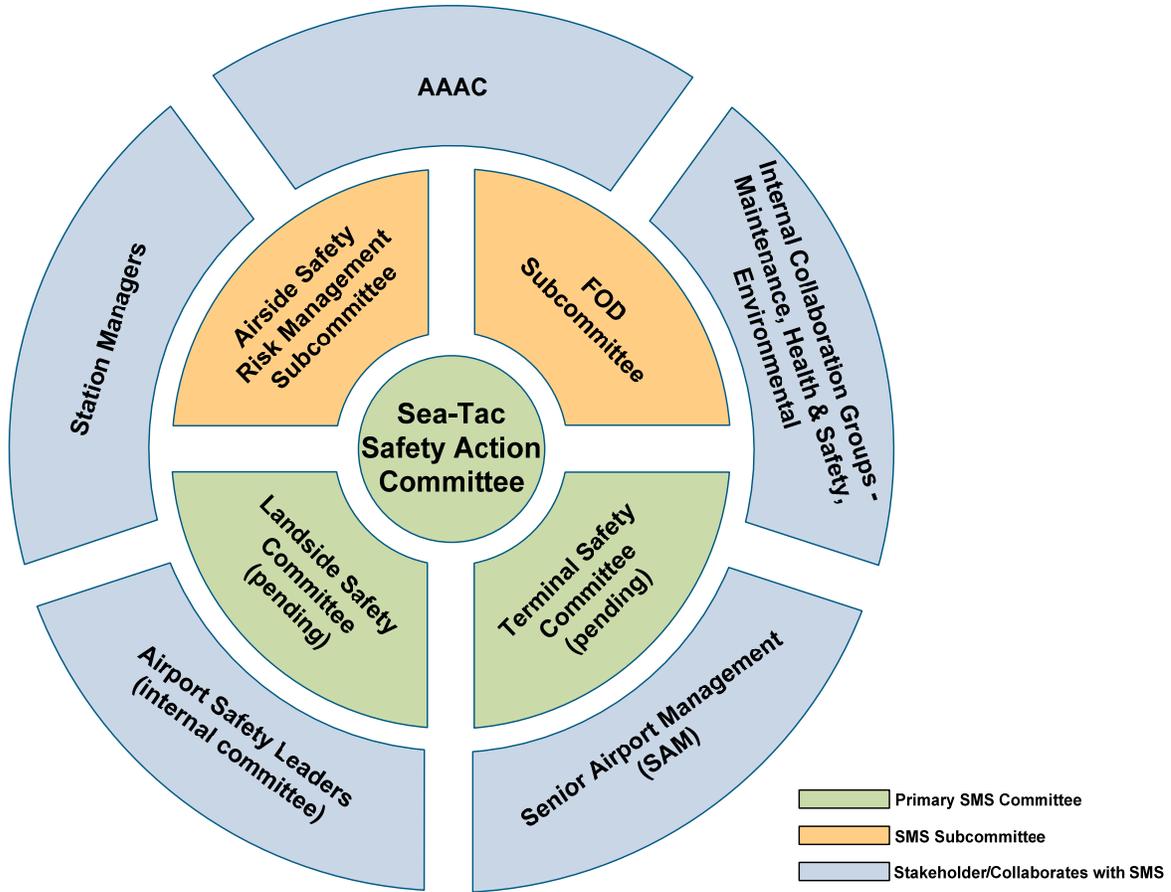


Figure 1 - SMS Committees

2.1 SMS Committees

As the SMS evolves, so will the community that participates in the proposed committees and review sessions. The committees will not be static and will focus on discussing and resolving safety concerns as a collaborative group. Although politics can exist in all levels of airport/tenant relationships, the team’s research suggests that the proposed committees are more likely to succeed in managing safety if the meetings focus on compiling accurate facts, sharing responsibilities, and resolving safety issues as a community of informed stakeholders. A brief description of each committee is presented in Sections 2.1.1 through 2.1.4.

1.1.1. Sea-Tac Safety Action Committee

The Sea-Tac Safety Action Committee was formerly referred to as the Airline Safety Committee. During this study, the name was specifically changed because the previous name did not accurately reflect either the committee purpose or attendees. The group is comprised of airport and tenant representatives such as senior operations managers, station managers, ramp managers, safety managers, safety trainers, and other safety related staff such as Sea-Tac’s Safety Construction and Health & Safety

Liaisons. The committee is currently co-chaired by an Operations Senior Manager and a Station Manager. The Operations Senior Manager provides the committee oversight regarding logistics and leadership and the Station Manager typically facilitates the meeting. Over the past year, the meeting has evolved to focus more effectively on documenting and discussing issues regarding collective concerns such as snow removal procedures, ramp drive lane compliance, FOD on the ramp and garbage in the bagwell, and speeding in general. Meeting notes are scribed and action items are identified but, because a SMS is not officially in place at Sea-Tac, the committee is working in an ad hoc manner to document and track these concerns. While recent improvements have been made to the format and content of the meeting, without the support, scope, charter, and structure of a formal SMS and associated Safety Manager, the Team believes the committee will continue to struggle with formally and consistently collecting information on hazards, identifying responsibility, and tracking mitigation. Actions are assigned to specific groups and often coordinated with maintenance to review and resolve the issue, but no formal process or oversight is in place to ensure resolution actually takes place.

As part of the future SMS, this committee will serve as a primary forum to discuss potential hazards, safety issues, safety policies, and other safety topics., Both airport and tenant personnel will be expected to attend the meetings to provide expertise or advisements to the group.

1.1.2. FOD Subcommittee

As mentioned in the FOD Program Manual, an expanded FOD program is proposed for Sea-Tac. In addition to other resources requested from the SMS community, the FOD program calls for the development of a FOD Subcommittee. This Subcommittee was recently formed (Fall of 2009) and is chaired by a Ramp/Safety Manager. To date, the Subcommittee has briefly met to discuss existing and proposed FOD programs underway at Sea-Tac. To ensure the success of the FOD Subcommittee, a collaborative effort between Sea-Tac's designed FOD Coordinator (assigned from the Airport Duty Manager Team) and the FOD Subcommittee Chair will need to be in place to organize and coordinate FOD efforts. The formalized structure of the SMS will provide a forum for FOD coordination at all levels of the organization including joint coordination of the Sea-Tac and tenant FOD programs.

1.1.3. Airside Safety Risk Management Subcommittee

The Guide to Safety Risk Management program outlines a structured process for assessing and mitigating identified hazards. The role of the Safety Risk Management Subcommittee members will be to serve as experts to perform risk assessments and provide recommendations for corrective actions for high risk hazards. As needed subject matter experts will meet to assess severity and probability of hazards to identify and rank risks and to discuss mitigation strategies. For more information on the proposed Risk processes and procedures, see the Guide to Safety Risk Management.

1.1.4. Landside/Terminal Safety Committees

The initial roll out of SMS at Sea-Tac will be limited to airside operations (including the bagwell), but eventually the program will be rolled out to landside and terminal operations. The Landside and Terminal Safety Committees will take on safety hazards

that exist in the non airside operations and jointly resolve issues that bridge more than one operational area. It is likely the Safety Manager will attend these new meetings and likely serve as a leader as the new committees are formed and deployed.

Table 1 on the following pages presents responsibilities for each committee relevant to SMS and includes recommendations for Chair assignments. In some cases airports may decide to co-chair with a tenant, but for the purposes of this documentation, the recommendation is founded on the skills, objectives, and accountabilities of the most effective SMS stakeholder which are representatives of Sea-Tac. Additionally, a list of required and as-needed members is included.

SMS Roles and Responsibilities

Committee	Responsibilities (as related to SMS program)	Chair	Members
SeaTac Safety Action Committee	<ul style="list-style-type: none"> • Review high risk hazards and discuss mitigation strategies • Provide recommendations to AAAC for mitigations requiring capital investment • Provide a forum to capture newly identified hazards for review and assessment by the SRM subcommittee • Determine ownership of hazards and corrective actions for those that do not clearly fall under either the airport or airline SMS • Disseminate relevant safety information • Participate in safety assurance (quality) programs, as defined • Draft, update, contribute to, or review airport SMS policies, as necessary 	Senior Manager, Airport Operations Secondary – Airline Rep.	<p>Required</p> <ul style="list-style-type: none"> • Airline Safety Managers • Ground Service Provider Safety Managers • Airport Safety Manager • Airport Maintenance Liaison • Airport Health & Safety Liaison • Construction Safety Liaison <p>As Needed</p> <ul style="list-style-type: none"> • Airport Comm.& Dispatch Liaison • Airport Duty Manager • Airport Operations Specialist • Maintenance Lead • Risk Management Liaison • Environmental Liaison
FOD Subcommittee	<ul style="list-style-type: none"> • Coordinate ongoing FOD prevention activities, including FOD walks, trash removal • Discuss and capture FOD hazards • Perform root cause analysis on FOD-related accidents/incidents • Review FOD trends and patterns • Collaborate and participate in FOD prevention strategies, enforcement methods, and FOD-awareness campaigns • Organize and sponsor twice annual all-airport FOD walks • Make policy recommendations to SeaTac Safety Action Committee 	FOD Coordinator (Airport Duty Manager) Secondary – Airline Rep.	<ul style="list-style-type: none"> • FOD Representative from each tenant (airlines and GSPs) • Airport Safety Manager • Airport Safety Specialist • Airport Maintenance FOD Coordinator

SMS Roles and Responsibilities

<p>Airside Safety Risk Management Subcommittee</p>	<ul style="list-style-type: none"> • Identify Airside safety hazards • Perform risk assessment for initial high risk hazards • Discuss corrective action alternatives and provide recommendations to SeaTac Safety Action Committee for high risk • Review safety trends and patterns • Make policy recommendations to SeaTac Safety Action Committee 	<p>Airport Safety Manager</p>	<p>Required</p> <ul style="list-style-type: none"> • Airport Safety Specialist • Airport Safety Manager <p>As Needed</p> <ul style="list-style-type: none"> • Airport Duty Manager • Airport Operations Specialist • Airport Maintenance Liaison • Airport Maintenance Lead • Risk Management Liaison • Environmental Liaison • Construction Safety Manager • Airport Comm.& Dispatch Liaison • Airport Health & Safety Liaison • Tenants
<p>Landside Safety Committee (pending)</p>	<ul style="list-style-type: none"> • Identify Landside safety hazards • Validate risk assessment for initial high risk hazards • Discuss corrective action alternatives and provide recommendations to SeaTac Safety Action Committee for high risk • Review safety trends and patterns • Make policy recommendations to SeaTac Safety Action Committee 	<p>TBD</p>	<p>TBD</p>
<p>Terminal Safety Committee (pending)</p>	<ul style="list-style-type: none"> • Identify Terminal safety hazards • Perform risk assessment for initial high risk hazards • Discuss corrective action alternatives and provide recommendations to SeaTac Safety Action Committee for high risk • Review safety trends and patterns • Make policy recommendations to SeaTac Safety Action Committee 	<p>TBD</p>	<p>TBD</p>

Table 1 - Committee Roles and Responsibilities

2.2 SMS Committee Stakeholders

A group of SMS Committee Stakeholders serves the SMS as interested business partners, budgetary approvers, information distributors, advisors, and subject matter experts. These stakeholders consist of both internal (Safety Leaders) and external (Airline Station Managers) groups that currently exist in the Sea-Tac airport business and operations community. A brief description of each Stakeholder group and their importance to the SMS is presented below.

1.1.5. Airport Safety Leaders

Led by a Sea-Tac Deputy Director, the Airport Safety Leaders are a group of internal staff who meet monthly to review safety trends and activities. The group is focused on Sea-Tac staff as a priority but also include safety issues associated with construction projects, fire and police issues, and maintenance staff issues. The meeting is typically facilitated by Port of Seattle (POS) Health & Safety personnel who present information on POS staff injuries, accidents and incidents (including vehicular accidents), and bagwell citation information (manually collected from the Airport Duty Manager Logs). As SMS is introduced at Sea-Tac, the Airport Safety Leaders group will establish a formal relationship with the Safety Manager to discuss internal safety trends especially safety hazards that overlap with Health & Safety issues such as air quality, recommendations on personnel protective equipment (PPE) and human factors. The Safety Manager will attend the Airport Safety Leaders meetings to report on SMS Committees activities such as airside safety issues.

1.1.6. Station Managers

Station managers representing airlines and ground service providers meet monthly to discuss Sea-Tac facility and operations issues including airside, terminal, and landside concerns, problems, and operational changes. The group is chaired by a Station Manager on a rotating basis. Station Manager meetings provide an excellent forum to discuss safety issues that impact the airport-wide community. Also, Station Managers are in a position to disseminate information at a local and corporate level. The Safety Manager will attend Station Manager Meetings to brief the group on emerging safety issues, to ask for input on potential hazards, and to collaborate and prioritize hazard mitigations.

1.1.7. Airline Airport Affairs Committee (AAAC)

The Airline Airport Affairs Committee (AAAC) is comprised of airline and ground service provider representatives as a budgetary oversight committee. The committee meets quarterly and is chaired by a committee representative on a rotating basis. With regard to the SMS, any large-scale or high-cost corrective actions to resolve hazards would need to be presented to the committee for funding or other approval. To inform and educate the committee, the Safety Manager will attend meetings to provide program information and to brief the group on significant safety concerns or trends.

1.1.8. Internal Collaboration Groups (ad hoc)

At Sea-Tac, airport operations combines the skills and knowledge of many departments including Maintenance, Aviation Operations, Facilities Engineering, Construction Safety, Risk Management, and Health & Safety. The SMS will require formal and informal committee meetings to address safety trends, hazards, corrective actions, and best practices. Of the committees presented, this is the most fluid and flexible and will change depending on existing safety concerns and projects. The Safety Manager will lead these committee sessions and rely on the Safety Specialist to coordinate invitees as needed to support the effort. Buy in from each department represented will be critical to the success of these ad hoc committee meetings.

1.1.9. Senior Aviation Management (SAM)

Senior Aviation Management (SAM) is led by the Airport Director and made up of Sea-Tac Senior Airport Managers representing Finance, Airport Operations, Business Development, Public Affairs, Community Development, etc. These leaders meet on a recurring basis and discuss airport wide concerns and programs, trends, inter-related business and budget issues. SAM member buy in to SMS is extremely important to the program success. The SAM team has the ability to promote safety from the airport's highest levels, which promotes a safety culture. The Safety Manager will attend the SAM meetings to instruct, inform, and foster SMS participation from the SAM.

Table 2 presents specific stakeholder groups, their integration and collaboration with the SMS, and additional or existing members as they related to the SMS.

SMS Roles and Responsibilities

Stakeholder	Collaboration/Integration with SMS	Members
Airport Safety Leaders	<ul style="list-style-type: none"> • Report out from SMS committees • Discuss Airside, Landside, and Terminal safety trends • Review safety hazards that overlap with internal Health & Safety initiatives (i.e. air quality in bag room) 	<ul style="list-style-type: none"> • Airport Safety Manager • Airport Health & Safety • Airport Maintenance • Airside Representative • Terminal Representative • Landside Representative • Construction Representative
Station Managers	<ul style="list-style-type: none"> • Report out from Safety Management Action Committee on safety risks, trends, actions required from tenants • Review and discuss policy recommendations from Safety Action Committee, when necessary • Disseminate safety-related information to employees and to corporate office • Collaborate on solutions to airport-wide safety hazards, where necessary 	<ul style="list-style-type: none"> • Station Managers • Airport Duty Manager(s), as necessary • Airport Safety Manager • Senior Manager, Airport Operations • Ramp Services Manager • Airport Quality Assurance Manager
Airline Airport Affairs Committee (AAAC)	<ul style="list-style-type: none"> • Report out from Safety Management Action Committee on safety risks, trends, high visibility tenant concerns • Approve large-scale, high-cost corrective action plans to mitigate risk 	<ul style="list-style-type: none"> • Airline Representatives • Airport Operations • Subject Matters Experts as needed
Internal Collaboration Groups	<ul style="list-style-type: none"> • Collaborate on corrective actions for safety hazards that impact multiple groups • Share safety-related information, data, and trends • Transfer and communicate hazards routed incorrectly 	<ul style="list-style-type: none"> • Maintenance • Health & Safety • Risk Management • Environmental • Port Construction Services • Engineering

<p>Senior Aviation Management (SAM)</p>	<ul style="list-style-type: none"> • Report out from Safety Management Action Committee on safety risks, trends • Review and approve policy recommendations from Safety Management Action committee • Review high risk hazards and corrective action plans • Promote SMS and safety-related initiatives • Foster and actively create safety culture • Participate in, lead and be visible at safety-related activities (including FOD walks, safety fairs, etc.) as much as possible • Create and communicate open door, non-punitive environment and policy for hazard reporting 	<ul style="list-style-type: none"> • SeaTac Senior Airport Managers
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Table 2 – Stakeholder SMS Collaboration / Integration

3. SMS Positions - Core Skills

Two positions are recommended for the Sea-Tac SMS program: a Safety Manager and a Safety Specialist. These positions, while suggested for SMS implementation, have not yet been filled and are not, to the Team's knowledge, included in the Sea-Tac 2010 staffing budget. Impact to full SMS implementation will need to be considered when the deployment phase of the project is initiated.

Core skills for each position are included in the following tables. These skills were compiled through research and discussions with airport operations management at Sea-Tac and other airports that have SMS programs in place. The skills listed are not specific to Sea-Tac's proposed SMS; in fact, they reflect the capabilities expected of Safety Managers and Specialists at most large hub Part 139, Class I airports. Each table is comprised of core and optional skills segmented into three sections:

- **Soft Skills** – Soft skills are essentially people skills; the intangible, personality-specific skills that determine strengths as a communicator, negotiator, facilitator, diplomat, and problem solver
- **Management Skills** – Management skills include leadership capabilities including the ability to develop strategies, control budgets, manage staff, and implement change effectively
- **Technical Skills** – Technical skills for a Safety Manager include exposure to the aviation industry, proficiencies such as AAE certifications or a regulatory background. Technical skills are likely the easiest to quantify through resumes, reviews, or interviews

Qualifications for a Safety Manager require a balance that integrates interpersonal and management skills, and technical proficiency. Because the Safety Manager role relies heavily on relationships with airport staff and tenants, the Safety Manager must have strong communication and people skills.

Also, in the early stages of the SMS implementation, the Safety Manager will likely serve as a program / project manager but as the SMS evolves and becomes operational, the Safety Manager's role shifts to SMS advocate, strategist, and ambassador. This combination of skills may seem difficult to find in today's aviation industry where SMS is a new and emerging program. However, airports who have engaged Safety Managers and Safety Specialists indicate that an excellent pool of qualified professionals exists, especially from the airline and risk industry, who can fill these positions.

The Safety Specialist position is a support role that is self-directed and focused on data and information management but also includes strong communication and investigative skills. The Safety Specialist will likely spend a great deal of time in the field collecting and validating information from hazard, accident, and incident reports. The Specialist will understand the organization and responsibilities to assist in escalation and issue resolution. The Specialist will manage the inputs and outputs of the SMS database including reports and alerts.

The two following tables provide a listing of soft, management, and technical skills for each of the positions: Safety Manager and Safety Specialist.

3.1 Safety Manager Skills

Core Skills	Soft Skills	Management Skills	Technical Skills
	Inquisitive	Leadership	Root cause analysis
	Telecommunication	Program management	Accident/incident investigation
	Written/verbal	Budget control	Aviation background
	Presentations/public speaking	Strategy and planning	Safety background
	Self starter	Analysis (data and systems)	Risk management
	Independent	Staff management	Data analysis
	People person	Scheduling	Technology proficient (SW tools)
	Motivational	Task Management	QA/QC background
	Diplomatic	Implementation	Audit programs
	Ability to work with government agencies	Program risk management	Regulatory compliance
	Problem solver	Escalation/change management	
	Ethical	Business and System process management	
	Collaborative		
Facilitation			
Additional/ Optional Skills	Soft Skills	Management Skills	Technical Skills
	Negotiation	Bachelor's or Master's degree	OSHA
		C-level reporting experience	Health and safety
		AAE	Ramp operations
			Airport operations
			IATA (IOSA or ISAGO)
			ICAO
			Part 139
		General airport experience	

Table 3 - SMS Manager Core Skills

3.2 Safety Specialist Skills

Core Skills	Soft Skills	Management Skills	Technical Skills
	Inquisitive	Data management	Root cause analysis
	Self starter	Document management	Accident/incident investigation
	Works independently	Process management	Computer proficient
	Strong verbal/communication skills	Time management	
	Strong written/documentation skills		
	Strong analysis skills		
	Critical thinking skills		
Customer service skills			
Additional/ Optional Skills	Soft Skills	Management Skills	Technical Skills
	Negotiation	Staff management	Ramp operations
	Facilitation	Customer management	Airport operations
	Presentations		Part 139
			General airport experience
		Inspections/Audit experience	

Table 4 - Safety Specialist Core Skills

2.0 Roles and Responsibilities

The integration of a SMS into airport operations requires a planned and coordinated effort where each individual participating in the program understands his or her roles and responsibilities. Designated SMS program staff such as the Safety Manager or Safety Specialist will manage and support the program through full time efforts, but the bulk of the day-to-day work, the observations, the hazard identification, the corrective actions will come from a collective pool of technical and professional experts. These experts include Airport Duty Managers; Airport Operations Specialists; Maintenance, Risk, Environmental, Construction Safety, and Health & Safety Liaisons; Communication Center Representatives; and tenants.

3.3 SMS Personnel Core Duties

Two full time positions are proposed for a SMS; the Safety Manager and Safety Specialist positions. These positions, while recommended for SMS implementation, have not yet been filled and are not, to the Team's knowledge, included in the Sea-Tac 2010 budget. Impact to full SMS implementation will need to be considered when the implementation project is initiated. These positions are considered designated resources necessary to manage and support the SMS program. Core responsibilities are defined in Sections 4.3.1 and 4.3.2 for the Safety Manager and Safety Specialist as either Implementation (Project Management and Support) efforts, or Operations (Program Management and Support) responsibilities for each of the SMS Elements (Policy, Risk, Assurance, and Promotion). The Core duties include interactions with collateral duty staff and tenants and participation in committees and meetings as described in Section 2.

4.1 SMS Personnel Collateral Duties

Section 4.4 includes a list of all identified Sea-Tac staff and tenants and their SMS responsibilities. This includes responsibilities for the Accountable Executive who will bear ultimate accountability for the SMS program. The Team recommends that the Accountable Executive position be filled at the highest level of the airport organization because of the authority held.

4.1.1 SMS Manager

Core Responsibilities - Operations - Program Management
Develop strategies
Develop alliances and relationships
Develop program mission and vision
Design and develop program (program plan, goals, oversight)
Define and establish program policies, objectives, and standards including compliance
Develop program safety baseline and benchmark goals including monitoring, tracking and performance evaluation
Manage and continuously improve operational safety performance
Ensure all government safety regulations, corporate safety policies, and industry-wide safety programs and initiatives are met
Continue to monitor/keep current with regulatory requirements
Attend conferences, make presentations, and share best practices with industry partners and other airports
Evaluate existing safety systems for program integration
Manage budget and grants (if applicable)
Manage documentation and record keeping
Provide ongoing reports to top management
Define roles and responsibilities for SMS staff
Hire and manage SMS staff
Collaborate with internal airport groups such as maintenance and operations
Collaborate with tenants
Serve as a safety ambassador
Participate in Safety Meetings
Coordinate with other agencies and organizations including the FAA and the general public

Core Responsibilities - Implementation – Project Management
Develop implementation schedule and budget
Assess implementation project impact to existing staff and assign duties
Develop a plan to integrate the SMS program plan into the overall airport operation (initially for airside but eventually to landside and terminal – this plan should be developed early in the project planning phase)
Manage consultant and deliverables
Coordinate internal staff participation, commitment, and logistics
Provide project oversight and budget management
Report project and budget status to management

Core Responsibilities - Policy
Draft or revise safety policy

SMS Roles and Responsibilities

Author policy communication plan
Develop minimum safety standards for program
Review with Legal, Risk, and Ops
Review Airport Rules and Regulations and make recommendations for SMS language and modifications
Review Airport Lease agreements and make recommendations for SMS language and modifications
Shepherd policy through organization
Gain management commitment and sign off
Develop a process to communicate policies and objectives throughout the organization
Communicate and distribute policy internally and externally
Review policy annually for revisions or updates

Core Responsibilities - Risk

Define the airport risk management program and its integration into the airport SMS.
Develop safety risk management (SRM) processes (for operational risk)
Develop safety cases
Participate in SRMD reviews and participate on panels as needed
Develop hazard collection and risk review program
Develop risk matrix and criteria for severity and probability
Develop and deploy hierarchies of control
Develop and deploy hazard categories
Develop risk tolerance criteria
Develop corrective action program and documentation/monitoring processes
Create guidance on the use of SRM and data and trend analysis
Define a process for documenting the results of SRM, including a description of how documents will be stored, i.e., electronic or paper.
Define how top management will follow up on SRM to ensure safety mitigation strategies are appropriate.

Core Responsibilities - Assurance

Develop QA/QC Program
Align Assurance program with Part 139 operations (if FAA Rule requires)
Align assurance program with minimum standards
Develop, oversee, and participate in Audit program (QA)
Develop, oversee, and participate in ramp/bagwell inspection program (QC)
Develop and oversee FOD program (see FOD documentation) internal and external (tenants)
Create a process to document and review lessons learned from within the organization.
Develop a plan to integrate apron safety management into the airport SMS program
Create a detailed method to document self-auditing processes and their findings.
Create a detailed method to document self-inspection reviews, analysis, and findings.

SMS Roles and Responsibilities

Core Responsibilities - Promotion
Communicate policy/program to staff and tenants
Develop and provide oversight to promotional safety program including logo, prizes, posters, etc.
Develop documentation and communication plans for training and education, safety communication, competency, and continuous improvement
Develop a plan for employee SMS indoctrination and training including an outline of proposed curriculum and resources
Design, develop, and provide oversight of the tenant orientation program
Promote safety awareness through workshops, events, discussions, on-site presence, and management commitment
Develop a plan to validate training effectiveness and the process to gain training feedback including useable metrics
Design procedures to promote safety awareness and participation in non-punitive (just culture) reporting systems

4.1.2 SMS Specialist

Core Responsibilities - Operations - Program Support
Support SMS Manager in meetings, collect and manage documentation,
Route hazard reports to appropriate department
Serve as point of contact for information and documentation requests
Communicate information to relevant departments
Manage data base and data flows
Support business processes
Assist in report development and deployment
Coordinate Maintenance response
Coordinate Airport Duty Manager response
Coordinate Airport Operations Specialist response

Core Responsibilities - Implementation – Project Support
Assist with implementation coordination and logistics
Assist with software requirements definition and data flow process documentation

Core Responsibilities - Policy
Assist with communication and delivery of policy to staff and tenants
Serve as point of contact for question routing
Assist with updates to policy and routing policy changes through proper internal channels
Make corrections or changes to policy from SMS Manager

Core Responsibilities - Risk
Collect hazards and enter into “system” either electronic or paper based data entry

Manage day-to-day status of hazards, risks, and corrective actions
Route questions and concerns to SMS Manager
Participate in Airside Safety Risk Management Subcommittee Meeting as needed

Core Responsibilities - Assurance
Collect inspection reports and enter into "system" either electronic or paper based data entry
Assist with providing proper forms and information to internal and external staff
Serve as document manager for inspection forms
Compile QA information for reporting and dashboard feeds

Core Responsibilities - Promotion
Serve as first contact for promotion questions and answers
Deliver media (posters etc.) to tenants and staff
Route questions and concerns to SMS Manager

4.2 SMS Personnel Collateral Duties

4.2.1 Accountable Executive

Collateral Responsibilities
Serve as ultimate responsible entity in the organization for the SMS Program
Responsible for establishing and maintaining the SMS program
Sign off on budgets, staff, and program goals and objectives
Serve as ultimate responsible entity for identified hazards, risks, and corrective action decisions
Serve as public outreach contact for media, regulatory, and public concerns
Meet with SMS Manager for escalation issues and resolutions
Sign off, approve, endorse, and promote the SMS Policy
Review dashboard or score card results on a quarterly basis
Report to CEO on SMS program results and concerns
Serve as ultimate role responsible for providing a safe and healthy environment to staff and tenants
Endorse all personnel to think and work safely at all times, regardless of any real or perceived pressures to do otherwise
Be knowledgeable of how the SMS program works, who the key SMS personnel are, and what significant safety issues exist in the organization.

4.2.2 Airport Duty Manager

Collateral Responsibilities
Conduct accident and incident investigations, collect information, provide documentation, and serve as subject matter expert
Assign staff for FOD program (see FOD documentation for detailed roles and responsibilities)

Assist in hazard and risk assessments
Serve as point of contact for hazard reporting from tenants
Attend Safety Action Meetings as needed for information on hazards and risks
Participate in Airside Safety Risk Management Subcommittee Meeting as needed
Participate in oversight of ramp and bag room inspections and associated findings for appropriate routing

4.2.3 Airport Operations Specialist

Collateral Responsibilities
Conduct ramp and bag room inspections
Report on findings
Participate as needed in review of hazards and risks based on inspections
Serve as airfield safety eyes and ears for tenants and staff

4.2.4 Maintenance Liaison

Collateral Responsibilities
Participate in hazard and risk assessments
Assign appropriate staff for hazard and risk assessments
Serve as liaison for FOD (see FOD documentation) and other safety program initiatives
Participate in Airside Safety Risk Management Subcommittee Meeting as needed

4.2.5 Maintenance Lead

Collateral Responsibilities
Assign staff to hazard mitigation projects
Participate in Airside Safety Risk Management Subcommittee Meeting as needed
Provide maintenance expertise to hazard mitigation strategies

4.2.6 Communications & Dispatch Liaison

Collateral Responsibilities
Collect information on hazards and document in "system" either paper based or electronic solution
Dispatch maintenance response
Dispatch Airport Duty Manager response
Dispatch Airport Operations Specialist response
Participate on strategy and planning sessions for SMS implementation
Participate in Airside Safety Risk Management Subcommittee Meeting as needed

4.2.7 Tenants

Collateral Responsibilities
Report hazards

Collaborate with other airline and GSE representatives and POS operations and maintenance staff
Participate in Safety Action Meeting as needed
Participate in Airside Safety Risk Management Subcommittee Meeting as needed
Serve as point of contact for FOD program
Participate in FOD Subcommittee
Serve as point of contact for ramp safety inspections

4.2.8 Health & Safety Liaison

Collateral Responsibilities
Participate in Airside Safety Risk Management Subcommittee Meeting as needed
Participate in Safety Action Meeting as needed
Serve as point of contact for Health & Safety and OSHA issues
Manage and report on bag room safety issues

4.2.9 Port Construction Services Liaison

Collateral Responsibilities
Participate in Airside Safety Risk Management Subcommittee Meeting as needed
Participate in Safety Action Meeting as needed
Provide briefings on construction activities that impact airfield and terminal operations
Serve as a safety inspection resource if needed and for best practice exchange

4.2.10 Risk Management Liaison

Collateral Responsibilities
Participate in Airside Safety Risk Management Subcommittee Meeting as needed
Participate in Safety Action Meeting as needed
Provide information on claims
Provide guidance on risk policies/programs at airport and port facilities

4.2.11 Environmental Liaison

Collateral Responsibilities
Participate in Airside Safety Risk Management Subcommittee Meeting as needed
Participate in Safety Action Meeting as needed
Provide project information for compactors, garbage, etc. as it relates to ramp operations or FOD issues.
Advise on any environmental issues that relate to the ramp or bag room

3.0 Integrated Duties – Hazard Example

To reflect the interoperability and collaboration required for SMS to function at Sea-Tac, the diagram on the following page demonstrates the steps required to identify a hazard and mitigate the safety risk. Nine roles are represented in the illustration; the processes will require coordination and communication to ensure safety risk management efforts are not bogged down in procedural delays. The roles include core SMS duties, collateral duties, committee duties, and stakeholders; all of which support the SMS through collaboration and communication.

As represented in the diagram and consistent with Sea-Tac's philosophy on SMS collaboration, anyone who is part of the airport or tenant community can report a hazard. This reporting will allow for hazards to be input through a variety of professional and technical operations. The routing of the hazard can take various paths depending on urgency and prioritization. Airport Duty Managers (ADMs) play an important role in responding to and resolving hazards and because of this, the ADM bears a responsibility to document and report information to the Safety Manager/Safety Specialist consistently and accurately. As needed, subject matter experts are brought in to assist with assessing hazards and their associated risk (see the Guide to Safety Risk Management for more information). As a hazard is further defined, the airport and tenant community has an opportunity to jointly agree to corrective actions and to risk acceptance.

This sample flow diagram serves to emphasize the importance of roles and responsibilities throughout the safety community to effectively manage hazards, risks, and resolutions.

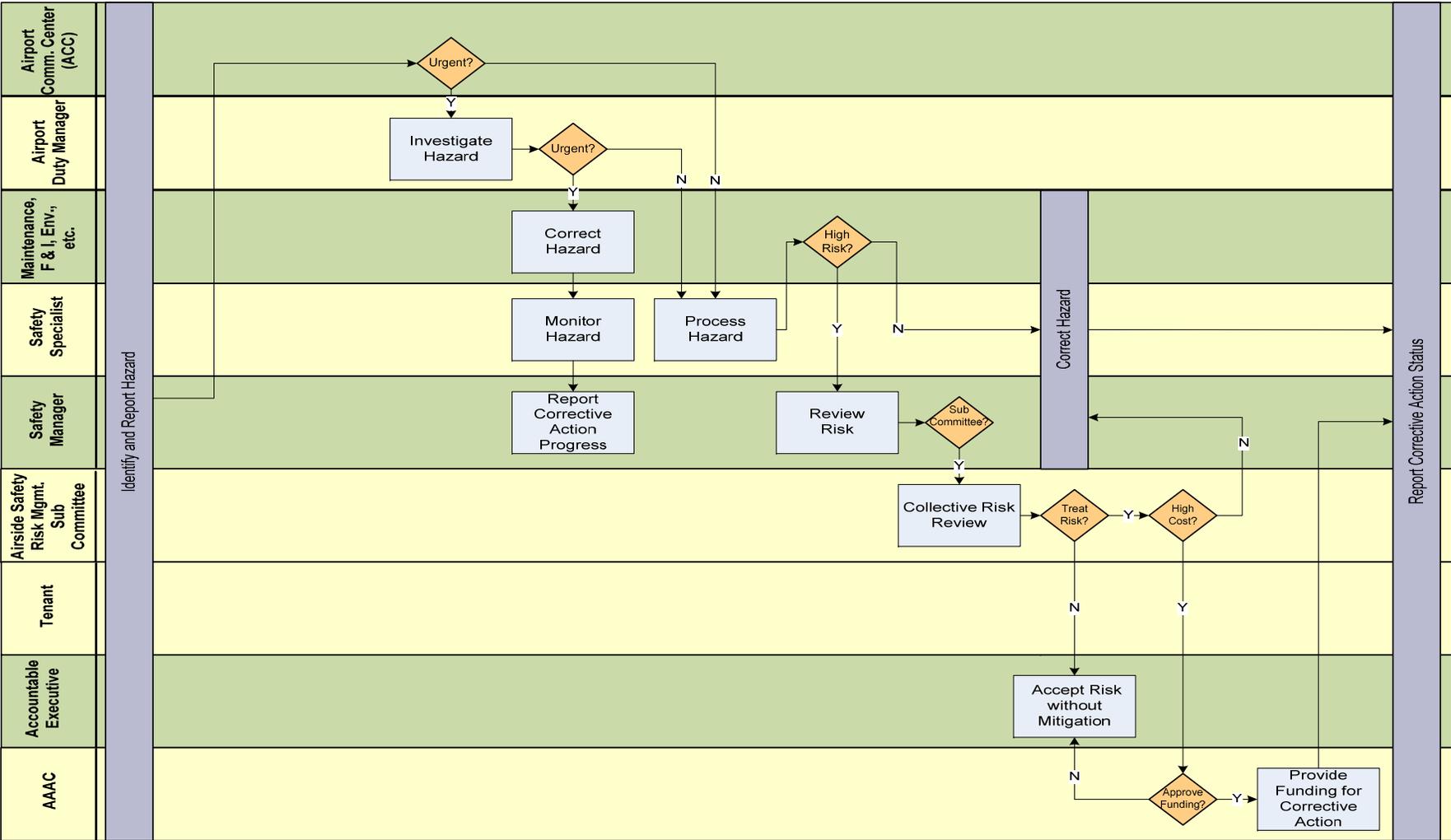


Figure 2 – Interoperability Example - Hazard Flow by SMS Role

4.0 Summary of Findings

As mentioned early in this document, staffing strategies are critical to the successful implementation of a SMS. New staff and their associated skills must be carefully assessed to ensure both technical proficiencies and personal “fit” into the organization. The role of Safety Manager can either make or break the program; the Safety Manager serves as the ambassador, the leader who not only manages day-to-day activities but gains Accountable Executive support, and develops long-term strategies to ensure the program is successful.

Equally important to achieving a robust SMS program is the ability to clearly define roles and responsibilities for all staff and tenants who have a stake in the program. Core and collateral duties must be agreed to by personnel prior to launching the SMS. The SMS team extends widely and broadly throughout the airport organization and requires planning and structure to leverage its effectiveness.