Las Vegas (LAS)
Harry Reid International Airport

SAFETY MANAGEMENT SYSTEM (SMS) MANUAL

HARRY REID
INTERNATIONAL
LAS VEGAS

Department of Aviation
Clark County, Nevada

Basic: August 14, 2024

Original Date: August 14, 2024
Revision Date: N/A

AE Approval: _____

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REVIEW LOG

DATE	REMARKS	REVIEWER NAME	REVIEWER SIGNATURE

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ACCOUNTABLE EXECUTIVE SIGNATURE PAGE

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Senior Director of Aviation
Harry Reid International Airport

Original Date: August 14, 2024
Revision Date: N/A

AE Approval: 

I. INTRODUCTION

A. WHAT IS SAFETY MANAGEMENT SYSTEM (SMS)?

This Safety Management System (SMS) provides Harry Reid International Airport (LAS) a systematic approach to managing safety, including all necessary organizational structures, accountabilities, processes, and procedures.

While not all inclusive, this SMS provides LAS management with a set of tools to make the most informed safety related decisions possible. With a healthy SMS, LAS management can better identify safety risks associated with its operations and address unacceptable risks before they result in accidents or incidents.

At LAS, every stakeholder has a role and responsibilities within this SMS. This manual attempts to clearly define these roles and responsibilities to help LAS maintain a culture of safety, compliance, and continuous improvement.

B. APPLICABILITY

The LAS SMS and any related policies and procedures, to include this manual, are applicable to any individual with access to the areas governed by SMS (*see section I.C*). These individuals each have a direct responsibility in ensuring safe operations within these areas. All tenants and DOA supervisors will ensure that employees with access to these areas receive required orientation and training (*see section V.A*).

C. SCOPE

This SMS applies to all areas within the LAS ***airside*** as defined by the LAS Airport Security Plan (ASP). The LAS airside includes all secured areas inside the airport perimeter as established by fences, buildings, and controlled access points. Within this perimeter, and of particular concern to SMS, are the Movement and Non-Movement Areas.

The LAS Movement Area includes the runways, taxiways, and other areas of the airport that aircraft use for taxiing, takeoff, and landing, exclusive of loading ramps and parking areas, and that are under the control of the air traffic control tower.

The LAS Non-Movement Area includes any taxi lanes, aprons, and other areas not under the control of the air traffic control tower.

Both Movement Area and Non-Movement Areas are designated by Non-Movement Area Boundary Markings. These markings consist of two yellow lines (one solid and one dashed). The solid line is located on the non-movement area side, while the dashed yellow line is located on the movement area side.

While generally outside the scope of the SMS, there are sometimes events, operations, and/or conditions outside of the LAS airside that directly impact safety within the LAS airside. Examples may include activities directly adjacent to the

airport perimeter, nearby wildlife management concerns, etc. This SMS will strive to identify and address these types of concerns to the extent possible.

D. REVIEW AND REVISION

This SMS was designed to meet minimum FAA standards with the flexibility to grow to meet the unique needs of LAS. Through consistent hazard identification and analysis, every effort will be made to identify opportunities to modify this SMS and ensure it remains appropriate in size, nature, and complexity in relation to the operations, activities, hazards, and risks associated with LAS.

No less frequently than once per 365 calendar days, the SMS Coordinator will conduct a comprehensive review of the SMS Manual. At a minimum, the review will include the following:

- Review management responsibilities and accountabilities for safety issues
- Review and update Safety Objectives
- Review and update safety communication methods
- Document the review in the Review Log on page iv of this Manual
- Document any revisions in the Revision Log on page iv of this Manual

The SMS Coordinator will provide copies of any revisions to the FAA within 14 calendar days of approval by the Accountable Executive.

E. SMS DOCUMENT MANAGEMENT FILE SYSTEM

The SMS Coordinator will maintain an electronic filing system for retention of SMS documentation and records. The SMS Document Management file system will be maintained on airport computer servers and include the following at a minimum:

1. A folder for each category of record retained, e.g. Communications, Orientation Materials, Safety Assurance, Training Records, SRM, etc.
2. A document within each folder that describes the records retained, retention time period requirement, and disposition instructions
3. Each folder will contain subfolders marked with month and year as needed to meet the retention time period requirements

F. POINT OF CONTACT

For any questions or concerns regarding SMS or this Manual, please contact the SMS Coordinator. The current SMS Coordinator is:

Eric McCammond
sms@lasairport.com
(702) 261-5547

II. SAFETY POLICY

A. ACCOUNTABLE EXECUTIVE

The Senior Director of Aviation; Airside Operations, Safety, Security, Construction and Engineering, General Aviation, and Planning is the Accountable Executive for Harry Reid International Airport (LAS). They are accountable to the Director of Aviation and have ultimate responsibility to the FAA, on behalf of the Director of Aviation, for the safety performance of operations conducted in areas governed by the SMS. They have overall responsibility for the implementation and maintenance of the SMS.

The current Accountable Executive for LAS is:

James Chrisley
jamesc@lasairport.com
(702) 261-5321

B. SAFETY POLICY STATEMENT

See appendix 2.

C. RESPONSIBILITY AND ACCOUNTABILITY WITHIN SMS

1. All Employees

Every individual who accesses the areas governed by the SMS has a responsibility to ensure safe operations within those areas. This is accomplished by incorporating risk management into every task or operation conducted.

Every employee is **required** to:

a. Follow all applicable safety procedures; and

b. Immediately report any SMS-reportable incident (*see paragraph III.A.5*) involving assigned personnel or equipment to the ACC.

To ensure the safest operational environment possible, it is critical that all employees work together to identify new or existing hazards where adequate hazard mitigation measures may not currently exist. When a hazard is identified, each employee is ***encouraged*** to:

c. Immediately report any hazard(s) that could potentially impact operations within the movement and/or non-movement area to the ACC;

d. Report the hazard up their chain of command using their applicable organizational chart. *CCDOA employees can find the current organizational chart at https://team.ccdoa.net/Content/OrgChart/*;

e. Report the hazard by emailing the SMS Coordinator (*sms@lasairport.com*); and/or

f. Report the hazard through the LAS Hazard Reporting System by navigating to https://www.harryreidairport.com/Contact/Email and selecting the category "Health and Safety".

2. All Supervisors

In addition to individual responsibility for safe operations, all supervisors are responsible for ensuring safe operations within their areas of responsibility. This is accomplished by providing adequate supervision to assigned subordinates and elevating safety concerns up their chain of command when needed.

Every supervisor is **required** to:

a. Follow and ensure all assigned subordinates follow all applicable safety procedures;

b. Ensure any SMS-reportable incident (*see paragraph III.A.5*) involving assigned personnel or equipment is immediately reported to the ACC;

c. When directed by the SMS Coordinator, provide mitigation plans for identified hazards within 14 calendar days of notification. An SMS Risk Analysis Worksheet (S-RAWS) (*see appendix 4*) may be utilized to analyze risk and develop mitigation strategy; and

d. Address hazards reported by assigned subordinates. Actions may include, but are not limited to, applying adequate mitigation measures, reporting hazards up the chain of command, contacting the SMS Coordinator for assistance.

3. All Managers

Managers have overall responsibility for safe operations within their areas of responsibility. This is accomplished by prioritizing safety in all activities and ensuring adequate resources are made available to mitigate hazards to acceptable levels as described in this Manual.

Every manager is **required** to:

a. Follow and ensure all assigned subordinates follow all applicable safety procedures;

b. Ensure any SMS-reportable incident (*see paragraph III.A.5*) involving assigned personnel or equipment is immediately reported to the ACC;

c. When directed by the SMS Coordinator, provide mitigation plans for identified hazards within 14 calendar days of notification. An SMS Risk

Analysis Worksheet (S-RAWS) (*see appendix 4*) may be utilized to analyze risk and develop mitigation strategy; and

d. Address hazards reported by assigned subordinates. Actions may include, but are not limited to, directing adequate mitigation measures, procuring required resources to adequately mitigate hazards, collaborating with other organizations, contacting the SMS Coordinator for assistance.

D. SMS ORGANIZATIONAL STRUCTURE

Although each individual who accesses the areas governed by the SMS has a responsibility to ensure safe operations within those areas, some individuals have specific roles in the administration and execution of the SMS. Figure 1: Safety Management System Organizational Structure identifies the SMS organizational structure.

1. Senior Director of Aviation; Airside Operations, Safety, Security, Construction and Engineering, General Aviation, and Planning

   The Senior Director of Aviation; Airside Operations, Safety, Security, Construction and Engineering, General Aviation, and Planning has ultimate responsibility to the FAA, on behalf of the Director of Aviation, for the safety performance of operations conducted in areas governed by the SMS. They have overall authority over the SMS and ultimately establish the risk profile for areas governed by the SMS.

   SMS responsibilities include:

   a. Serve as the Accountable Executive for the SMS.
   b. Approve and sign the SMS Safety Policy Statement.
   c. Approve SMS objectives.
   d. Approve the SMS Manual.
   e. Ensure sufficient resources and support to meet SMS objectives.
   f. Approve risk mitigation decisions for areas governed by the SMS.
   g. Chair the Safety Assurance Committee.
   h. Establish the risk profile for areas governed by the SMS.

2. Assistant Fire Chief, Aircraft Rescue and Firefighting

   The Assistant Fire Chief, Aircraft Rescue and Firefighting, provides management and oversight of all airport firefighting resources, programs, and processes.

   SMS responsibilities include:

   a. Permanent member of the Safety Assurance Committee.

b. Assign subject matter experts to attend and participate in SMS committees, subcommittees, and safety investigations as needed.

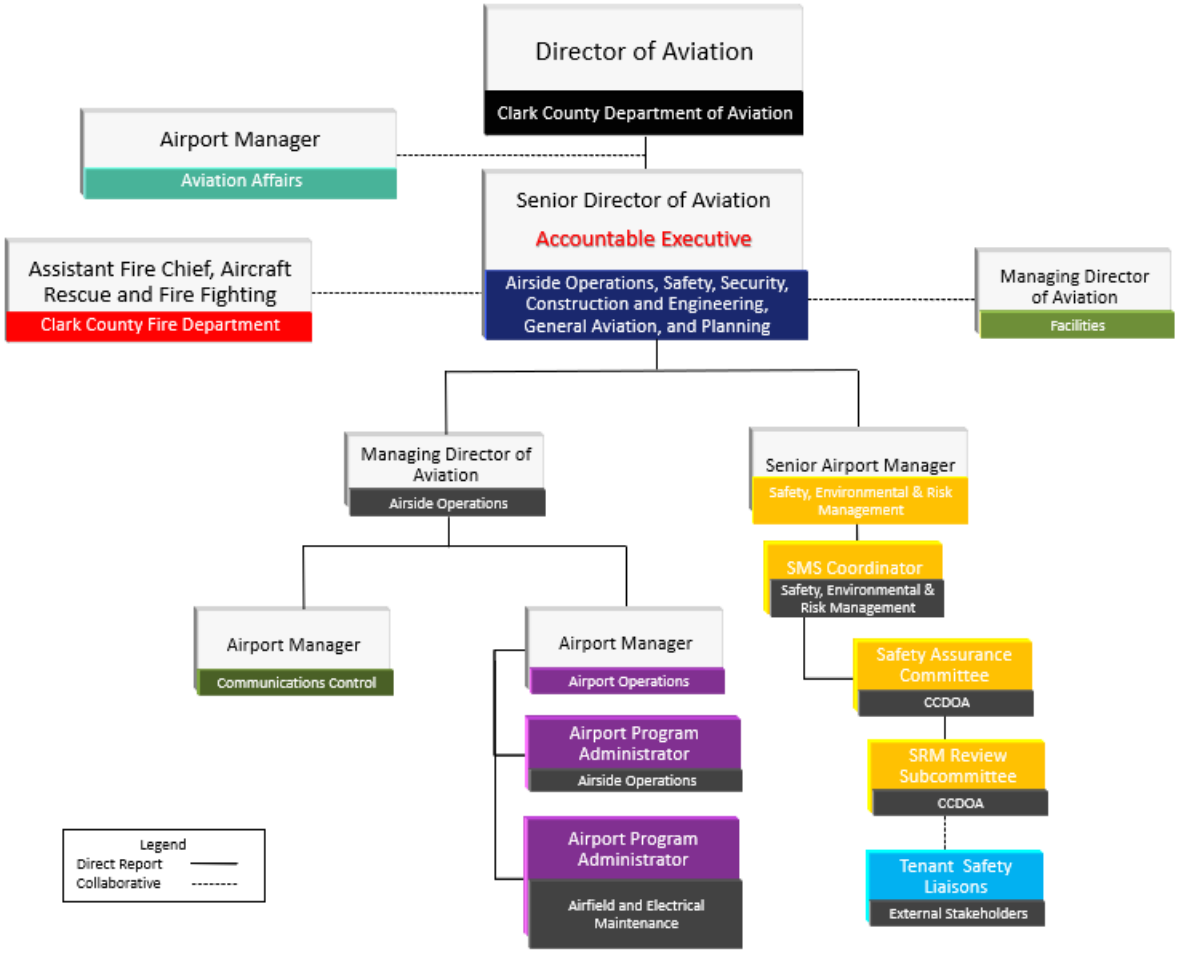

Figure 1: Safety Management System Organizational Structure

3. Managing Director of Aviation; Airside Operations

   The Managing Director of Aviation over Airside Operations oversees all airside airport operations functions to include communications and control, airfield operations, airport escorts, and airfield maintenance.

   SMS responsibilities include:

   a. Assist in the development and achievement of SMS objectives.

   b. Submit budget and/or other requests for resources and support required to execute the SMS within their functional area.

   c. Permanent member of the Safety Assurance Committee.

   d. Chair the SRM Review Subcommittee.

e. Assign subject matter experts to attend and participate in SMS committees, subcommittees, and safety investigations as needed.

4. Managing Director of Aviation; Facilities

   The Managing Director of Aviation over Facilities oversees the maintenance of facilities and airport specialty equipment.

   SMS responsibilities include:

   a. Assist in the development and achievement of SMS objectives.

   b. Permanent member of the Safety Assurance Committee.

   c. Assign subject matter experts to attend and participate in SMS committees, subcommittees, and safety investigations as needed.

5. Senior Airport Manager; Safety and Risk Management

   The Senior Airport Manager of Safety and Risk Management oversees all airport safety, environmental, sustainability, and risk management functions to include the SMS program.

   SMS responsibilities include:

   a. Assist in the development and achievement of SMS objectives.

   b. Submit budget and/or other requests for resources and support required for administrating the SMS.

   c. Permanent member of the Safety Assurance Committee.

   d. Permanent member of the SRM Review Subcommittee.

   e. Assign subject matter experts to attend and participate in SMS committees, subcommittees, and safety investigations as needed.

   f. Liaise with CCDOA executive leadership, CCDOA divisions, and external stakeholders on SMS related concerns and matters.

6. Airport Manager; Airport Operations

   The Airport Manager of Airport Operations oversees airport operations functions that include airfield operations, airport escorts, and airfield maintenance.

   SMS responsibilities include:

   a. Assist in the development and achievement of SMS objectives.

   b. Submit budget and/or other requests for resources and support required to execute the SMS within their functional area.

   c. Permanent member of Safety Assurance Committee.

   d. Permanent member of the SRM Review Subcommittee.

   e. Assign subject matter experts to attend and participate in SMS committees, subcommittees, and safety investigations as needed.

7. Airport Program Administrator, Airside Operations

   The Airport Program Administrator, Airside Operations oversees airport operations functions that include airfield operations and airport escorts.

   SMS responsibilities include:

   a. Permanent member of the SRM Review Subcommittee.

   b. Assign subject matter experts to attend and participate in SMS committees, subcommittees, and safety investigations as needed.

8. Airport Program Administrator, Airfield and Electrical Maintenance

   The Airport Program Administrator, Airfield and Electrical Maintenance oversees airfield maintenance operations.

   SMS responsibilities include:

   a. Permanent member of the SRM Review Subcommittee.

   b. Assign subject matter experts to attend and participate in SMS committees, subcommittees, and safety investigations as needed.

9. Airport Manager, Communications Control

   The Airport Manager of Communications Control oversees airport command and control functions to include the Airport Control Center and Ramp Control.

   SMS responsibilities include:

   a. Assist in the development and achievement of SMS objectives.

   b. Submit budget and/or other requests for resources and support required to execute the SMS within their functional area.

   c. Permanent member of the Safety Assurance Committee.

   d. Permanent member of the SRM Review Subcommittee.

   e. Assign subject matter experts to attend and participate in SMS committees, subcommittees, and safety investigations as needed.

10. SMS Coordinator

    The SMS Coordinator is responsible for the development, implementation, and day-to-day operation of the SMS.

    SMS responsibilities include:

    a. Administer the day-to-day functions of the SMS.

    b. Administer activities required for the development and monitoring of SMS objectives.

    c. Submit budget and/or other requests for resources and support required for administrating the SMS.

d. Schedule and facilitate all SMS committees, subcommittees, safety investigations, and other related meetings.

e. Create and distribute any SMS-related communications.

f. Maintain SMS records in accordance with this Manual and applicable directives.

g. Collect, analyze, and present applicable data to SMS stakeholders and decision makers.

h. Develop and distribute SMS training materials and monitor training completion.

i. Monitor and track SMS regulatory requirements and trends.

j. Review the SMS regularly and update as needed.

k. Coordinate and communicate with airport divisions and stakeholders as necessary on issues related to the SMS.

11. Airport Manager, Airport Affairs

The Airport Manager over Airport Affairs overseas airport functions that include administration of tenant contracts.

a. Assist in the development and achievement of SMS objectives.

b. Permanent member of the Safety Assurance Committee.

c. Assign subject matter experts to attend and participate in SMS committees, subcommittees, and safety investigations as needed.

12. Tenant Safety Liaison

SMS Liaisons are appointed to perform specific roles within the SMS as directed by this Manual.

SMS responsibilities include:

a. Represent their respective organizations on any matters related to SMS.

b. Attend and participate as subject matter experts and/or organization representatives in SMS committees, subcommittees, and safety investigations as needed.

13. Safety Assurance Committee

See section IV.E.

14. SRM Review Subcommittee

See paragraph III.C.5.

E. SAFETY OBJECTIVES

The SMS Coordinator will maintain Safety Objectives that are developed by the Safety Assurance Committee and approved by the Accountable Executive. The Safety Objectives will be reviewed, modified when applicable, and approved at each Safety Assurance Committee (*see section IV.E*). The objectives should incorporate the SMART concept whenever possible, e.g. Smart, Measurable, Achievable, Relevant, Timed. When objectives are met, the Safety Assurance Committee will develop new objectives. Current Safety Objectives can be found in appendix 3.

III. SAFETY RISK MANAGEMENT

Harry Reid International Airport supports the proactive formal analysis and mitigation of hazards through Safety Risk Management (SRM) and SMS. SRM is defined as a formal process within SMS composed of describing the system, identifying hazards, analyzing, assessing, and mitigating risk.

Harry Reid International Airport has outlined processes in this section to identify, analyze, and mitigate hazards.

A. HAZARD IDENTIFICATION

Actively identifying hazards in day to day operations is the first step of proactive risk management and is everyone's job. A hazard is defined as any existing or potential condition that can lead to:

- the injury, illness, or death of a human;

- damage to or loss of a system, equipment, or property; or

- damage to the environment.

While hazards are identified in multiple ways at Harry Reid International Airport, the following practices have been identified as primary methods of hazard identification.

1. Airport Self-Inspections

   The SMS Coordinator will review AOC Self-Inspection logs no less frequently than monthly to identify trends that may indicate present hazards. Additionally, the SMS Coordinator and Airside personnel will continue to explore software and other tools, e.g. GIS mapping, that will increase trend analysis capabilities.

   Any hazards identified during an Airport Self-Inspection will be documented as an Observation, Direct Safety Violation, or Unsafe Condition Violation (*see sections III.A.2, III.A.3, III.A.4*).

2. Observations

   An observation is the identification of a hazard by the following Clark County Department of Aviation personnel during the performance of their normal duties:

   a. Airport Operations Coordinators;

   b. Environmental, Health, and Safety Staff; or

   c. Airport Security Staff.

   Examples of observations include, but are not limited to, the discovery of Foreign Object Debris (FOD), observance of wildlife in the movement area, or discovery of a damaged airfield light assembly.

   When an observation is made, the following actions must be taken:

d. Immediately mitigate any hazard that presents an immediate unacceptable risk to current operations. Examples may include cordoning the area, discontinuing an operation, removing discovered FOD, etc.

e. Report observation to the ACC. ACC will notify the AOC.

f. The on-duty Airport Operations Coordinator will document the observation in the AOC Daily Log.

3. Direct Safety Violation (DSV)

A DSV is a type of observation (*see paragraph III.A.2*) where an individual is observed by airport operations or safety personnel not complying with required safety procedures and/or practices. Examples include, but are not limited to:

a. Performing a task without required personal protective equipment (PPE);

b. Failing to follow a safety procedure related to a task and/or operation;

c. Not utilizing a seatbelt while operating a vehicle;

d. Operating faulty and/or unserviceable equipment.

When a DSV is discovered, the following actions must be taken:

d. Immediately address the unsafe activity.

e. Issue verbal warning or citation to the individual responsible for the DSV.

f. Report the DSV to on-duty Airport Operations Coordinator.

g. The On-duty Airport Operations Coordinator will document the DSV in the AOC Daily Log.

4. Unsafe Condition Violation (UCV)

A UCV is a type of observation (*see paragraph III.A.2*) where an unsafe condition exists that cannot be attributed to an individual. Examples may include, but are not limited to:

a. An unreported puddle of fuel or oil;

b. A piece of untagged unserviceable equipment stored in an unauthorized area;

c. Garbage and/or refuse that presents a FOD and/or wildlife hazard.

When a UCV is discovered, the following actions must be taken:

d. Immediately mitigate any hazard that presents an immediate unacceptable risk to current operations.

e. If a responsible organization can be identified, issue a verbal warning or citation to the organization responsible for the UCV.

f. Report the UCV to on-duty Airport Operations Coordinator.

g. The on-duty Airport Operations Coordinator will document the UCV in the AOC Daily Log.

5. Incident

An incident is an unplanned event which affects or could affect the safety of airport operations. SMS ***encourages*** all employees to report all incidents within the areas governed by SMS. Reporting even minor incidents helps build a safety culture and create a safer airfield environment for all stakeholders. Additionally, all personnel who access the areas governed by SMS are ***required*** to report any observance of the following incidents that occur within the areas governed by SMS to the ACC immediately. The ACC will notify the on-duty Airport Operations Coordinator. An SMS-Reportable Incident includes:

a. Any SMS-Reportable Accident (*see paragraph III.A.6*);

b. Any "near miss" that could reasonably have resulted in an SMS-Reportable Accident (*see paragraph III.A.6*);

c. Any runway incursion;

d. Any surface incident (*see definition in Appendix 1*);

e. Any spill of fluid, other than water, that equals one pint or more of volume.

When an incident is reported, the on-duty Airport Operations Coordinator will:

d. Ensure immediate mitigation of any hazard that presents an immediate unacceptable risk to current operations;

e. Issue verbal warning or citation to the individual and/or organization responsible when applicable;

f. Document the incident in the AOC Daily Log.

6. Accident

An accident is an unplanned event or series of events that results in death, injury, damage to, or loss of equipment or property. SMS ***encourages*** all employees to report all accidents within the areas governed by SMS. Reporting of even minor accidents helps build a safety culture and create a safer airfield environment for all stakeholders. Additionally, all personnel who access the areas governed by SMS are ***required*** to report any observance of the following accidents that occur within the areas governed by SMS to the ACC immediately. The ACC will notify the on-duty Airport Operations Coordinator. An SMS-Reportable Accident includes:

a. Any incident resulting in injury to a human requiring treatment by medical or emergency personnel, regardless of where treatment is administered;

b. Any incident that results in damage to or loss of equipment or property beyond normal expected wear and tear, regardless of who owns the equipment or property.

Any accident will be reported, addressed, and documented in accordance with incident reporting procedures (*see paragraph III.A.*5).

7. Construction Planning

   Any new construction project planned within the areas governed by this SMS will be evaluated by SMS and Airside Operations during the weekly Work Plan review meeting or when otherwise notified by Construction and Engineering of a new project to determine if an SRM is required.

   When an SRM is required, the SMS Coordinator will coordinate the required SRM event.

   For any project that may drive a procedural change for the FAA, the DOA will notify the FAA that an SRMP may be required. Every effort will be made to make this determination by the 30% phase of project design.

8. Hazard Reporting System

   LAS leadership encourages all individuals at LAS to report any perceived hazard through the LAS Hazard Reporting System (*see section IV.C*). All submissions applicable to the areas governed by the SMS Manual will be routed to the SMS Coordinator for evaluation, documentation, and processing using the SRM procedures found in section III.C.

9. Safety Trend Analysis

   The SMS Coordinator will continuously collect, evaluate, and analyze data that is submitted to SMS (*see section IV.A*). Whenever data trend analysis illustrates a new hazard or unmitigated existing hazard, the SMS Coordinator evaluate, document, and process the hazard(s) using SRM procedures found in section III.C.

B. SRM PROCESS

When a new hazard is identified or the potential of unidentified hazards exists, a formal Hazard Assessment must be conducted. LAS uses the 5-step process for SRM Hazard Assessment which includes:

- Describe the System
- Identify the Hazards
- Analyze the Risk of Identified Hazards
- Assess the Level of Risk
- Mitigate Risk

Utilizing guidance as provided in FAA Advisory Circular 150/5200-37A, the LAS Hazard Assessment process is conducted as follows:

1. Describe the System

The first step of the 5-step process is to describe the system. The system description depicts the operating environment in which the hazards will be identified. The description of the system sets the boundaries for hazard identification. Questions that help define this description could include the following:

b. What are the meteorological/weather conditions?

c. Are seasonal conditions involved and are they abnormal?

d. Are there known defects or deficiencies (e.g., paved area problems, safety area problems, deteriorated marking, missing or deficient signs, or lighting deficiencies)?

e. Is time of day or night a factor?

f. Is traffic volume involved (peak activity or low activity)?

g. Do normal operations prevail or are there abnormal conditions like construction or a closed runway or taxiway?

h. What type of infrastructure or media is involved (e.g. runway, taxiway, apron, or drainage facility)?

Several models can be used to help define the operational environment. For example, 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 (*see Figure 2*). These elements are defined as follows:

Mission – A clearly defined role of the SRM panel, describing, in detail, the operation or change.

(hu)**Man**/Person – The person or human component.

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 (i.e., the airport). What are the meteorological/weather conditions?

Other models and/or tools that can be used to assist in defining the operational environment include the Fishbone Diagram (*see appendix 5*) and the 5 Why's Technique (*see appendix 6*)

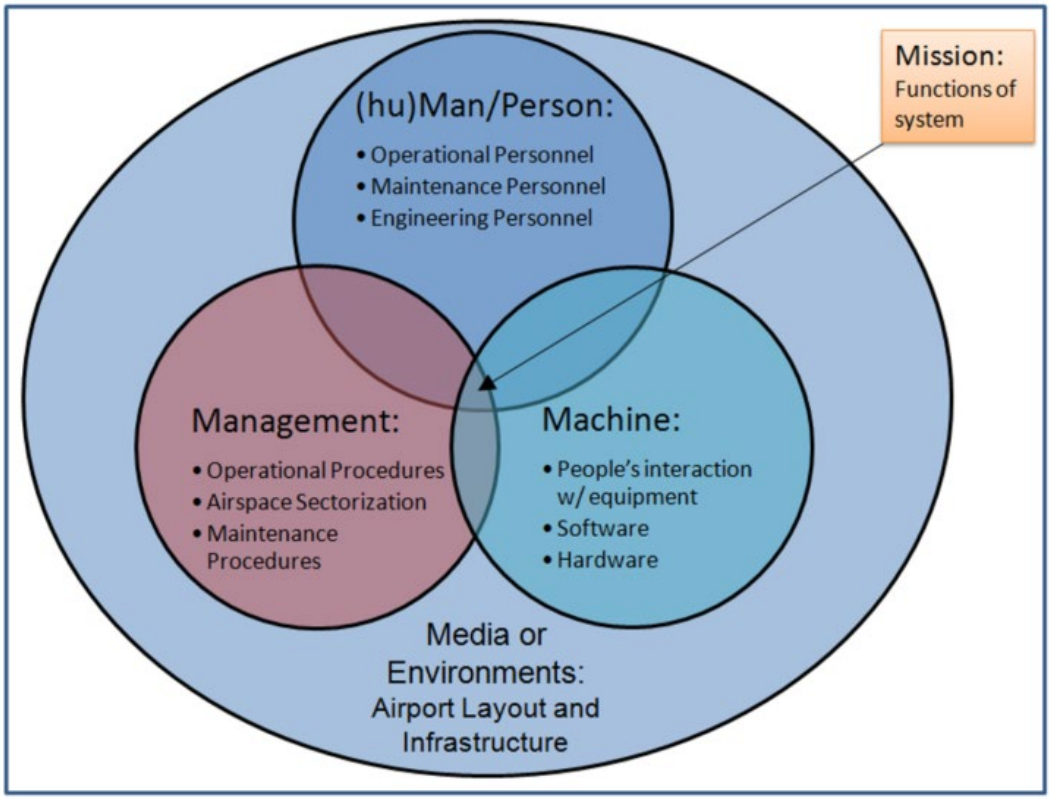

Figure 2: The 5M Model

2. Identify the Hazards

   The second step of the hazard assessment process identifies hazards in a systematic way based on the system described in the first step. A hazard is any condition that could foreseeably cause or contribute to an accident. When identifying hazards, all possible sources of system failure should be considered. Examples of hazards may include:

   - Ice on a driving and/or operating surface
   - High noise levels from aircraft and/or equipment
   - Loss of visibility due to dust from construction
   - Potential for ejection from a vehicle due to not wearing a seat belt
   - High temperatures during summer operations
   - Slippery surface due to a fluid spill

3. Analyze the Risk of Identified Hazards

   The third step of hazard assessment analyzes the risk associated with each of the hazards identified in the previous step. For each hazard, the airport should consider the worst credible outcome (harm), which is the most unfavorable condition that is believable and possible given the system state described in step one. It is important to remember that in identifying hazards, airports should

strive for reasonable assessments that cite credible outcomes. Not all hazards could technically result in a catastrophic accident. The airport should strive for quantitative or real-life examples of outcomes based on the hazard. Using examples from airports of similar size and operations may help add credibility.

Based on the worst credible outcome of each hazard, the airport should determine the severity and likelihood of that outcome using the criteria in Tables 1 and 2.

Table 1: Severity *Determine the worst credible outcome as result of each identified hazard.*

Negligible	Minor	Major	Hazardous	Catastrophic
No first aid required injury/illness; no lost work time; none to very limited operational impact (less than 1 hour); none to minimal equipment loss (less than 1 day out of service); no environmental impact; none to minimal budget impact	Injury/illness (first aid required); little to no lost work time (less than 2 days); none to very limited operational impact (less than 4 hours); none to minimal equipment loss (less than 2 days out of service); contained with none to limited impact to environment; minimal budget impact	Injury/illness (1 to 5 persons); death (less than 2 persons); lost work time (less than 1 week); loss of total operations (less than 2 hours); loss of partial operations (less than 1 day); equipment loss (less than 1 week); non-contained (manageable/ mitigated within 1 day); moderate budget impact	Injury/illness (6 to 49 persons); death (less than 5 persons); lost work time (1 week to 1 month); loss of total operation (2 to 12 hours); partial loss of operation (48 hours or less); equipment loss (less than 30 days); non-contained, resulting in environmental impact (1 to 30 day); serious budget impact	Injury/illness (greater than 50 persons); death (greater than 5 persons); lost work time (greater than 1 month); loss of total operation (greater than 12 hours); loss of partial operations (greater than 48 hours); total loss of equipment; non-contained resulting in long-term environmental impact (greater than 30 days); grave budget impact

Table 2: Likelihood *Determine the most reasonable likelihood the outcome (harm) identified in Step 3a would occur.*

Extremely Improbable	Extremely Remote	Remote	Probable	Frequent
Almost impossible; possibly only once in 10 to 100 years	Conceivable but highly unlikely; possibly once in every 5 to less than 10 years	Possibly once a year or multiple times from 1 year to less than 5 years; unlikely but possible to occur	Likely to occur multiple times per year or once per month; regularly expected to occur in the system	Likely to occur once a day or multiple times per week; continuously expected to occur in the system

4. Assess the Level of Risk

The fourth step uses the Severity and Likelihood values assessed in the third step and compares it to the organization's acceptable and unacceptable levels of safety risk using Table 3. This is considered "initial risk" because it does not consider any potential mitigations.

When assessing the level of risk, it is important to understand that risk management does not mean eliminating all risk. Risk management acknowledges that a certain amount of risk is necessary to meet operational objectives in an efficient, economical manner. Effectively managing risk means ensuring that the right amount of risk is taken and that decisions regarding the amount of risk are made at the appropriate level.

Table 3: ASSESS THE LEVEL OF RISK *Using Risk Matrix and determinations made in Steps 3, assign risk levels to each hazard identified in Step 2.*

Severity / Likelihood	Minimal 5	Minor 4	Major 3	Hazardous 2	Catastrophic 1
Frequent A					
Probable B					
Remote C					
Extremely Remote D					
Extremely Improbable E					*

High Risk
Medium Risk
Low Risk

* Unacceptable with Single Point and/or Common Cause Failures

5. Mitigate Risk

   The fifth step is only required if the initial risk of the hazard's outcome, as determined in step four, is determined to be "High Risk". Medium risk is acceptable, but **mitigation is preferred** when possible.

   There are a variety of risk mitigation strategies the airport can use to decrease the severity or likelihood of the hazard's outcome. Some generic approaches include:

   a. Avoidance – The operation or activity is cancelled or suspended because the safety risks are intolerable or deemed unacceptable (e.g., cancelling rather than allowing construction during low visibility night operations).

   b. Reduction – The frequency of the operation or activity is reduced, or action is taken to reduce the magnitude of the consequences of the accepted risks; some safety risk is accepted (e.g., limiting construction to daytime hours during low-traffic operations).

   c. Segregation of Exposure – Action is taken to isolate the impacts of the hazard or redundancy is built in to protect against the impacts (e.g., conducting additional FOD sweeps before operations during periods of construction).

   Other more specific mitigations to reduce the outcome's likelihood include:

   d. Raising awareness (e.g., safety campaigns, NOTAMs, or signage).

   e. Providing training (e.g., on-the-job training, recurrent training, or licensing).

   f. Establishing controls (e.g., avoid operations under certain conditions, develop or modify standard operating procedures, or by installing safety equipment).

   g. Eliminate the hazard (e.g., remove hazard from the airport).

   Once a mitigation(s) is selected, the hazard should be reevaluated based on the new mitigation(s) being implemented. The risk remaining after all mitigations have been implemented is referred to as "***residual risk***". If the residual risk is assessed to be at an acceptable level, no further mitigations are required. If the residual risk is still unacceptable, further mitigation is required.

   Finally, an individual or individuals will be assigned responsibility to ensure each selected mitigation is implemented.

C. SRM PROCEDURES

A goal of the LAS SMS program is to promote Safety Risk Management at all levels of supervision. When front-line supervisors are aware of SRM procedures and techniques, the effective identification and mitigation of risks is much more likely. This **does not** imply that front-line supervisors bear overall responsibility for SRM. Effective oversight is critical and all mitigation decisions should be made at the

appropriate level of supervision and/or management with oversight by the Accountable Executive.

1. SRM Triggering Events

   For any of the following events, the SRM Workflow (*see Figure 3*) will be initiated.

   a. Discovery of any *new* hazard through the review of SMS-Reportable Incidents with a severity classification of intermediate or major (*see paragraph III.A.5, section III.E., and section IV.B*);

   b. Discovery of any *new* hazard through the review of Direct Safety Violations (*see paragraph III.A.3 and section III.E*);

   c. Discovery of any *new* hazard through the review of Unsafe Condition Violations (*see paragraph III.A.4 and section III.E*);

   d. Identification of any new construction within the areas governed by SMS (*see paragraph III.A.7*);

   e. Report of any new hazard through the hazard reporting system (*see paragraph III.A.8*);

   f. Discovery or report of any new hazard through other means as determined by the SMS Coordinator;

   g. When Safety Trend Analysis indicates an unacceptable risk may be present (*see paragraph III.A.9*);

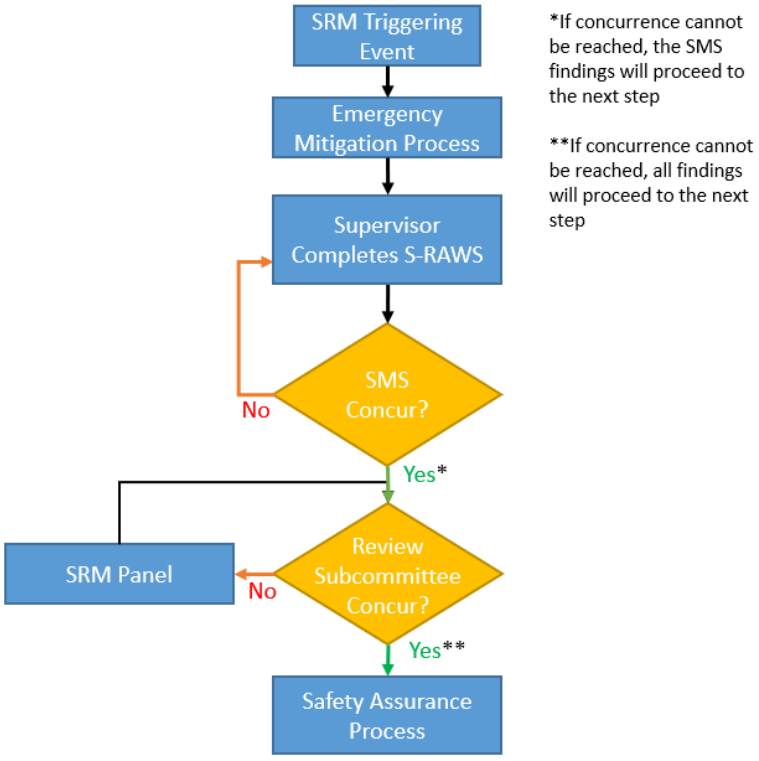

Figure 3: SRM Procedures

2. SRM Workflow (*see Figure 3*)

When an SRM Triggering Event occurs, the steps taken are as follows:

Step 1: Record the Triggering Event in the SMS SRM Log

For any SRM triggering event, the SMS Coordinator will record the Triggering Event in the SRM Log. The SMS Coordinator will be responsible for tracking the SRM Workflow through to completion.

Step 2: Determine if emergency mitigation is required (*see paragraph III.C.3*)

Step 3: Complete SMS Risk Analysis Worksheet (S-RAWS)

For any SRM triggering event where a sole responsible CCDOA organization can be identified, that organization will complete the S-RAWS or will assist the SMS Coordinator in the completion of the S-RAWS (*see appendix 4*). For an SRM triggering event where there are multiple responsible organizations, they will collaborate on the S-RAWS.

The S-RAWS will be completed using the instructions provided on the form as well as the information provided in section III.B of this manual. Additional assistance can also be requested by contacting the SMS Coordinator at sms@lasairport.com.

The S-RAWS must be submitted to sms@lasairport.com within 30 calendar days of the triggering event unless an extension is approved by the SMS Coordinator. **If it is immediately evident that an unacceptable risk may exist requiring more timely mitigation, the S-RAWS may be required earlier at the discretion of the SMS Coordinator.**

Step 4: SMS Review of S-RAWS

The SMS Coordinator will review the S-RAWS to evaluate the organization's risk assessment and proposed mitigations. The SMS Coordinator will work with the organization towards concurrence on the assessment and proposed mitigation(s). **If concurrence cannot be reached, the SMS Coordinator's findings will be used to complete the SRM Workflow**.

Step 5: SRM Review Subcommittee

All findings from an S-RAWS or SRMP will be reviewed at the next available SRM Review Subcommittee meeting. If the SRM Review Subcommittee concurs with findings, the concurrence will be recorded and the hazard will enter the Safety Assurance Process. If the SRM Review Subcommittee does not concur with findings of an S-RAWS, nonconcurrence will be recorded and the hazard will be referred to an SRMP after which the SRMP findings will be reviewed again by the SRM Review Subcommittee. If concurrence cannot be reached between an SRMP and the SRM Review Subcommittee, all findings will be forwarded to the Safety Assurance Process.

Step 6: Safety Risk Management Panel (SRMP)

When the SRM Review Subcommittee does not concur with findings of an S-RAWS or otherwise determines a need, an SMRP will be conducted for the hazard(s) (*see paragraph III.C.4*).

Step 7: Safety Assurance Process

Once a hazard analysis and any corresponding mitigations have been reviewed and approved by the SRM Review Subcommittee the hazard analysis will be referred to the Safety Assurance Committee (*see section IV.E*) for final acceptance by the Accountable Executive or referral back to the SRM process. The hazard will remain within the Safety Assurance Process until closed to ensure any mitigations are completed, to measure effectiveness of the risk analysis, and to refer back to the SRM process if needed.

3. Emergency Mitigation

Whenever a hazard is identified that the SMS Coordinator or the Airport Operations Coordinator deems a possible "High Risk" based on initial evaluation, emergency mitigation measures will be considered. Emergency mitigation measures are intended to temporarily eliminate or decrease an unacceptable risk until the applicable hazard(s) can be assessed through the S-RAWS and/or SRMP process. Emergency mitigation measures may include:

a. Immediate discontinuation of the operation presenting the hazard.

b. Rescheduling the operation presenting the hazard to reduce exposure.

When an emergency mitigation is implemented, the SMS Coordinator will immediately notify the Accountable Executive and the members of the SRM Review Subcommittee via email. The emailed message will include the following:

c. Description of the hazard(s) requiring emergency mitigation.

d. Description of the prescribed mitigations and the person responsible for ensuring immediate implementation.

e. Steps and timeline for review of the hazards through the standard SRM Workflow.

4. Safety Risk Management Panel (SRMP)

Whenever any of the following occur, an SRMP will be conducted within 30 calendar days.

a. The SRM Review Subcommittee refers a hazard to the SRMP.

b. The Safety Assurance Committee refers a hazard or trend to the SRMP.

c. As determined by the SMS Coordinator.

The SRMP will include the SMS Coordinator and any subject matter experts and/or stakeholders identified by the SMS Coordinator. The SRMP should include at least three members, not counting the SMS Coordinator. The SMS Coordinator will act as moderator and will not vote on decision points. Subject matter experts should include, at a minimum, an Airside Operations representative and a Safety/Risk Management representative. Unless otherwise determined by the SMS Coordinator, the SRMP will also include a representative from the organization responsible for the hazardous activity. Every effort should be made to gather a panel that will bring a broad breadth of knowledge and experience to the analysis and mitigation effort.

During the SRMP, the SMS Coordinator will complete the SRMP Worksheet (*see appendix 7*). The completed SRMP Worksheet will be filed in accordance with section III.F of this manual. Findings from the SRMP will be recorded in the SRM Log and briefed at the next available SRM Review Subcommittee.

5. SRM Review Subcommittee

The SRM Review Subcommittee will meet no less frequently than once every 30 calendar days whenever an SRM decision exists that requires SRM review. If more than 30 days elapses without any S-RAWS or SRMPs completed during that time, there are no SRM decisions to review and thus no need for an SRM Review Subcommittee. However, once an SRM decision is made through completion of an S-RAWS or SRMP, a review must be conducted by the SRM Review Subcommittee no later than 30 days following the initiating SRM decision.

The SMS Coordinator will schedule SRM Review Subcommittees at least 14 calendar days in advance by emailing an MS Outlook calendar invite to all required attendees.

a. Members will include the following individuals (or a representative), at a minimum:
    i. Managing Director of Aviation; Airside Operations (Chair)
    ii. Managing Director of Aviation; Facilities
    iii. Senior Airport Manager; Safety and Risk Management
    iv. Airport Manager; Airport Operations
    v. Airport Program Administrator, Airside Operations
    vi. Airport Program Administrator, Airfield and Electrical Maintenance
    vii. Airport Manager, Communications Control
    viii. SMS Coordinator (Facilitator)
b. The SMS Coordinator will develop the agenda for each meeting. Mandatory agenda items will include:
    i. Sign-in

ii. Approval of previous meeting minutes

iii. Review of SRM decisions made in past 30 days (as result of S-RAWS and/or SRMP)

iv. Concurrence or nonconcurrence for each SRM decision from previous item. Any nonconcurrence must include instructions to SRMP.

c. Records will be maintained in accordance with section III.F. Records will include:

i. Sign-in Sheet

ii. Agenda

iii. Presentation materials

iv. Meeting minutes

v. Completed SRMP Worksheets (*see appendix 7*)

D. MEANS FOR ENSURING MITIGATIONS ARE EFFECTIVE

Every effort will be made to avoid a "fire and forget" mentality for implemented mitigations. Mitigations will be evaluated using the following measures. For every implemented mitigation, a follow-up review will be conducted by the SMS Coordinator to evaluate whether the mitigation is having the desired effect and that the residual risk remains acceptable. Follow-up reviews may include interviews, spot checks, data review, etc. Follow-up reviews will be conducted no later than 6 months following the implementation of a mitigation and will be documented in the SRM Log.

If the review determines that the mitigation(s) was not effective, the hazard will be referred back to the SRMP. If the review determines that the mitigation(s) has been effective, the SMS Coordinator may recommend closure of the SRM Event at the next Safety Assurance Committee meeting.

E. REVIEWING POTENTIAL SRM TRIGGERING EVENTS

Events that are substantially similar or recur often do not reveal any new hazard or change in risk and thus do not require a new SRM event. When evaluating SRM Triggering Events (*see paragraph III.C.1*), event should be evaluated to determine if a new hazard is suspected which has not already been addressed through a previous SRM event. Criteria for considering whether a new hazard may be suspected include, but are not limited to:

a. Is the event substantially similar to an event that has already been evaluated through the SRM process (If *no*, the SRM process will be initiated)?

b. Is the event completely non-attributable to activities within the airport's span of control, e.g. a medical event due to a pre-existing medical condition?

c. Is the hazard contained within a single primary organization's span of control and impact or does the hazard potentially impact other organizations?

d. Does event suggest that an organization may be putting its own employees, passengers, etc. at unacceptable or unreasonable risk?

e. Does an increase in frequency of similar events indicate a change in risk levels may exist (previous SRM documentation should be consulted)?

Event Review Teams will review potential SRM Triggering Events as follows:

f. The following events will be reviewed bi-weekly by a team comprising of representatives from SMS, Airside Operations, and Airfield Electrical/Maintenance.

   i. SMS-Reportable Incidents with a severity classification of intermediate or major (*see paragraph III.A.5 and section IV.B*)

   ii. Direct Safety Violations (*see paragraph III.A.3*)

   iii. Unsafe Condition Violations (*see paragraph III.A.4*)

g. All breaches except sterile-to-ramp breaches where no suspicious or unusual behavior is observed will be reviewed monthly at the Security Door Alarm Review meeting. An example of suspicious or unusual behavior would include an individual who, upon exiting the sterile terminal area, begins to wonder around the ramp rather than realizing they may have made a mistake and attempting to reenter the sterile area.

F. DOCUMENTATION AND RECORD RETENTION

All SRM related documents are managed by the SMS Coordinator and retained in the electronic filing system (*see section I.E*). All documents pertaining to each identified hazard are retained for 36 consecutive calendar months following closure of the SRM event.

IV. SAFETY ASSURANCE

Safety Assurance includes processes 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.

A. SAFETY PERFORMANCE MONITORING

The SMS Coordinator is responsible for overseeing data collection and analysis to illuminate safety trends, identify new hazards, verify compliance with SMS requirements, and verify performance with safety objectives.

Data sources include, but are not limited to:

- the AOC Daily Log (http://part139.ccdoa.net/Dashboard);

- the Clark County DOA Incident Log (https://vhiweb04.ccdoa.net:44310);

- the Electronic Spill Report Management system (https://svwb-iweb02.ccdoa.net:4493);

- citations and warnings issued for SMS-relevant behavior and activity;

- results from inspections and audits (e.g. fuel equipment inspections, apron inspections, spot inspections, dripline walks, safety focus areas, etc.);

- incident reports; and

- reported hazards.

Using all available data sources, the SMS Coordinator will continuously develop tools and techniques to collect, review, and analyze any data relevant to the SMS. At a minimum, the SMS Coordinator will develop tools to monitor the safety indicators identified in Figure 4.

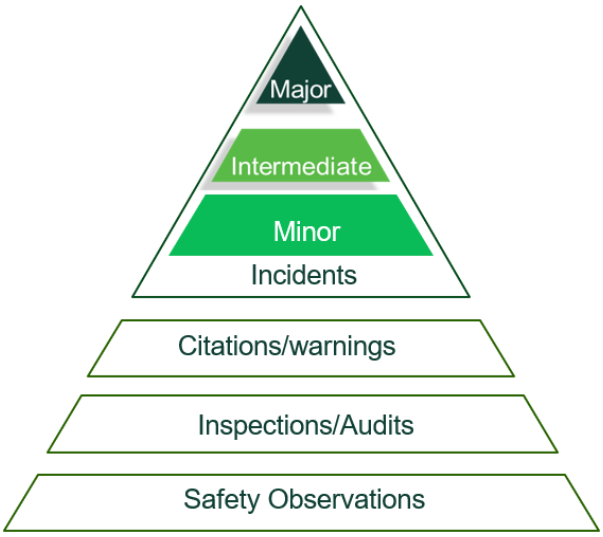

Figure 4: Key Safety Indicators

B. INCIDENT SEVERITY CLASSIFICATION

In order to identify, analyze, and prioritize safety-related incidents, any SMS-Reportable Incident (*see paragraph III.A.5*) will be logged via the SMS Dashboard (*see section IV.D*) and receive an incident severity classification based on the following criteria.

1. A Major incident is any incident that results in one or more of the following:
    a. Injury requiring hospitalization
    b. Injury resulting in loss of life, limb, or eyesight
    c. Total property damage of $30K+
    d. Damage to aircraft affecting flight and/or FAA reportable damage to aircraft
    e. "Adverse Effect" wildlife strike
    f. Runway Incursion
2. An Intermediate incident is any incident that results in one or more of the following:
    a. Injury requiring transport to a medical facility by any means to include by private vehicle
    b. Total property damage of $5K-$30K
    c. Inadvertent contact with aircraft causing aircraft to be taken out of service or maintenance finds damage
    d. Triggering event wildlife strike (non-adverse effect)
    e. Surface Incident
    f. Security Breach
    g. Uncontained petroleum or other chemical spills
2. A Minor incident is any incident that results in one or more of the following:
    a. Injury not requiring transport to a medical facility
    b. Total property damage of <$5K
    c. Inadvertent contact with aircraft or bird strike not causing damage
    d. Contained petroleum or other chemical spills

C. HAZARD REPORTING SYSTEM

Anyone at LAS can report any hazard anywhere on the property by submitting a comment at https://harryreidairport.com/contact/email under the category "Health and Safety".

Every effort will be made to maintain the confidentiality of the individual submitting the report. The SMS Coordinator will be the sole recipient of hazards reported to SMS and will ensure the reporter's information is excluded from all correspondence regarding a reported hazard. The SMS Coordinator will not share a reporter's information with anyone, to include anyone within their chain of command. Additionally, when an employee submits a hazard report, the on-line form reminds employees at LAS that Nevada Revised Statute (NRS) 618.445 protects all employees from discrimination by their employer should they report a hazard within their workplace.

D. REPORTING SAFETY INFORMATION

The SMS Coordinator will create and maintain an SMS Dashboard that illustrates relevant safety information to assist the Accountable Executive and other key decisionmakers in making risk decisions for LAS. The SMS Dashboard will be maintained at (H:\Safety\SMS\LAS SMS Program\Safety Assurance) and will be updated no later than the tenth workday of each month.

The SMS Dashboard will include the following information at a minimum:

- quantity and severity classification of all SMS-reportable incidents for the past 12 CCM (*see paragraph III.A.5 and section IV.B*);

- graphs or other tools that illustrate monthly incident trends for the past 12 CCM (*see appendix 8*);

- detailed information for all major incidents for the past 12 CCM;

- quantity of hazards reported through the Hazard Reporting System for the past 12 CCM (*see section IV.C*);

- status of schedule for SMS implementation;

- status of Subpart D compliance based on most recent self-inspection (*see section IV.F*);

- status of Subpart E compliance based on most recent self-inspection (*see section IV.F*);

- performance of Safety Objectives;

- Safety Critical Information distributed during past 180 days;

- results from SRM process during past 180 days;

- status of ongoing mitigations

- safety communications distributed during the past 365 days.

E. SAFETY ASSURANCE COMMITTEE

With SMS, the ultimate responsibility for risk acceptance rests with the Accountable Executive. The Safety Assurance Committee is the primary forum for providing the Accountable Executive the information for doing so.

The Safety Assurance Committee meetings will occur, at a minimum, during the months of January, April, July, and October.

1. Members will include, at a minimum:
    a. Accountable Executive (Chair)
    b. Managing Director of Aviation; Airside Operations
    c. Assistant Fire Chief; Aircraft Rescue and Firefighting
    d. Managing Director of Aviation; Facilities
    e. Senior Airport Manager; Safety and Risk Management
    f. Airport Manager; Airport Operations
    g. Airport Manager; Communications Control
    h. SMS Coordinator (Facilitator)
    i. Airport Manager; Airport Affairs
2. The SMS Coordinator will develop the agenda for each meeting. Mandatory agenda items will include:
    a. Sign-in
    b. Approval of previous meeting minutes
    c. Presentation and discussion of the SMS Dashboard (*see section IV.D*)
    d. Review, modification (when applicable), and approval of Safety Objectives (*see section II.E*)
    e. Presentation and discussion of SRM process results since the last Safety Assurance Committee meeting
    f. Acceptance of responsibility, by the Accountable Executive, for all SRM Process results since the last Safety Assurance Committee
    g. Review SRM Events for closure (*see section III.D*)
    h. Status of Safety Focus Areas (*see section IV.G*)
    i. New safety or other concerns
3. Records will be maintained in accordance with section IV.E. Records will include:
    a. Sign-in Sheet
    b. Agenda

c. Presentation materials

d. Meeting minutes

F. SMS SELF-INSPECTION

Not less frequently than twice per calendar year, a self-inspection will be conducted to determine SMS program compliance. At a minimum, the self-inspection will include the following:

- completion of the Subpart D Checklist at H:\Safety\SMS\LAS SMS Program\Safety Assurance ; and
- completion of the Subpart E Checklist at H:\Safety\SMS\LAS SMS Program\Safety Assurance.

Note that the first item of each checklist is to verify that the checklist is current based on the most recent Title 14 CFR Part 139. Currency can be verified by reviewing www.ecfr.gov. If the checklist is not up to date, notify the SMS Coordinator immediately.

The completed self-inspection checklists will be provided to the SMS Coordinator within 10 business days of completion for documentation and record retention (*see section IV.H*).

G. SAFETY FOCUS AREA

Safety Focus Areas may be used to provide additional attention a specific safety topic, issue, concern, etc. Safety Focus Areas and the actions required are determined at the discretion of the Accountable Executive. An example of a Safety Focus Area would be to "increase seat belt usage". An example of related actions would be to increase enforcement specifically for seat belt violations or to set up periodic checkpoints to canvass for seat belt usage. Other actions may include increased outreach, training, etc.

H. DOCUMENTATION AND RECORD RETENTION

All Safety Assurance related documents are managed by the SMS Coordinator and retained in the electronic filing system (*see section I.E*). All documents are retained for a minimum of 36 CCM.

V. SAFETY PROMOTION

A. TRAINING

1. Safety Awareness Orientation

   All persons authorized access to the areas governed by this SMS must receive Safety Awareness Orientation Training. This training will be developed by the SMS Coordinator no later than 1/1/2025. The orientation materials will include the following at a minimum:

   a. Identity of the airport Accountable Executive

   b. Current SMS policy statement

   c. Short description of a hazard and everyone's role in hazard identification

   d. Description of the LAS hazard reporting system to include confidentiality of reporting

   e. Instructions for reporting hazards through the hazard reporting system

   f. Mandatory reporting of SMS-reportable incidents

   g. How to contact the SMS Coordinator for more information

   The orientation materials will be incorporated as an additional module in the existing initial badge training system and made available to the public on the www.harryreidairport.com website.

   Safety Awareness Orientation Training will be provided during initial badge training for affected individuals beginning no later than 4/1/2025. For existing badge holders, the SMS Coordinator will develop a method for ensuring all previously badged individuals review the publicly posted orientation materials prior to 4/1/2026.

2. SMS Coordinator Training

   The SMS Coordinator will complete an approved formal airport SMS training program provided by an authorized third party within 180 days of assignment to the position. The training program must be specific to airport SMS and must be approved by the Senior Airport Manager; Safety and Risk Management. Examples of third party training providers that may be considered include, but should not be limited to, Airports Council International (ACI) and the American Association of Airport Executives (AAAE).

3. SMS Basics Training

   All persons identified in paragraphs II.D.1 through II.D.10 will complete SMS Basics Training no less frequently than every 24 months. This training will be developed by the SMS Coordinator no later than 1/1/2025. The training will include the following at a minimum:

a. Identity, roles, and responsibilities of the airport Accountable Executive

b. SMS Description and Scope

c. Description of SMS Manual

d. SMS Organizational Structure

e. Current Safety Objectives

f. Components of the Airport Safety Management System

g. Fundamentals of Safety Risk Management

h. Description of LAS Hazard Reporting System

i. Ensuring Confidentiality of Hazard Reports

j. Description of Safety Assurance Committee

k. Description of Safety Focus Area

l. Fundamentals of Safety Promotion

m. Description of SMS training requirements

The training will be provided and tracked through the existing SuccessFactors Learning Management System beginning no later than 4/1/2025. All affected individuals will complete the training no later than 4/1/2026 and no less frequently than every 24 months thereafter.

4. Specialized Training

Training for specific tasks and/or roles will be provided one-on-one or in small groups with the SMS Coordinator on a just-in-time basis as needed. Examples may include prior to participation on an SRMP or to assist a supervisor in the completion of an S-RAWS. Any specialized training will be coordinated by the SMS Coordinator. The SMS Coordinator will develop standardized materials for training that is delivered on a recurrent basis.

B. COMMUNICATION

1. The SMS Coordinator will develop, publish, and distribute an SMS newsletter no less frequently than quarterly that includes the following information at a minimum:

   a. articles or other information reminding all persons authorized access to the areas governed by this SMS of the SMS and their safety roles and responsibilities under SMS; and

   b. current safety critical information (*see also paragraph V.B.2*).

   Other information may include recent safety lessons learned, recent mitigation actions taken, highlights of best practices.

Newsletters will be emailed to station managers and DOA managers for distribution to any employees authorized access to the areas governed by this SMS and inclusion on their safety bulletin boards. Newsletters will also be made available to the public on the www.harryreidairport.com website.

2. For **safety critical information where timely distribution is needed**, an Airport SMS Communication will be issued utilizing the Tenant Bulletin email contact list. The information will still be included in the next standard newsletter if the information is still current as of date of newsletter publication.
3. For any hazard reported through the hazard reporting system (*see section IV.C*), the SMS Coordinator will provide an email response within 60 calendar days to the individual who reported the hazard detailing any actions being taken. All email responses will be made from the sms@lasairport.com email account.
4. The SMS Coordinator will attempt to attend any meeting where SMS is a relevant topic and to promote SMS. Such meetings include, but are not limited to:
    a. Weekly Airside Meeting
    b. LAS Users Committee (LUC)
    c. Station Manager Meetings
    d. Quarterly Safety Round Table
    e. Quarterly Tenant Fuel Meeting
    f. Quarterly DOA Safety Meeting
    g. tenant safety fairs, meetings, etc.

C. DOCUMENTATION AND RECORD RETENTION

All Safety Promotion related documents are managed by the SMS Coordinator and retained in the SMS Document Management file system (*see section I.E*) as follows:

1. The SMS Coordinator will maintain records of all safety awareness orientation materials made available under paragraph V.A.1. These records will include, a copy of the materials (including any revisions), method of distribution, and date distributed. These records will be retained for 24 CCM after the materials are made available.
2. The SMS Coordinator will review and print training completion records from the SuccessFactors Learning Management System no less frequently than once every 30 calendar days. The records will be retained for 24 CCM.
3. Created newsletters (*see paragraph V.B.1*) and any other safety promotion communication materials will be maintained for a minimum of 12 CCM.

Additionally, each communication will be logged in the Communications Log located within the SMS Document Management file system.

Email responses sent in accordance with paragraph V.B.2 will be maintained in the sms@lasairport.com email account for a minimum of 12 CCM.

APPENDIX 1 – DEFINITIONS AND ACRONYMS

ACC – Airport Control Center. Phone number (702) 261-5125.

Accident – an unplanned event or series of events that results in death, injury, damage to, or loss of equipment or property. *See paragraph III.A.6.*

AOC – Airport Operations Coordinator. Phone number (702) 261-5605.

ASP – Airport Security Plan.

CCM – Consecutive Calendar Months.

Direct Safety Violation (DSV) – a type of observation where an individual is observed not complying with required safety procedures and/or practices. *See paragraph III.A.3.*

FAA – Federal Aviation Administration.

FOD – Foreign Object Debris.

GIS – Geographic Information System.

Incident – an unplanned event which affects or could affect the safety of airport operations. *See paragraph III.A.5.*

LAS – Harry Reid International Airport.

Manager – any person responsible for controlling or administering some or all activities of an organization.

Observation – the identification of a hazard by key Clark County Department of Aviation personnel during the performance of their normal duties. *See paragraph III.A.2.*

Runway Incursion – any occurrence involving the incorrect presence of an aircraft, vehicle, or person on the protected area of a surface designated for the landing and takeoff of aircraft.

Security Breach – any unauthorized access to an area governed by the SMS.

SMS-Reportable Accident – a type of accident for which it is ***required*** that the accident is reported by any individual who observed it. *See paragraph III.A.6.*

SMS-Reportable Incident – a type of incident for which it is ***required*** that the incident is reported by any individual who observed it. *See paragraph III.A.5.*

S-RAWS – SMS Risk Assessment Worksheet.

Supervisor – any person who directs or leads the execution of a task, project, or activity.

AE Approval: 

Surface Incident – an unauthorized or unapproved aircraft movement within the areas governed by SMS (excluding runway incursions); an occurrence in that same area associated with the operation of an aircraft that affects or could affect the safety of flight or the safety of nearby personnel and/or equipment; and/or any event that causes an aircraft to unexpectedly deviate from the normal speed and/or path of travel in order to avoid a hazard.

Unsafe Condition Violation (UCV) – a type of observation where an unsafe condition exists that cannot be attributed to an individual. *See paragraph III.A.4.*

APPENDIX 2 – SAFETY POLICY STATEMENT

HARRY REID INTERNATIONAL LAS VEGAS

Department of Aviation
Rosemary A. Vassiliadis, Director
P.O. Box 11005
Las Vegas, NV, 89111-1005
(702) 261-5211
Fax (702) 597-9553

March 27, 2024

SUBJECT: Safety Policy Statement

At Harry Reid International Airport, we are dedicated to excellence, driven by forward-thinking team members who collaborate and innovate to lead the aviation industry of tomorrow. Civil aviation is an endeavor where it is essential that, we not only make safety our top priority, but that we bring a collaborative and innovative approach to safety management. With the application of an effective Safety Management System (SMS), Harry Reid International Airport stakeholders will be better equipped to identify hazards, communicate critical safety data, collaborate on mitigation strategies, and to ultimately provide a safer airport environment for everyone.

Through SMS, Harry Reid International Airport is committed to:

- Making safety at Harry Reid International Airport the highest priority.
- Providing the necessary resources needed for safe operations.
- Promoting a safety culture across all operations that recognizes the importance of safety in all daily activities and a posture towards continuous improvement of all safety programs, processes, and procedures.
- Establishing a confidential and non-punitive hazard reporting system accessible to all stakeholders regardless of position or organization.
- Complying with all local, State, and Federal regulatory requirements related to safety.

Equipped with a strong culture of safety and an effective SMS, Harry Reid International Airport will be better positioned to realize our vision of being a global leader in the aviation industry committed to excellence and innovation by delivering unparalleled experiences for all.

James Chrisley
Senior Director of Aviation / SMS Accountable Executive

Clark County Board of Commissioners

Tick Segerblom, Chair William McCurdy II, Vice Chair James B. Gibson
Justin C. Jones Marilyn Kirkpatrick Ross Miller Michael Naft

Original Date: August 14, 2024
Revision Date: N/A

AE Approval: _____

APPENDIX 3 – SAFETY OBJECTIVES

HARRY REID INTERNATIONAL LAS VEGAS

Department of Aviation
Rosemary A. Vassiliadis, Director
P.O. Box 11005
Las Vegas, NV, 89111-1005
(702) 261-5211
Fax (702) 597-9553

April 2, 2024

SUBJECT: Safety Management System (SMS) Safety Objectives

In accordance with the LAS SMS Manual section II.E, the following initial Safety Objectives have been established for Harry Reid International Airport. These objectives will be reviewed, modified when applicable, and approved at each Safety Assurance Committee meeting.

Safety Objective 1: Reduce the annual rate per 1K operations of SMS-reportable incidents in each category (minor, intermediate, major) between the end of calendar year 2023 and the beginning of calendar year 2027 (3 years). After year 3, data will be analyzed and a measurable reduction goal will be implemented.

Safety Objective 2: Develop two new processes by July 1, 2025, that proactively measure safe behaviors rather than reactively measure incidents that result from unsafe behaviors.

Goal 2.1: By July 1, 2025, develop a safety enforcement process that promotes both individual and organizational accountability and provides quantifiable indicators of safety rules compliance.

Goal 2.2: By July 1, 2025, develop an auditing process that provides quantifiable indicators of safety rules compliance.

Safety Objective 3: Raise awareness of airport hazard reporting system by 80% by April 1, 2026.

James Chrisley
Senior Director of Aviation / SMS Accountable Executive

CLARK COUNTY NEVADA

Clark County Board of Commissioners

Tick Segerblom, Chair William McCurdy II, Vice Chair James B. Gibson
Justin C. Jones Marilyn Kirkpatrick Ross Miller Michael Naft

Original Date: August 14, 2024
Revision Date: N/A

AE Approval: _____

APPENDIX 4 – SMS RISK ANALYSIS WORKSHEET (S-RAWS)

SMS RISK ANALYSIS WORKSHEET (S-RAWS)

Date (mm/dd/yyyy):	Organization:	
Supervisor Name:	Supervisor Email:	Supervisor Phone Number:
Reason for S-RAWS: ☐Incident ☐Hazard Report ☐Other ☐Direct Safety Violation ☐Unsafe Condition Violation	SMS Event ID	Citation/Incident # (if applicable)
Description of Incident, Violation, Project, etc.:		

Step 1: DESCRIBE THE SYSTEM *The system description depicts the operating environment in which the hazard(s) exist. Helpful tools to help the supervisor complete this portion can be found in section III.B of the SMS Manual, e.g. 5M Model, Fishbone Diagram, 5 Why's Technique, etc. Attach plain white paper if more space is required.*

Step 2: IDENTIFY THE HAZARD(S) *What hazard(s) contributed to this incident and/or condition? When identifying hazards, all possible sources of system failure should be considered. Examples may include equipment, operating environment, experience, training, procedures, etc. Attach plain white paper if more space is required.*	**Severity**	**Likelihood**	**RISK** *Complete Step 4 to assign risk levels to each hazard.*
1.			☐L ☐M ☐H
2.			☐L ☐M ☐H
3.			☐L ☐M ☐H

Step 3: ANALYZE THE RISK OF IDENTIFIED HAZARDS *Analyze the risk associated with each hazard identified in Step 2. For each hazard, the supervisor should consider the worst credible outcome (harm), which is the most unfavorable condition that is believable and possible given the system state described in Step 1.*

Step 3a: Severity *Determine the worst credible outcome as result of each identified hazard.*

5. Negligible	4. Minor	3. Major	2. Hazardous	1. Catastrophic
No first aid required injury/illness; no lost work time; none to very limited operational impact (less than 1 hour); none to minimal equipment loss (less than 1 day out of service); no environmental impact; none to minimal budget impact	Injury/illness (first aid required); little to no lost work time (less than 2 days); none to very limited operational impact (less than 4 hours); none to minimal equipment loss (less than 2 days out of service); contained with none to limited impact to environment; minimal budget impact	Injury/illness (1 to 5 persons); death (less than 2 persons); lost work time (less than 1 week); loss of total operations (less than 2 hours); loss of partial operations (less than1 day); equipment loss (less than 1week); non-contained (manageable/ mitigated within 1 day); moderate budget impact	Injury/illness (6 to 49 persons); death (less than 5 persons); lost work time (1 week to 1 month); loss of total operation (2 to 12 hours); partial loss of operation (48 hours or less); equipment loss (less than 30 days); non-contained, resulting in environmental impact (1 to 30 day); serious budget impact	Injury/illness (greater than 50 persons); death (greater than 5 persons); lost work time (greater than 1 month); loss of total operation (greater than 12 hours); loss of partial operations (greater than 48 hours); total loss of equipment; non-contained resulting in long-term environmental impact (greater than 30 days); grave budget impact

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SMS RISK ANALYSIS WORKSHEET (S-RAWS)

Step 3b: Likelihood *Determine the most reasonable likelihood the outcome (harm) identified in Step 3a would occur.*

E. Extremely Improbable	D. Extremely Remote	C. Remote	B. Probable	A. Frequent
Almost impossible; possibly only once in 10 to 100 years	Conceivable but highly unlikely; possibly once in every 5 to less than 10 years	Possibly once a year or multiple times from 1 year to less than 5 years; unlikely but possible to occur	Likely to occur multiple times per year or once per month; regularly expected to occur in the system	Likely to occur once a day or multiple times per week; continuously expected to occur in the system

Step 4: ASSESS THE LEVEL OF RISK *Using Risk Matrix and determinations made in Steps 3a and 3b, assign risk levels to each hazard identified in Step 2.*

Severity / Likelihood	Minimal 5	Minor 4	Major 3	Hazardous 2	Catastrophic 1
Frequent A					
Probable B					
Remote C					
Extremely Remote D					
Extremely Improbable E					*

High Risk
Medium Risk
Low Risk

* Unacceptable with Single Point and/or Common Cause Failures

Step 5: MITIGATE RISKS *Identify measures taken by supervisor and/or organization to eliminate hazard(s) identified in Step 2 and/or reduce the risk levels of hazard(s) to Medium or Low Risk. If presenting no mitigation(s), write "N/A". Attach plain white paper if more space is required.*	**Residual Risk (L,M,H)**
1. 2. 3.	

☐*Some or all hazards identified in Step 2 are outside of the organization's span of control. Assistance is required with mitigation measures.*

	Supervisor Signature:	
SMS Reviewer:	Date Reviewed (mm/dd/yyyy):	SMS Review: ☐Accepted ☐Resubmit SRMP Required?: ☐Yes ☐No Date:
SMS Signature:	Mitigation Periodic Review Required? ☐Yes ☐No	Next Review Due (mm/dd/yyyy):

Email completed form to sms@lasairport.com within 30 calendar days of incident and/or discovery of condition

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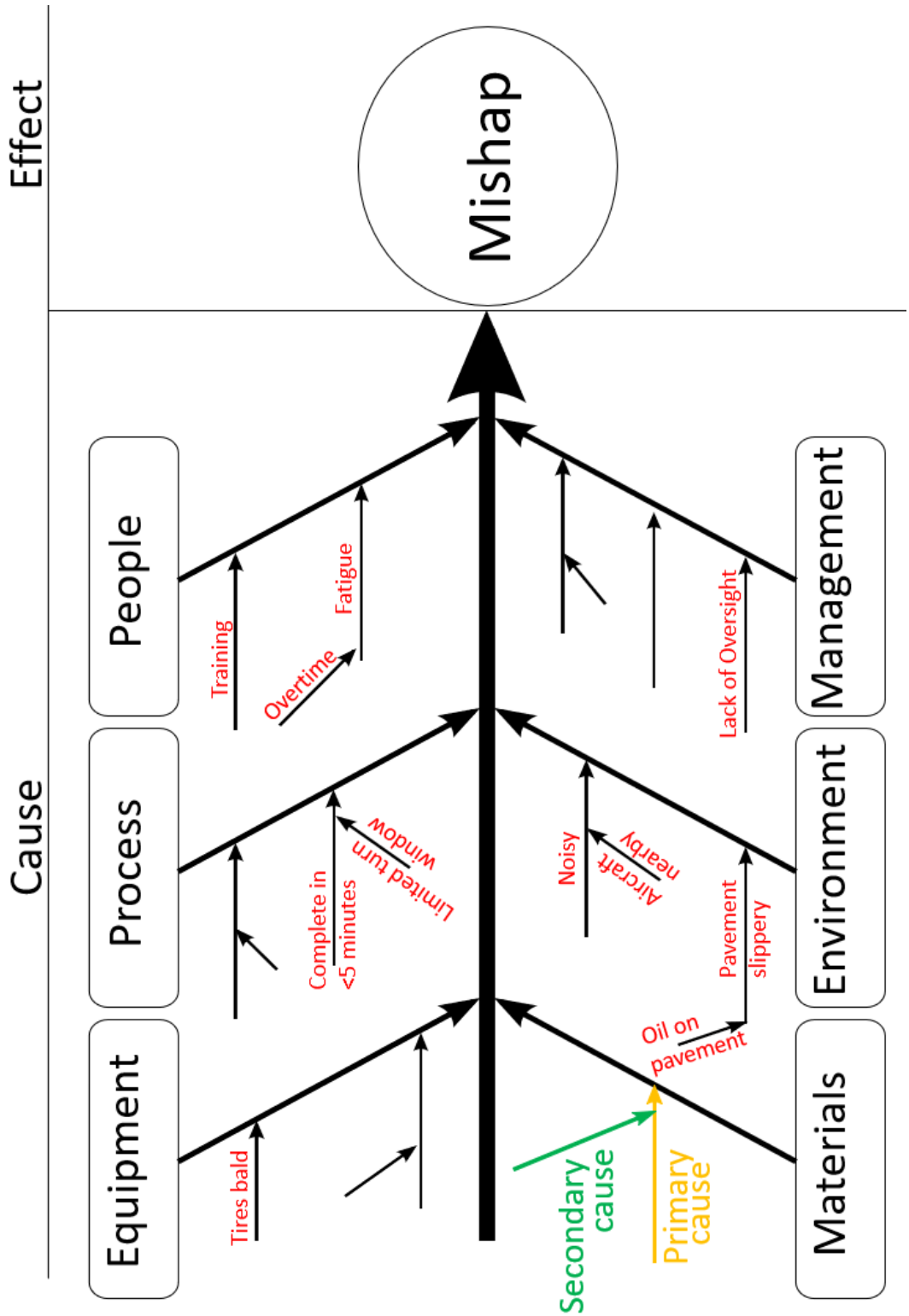
AE Approval: _____

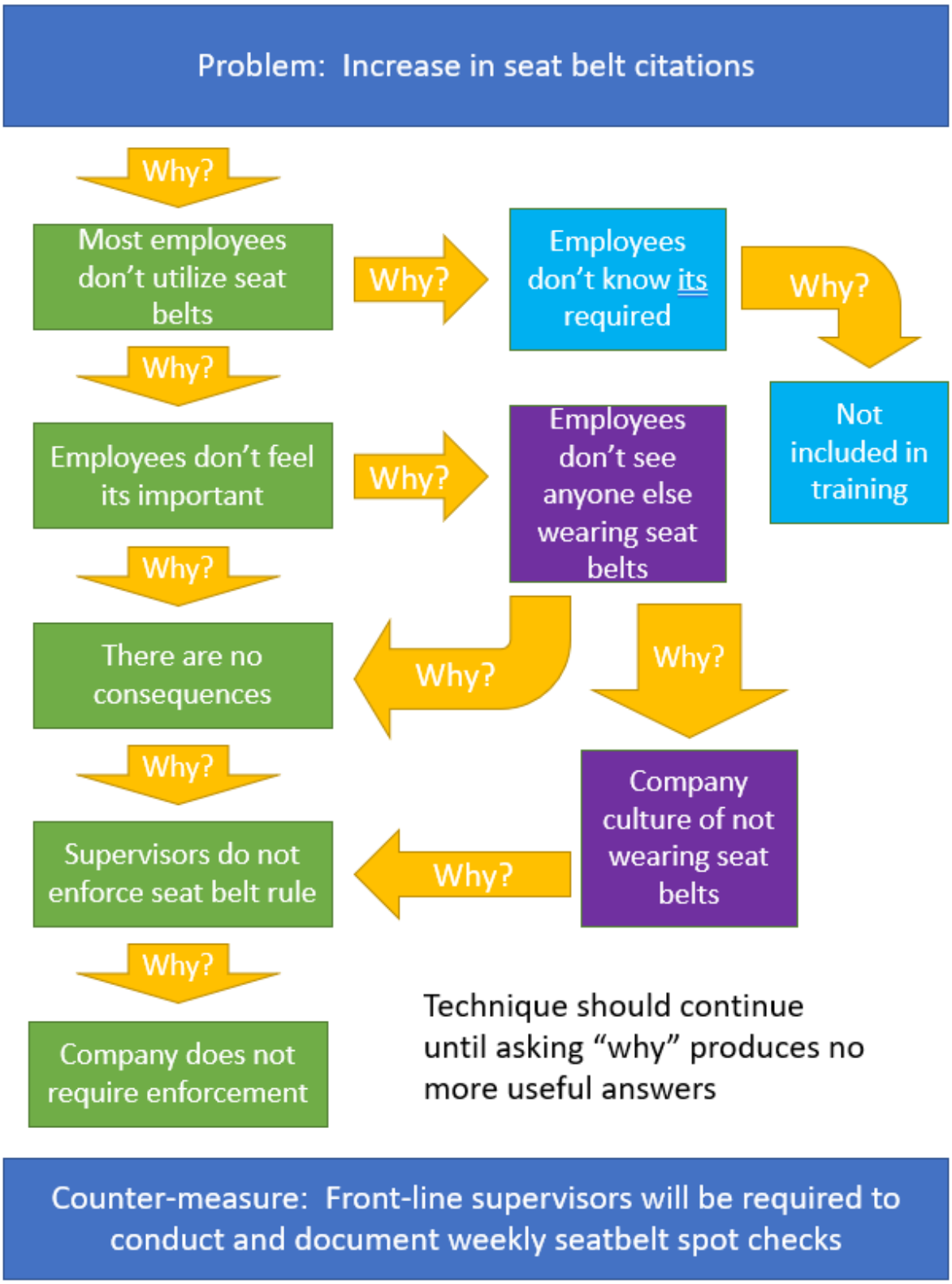
APPENDIX 5 – FISHBONE DIAGRAM EXAMPLE



Original Date: August 14, 2024
Revision Date: N/A

AE Approval: _____

APPENDIX 6 – 5 WHY'S TECHNIQUE EXAMPLE



Original Date: August 14, 2024
Revision Date: N/A

AE Approval: _____

APPENDIX 7 – SRMP WORKSHEET

SAFETY RISK MANAGEMENT PANEL (SRMP) WORKSHEET

HARRY REID INTERNATIONAL LAS VEGAS

Date (mm/dd/yyyy):	SRM Log Event ID:	Moderator Name:
Description of Hazard and/or Triggering Event:		
SRMP Members (LName, FName, Office):		Email:
Step 1: Describe the System		
Step 2: Identify the Hazard(s) 1. 2. 3. 4.	**Step 3: Analyze Risk**	**Step 4: Assess Risk (L, M, H)**
Step 5: Mitigation(s) 1. 2. 3. 4.	**Residual Risk**	**POC (LName, FName, Office)**
Final Comments		
SRM Review Subcommittee (date):		
Safety Assurance Committee (date):		

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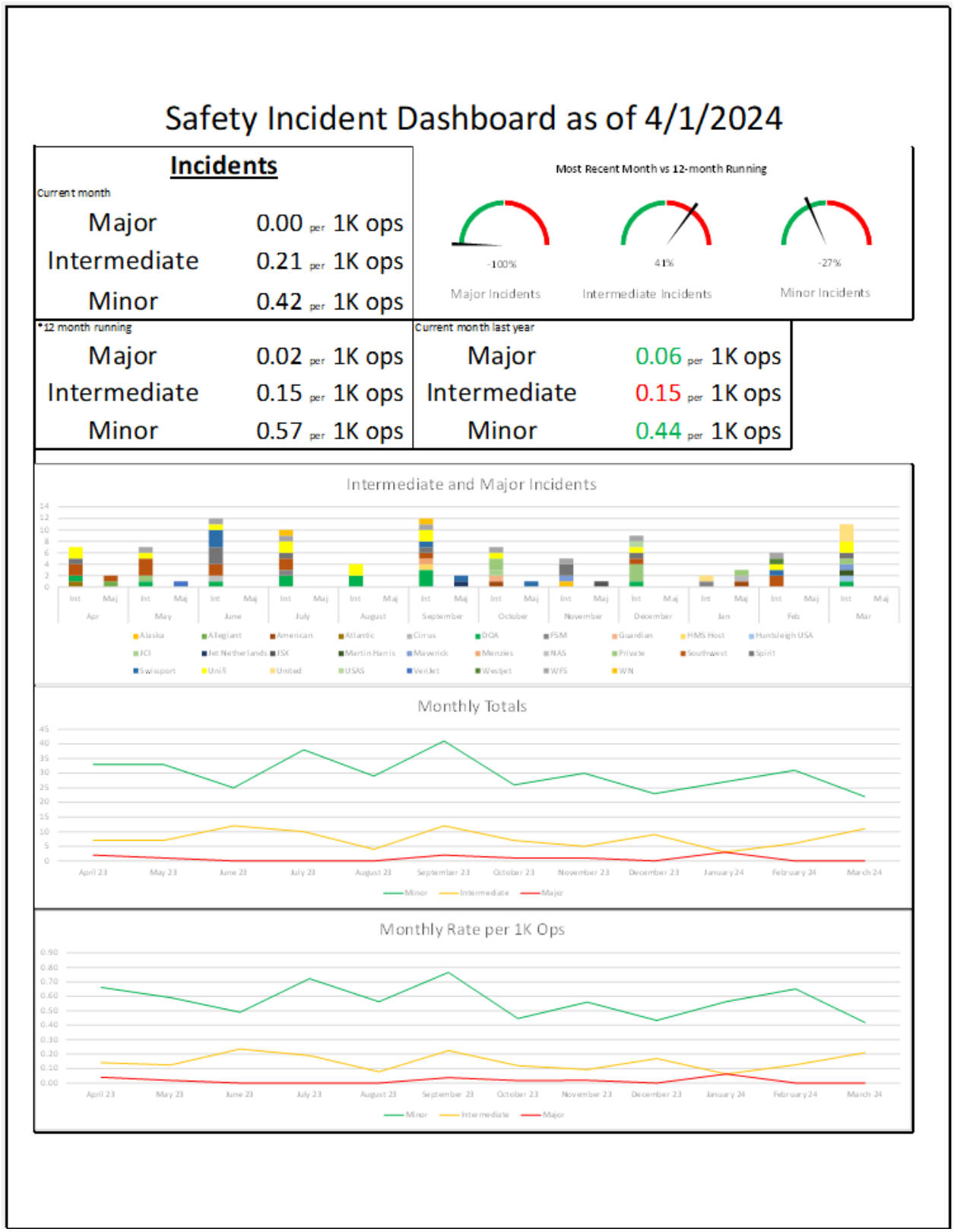
Original Date: August 14, 2024
Revision Date: N/A

AE Approval: _____

APPENDIX 8 – SMS DASHBOARD



Original Date: August 14, 2024
Revision Date: N/A

AE Approval: _____

Hazards Dashboard as of 6/1/2024

Total
10

Safety Risk Management Results (past 180 days)

Event ID	Date of Triggering Event	Description	SRM Complete?	Mitigation(s)	Initial Risk	Residual Risk	SRM Review Concur?	AE Accept?
24-001	4/3/2024	**Hazard Report:** Within terminal 3 tug bay #4, tugs are speeding through the bay and out the exit.	5/13/24	1. (Complete) Install signage which includes "Slow Down" within tug bays and "Stop" at tug bay #4 exit. 2. Pursue speed bumps at entrance/exits in tug bays 1-4 (added @ SRM Review SC)	Medium (3C)	Medium (3C)	Yes	
24-002	4/3/2024	**Hazard Report:** At HP#5, reporters stated that lighting is insufficient for towing operations, particularly when towing the Boeing 737 due to its low height.	5/3/24	1. Publish Airside Operating Directive 01-1-R006 (currently in draft -- has new language requiring 2 wing walkers) 2. SMS Safety message / tenant bulletin – recommends 2 wing walkers anytime an aircraft is taxied into a gate, pushed off a gate, or towed on/off a parking stand 3. (Complete) ~~Research plausibility of reversing direction of T-Bar / I-Line~~ (unfeasible) 4. Offer AOC to help enforce wing walker policy if airline has one	Medium (3D)	Medium (3D)	Yes	
24-003	4/3/2024	**Hazard Report:** Reporters are concerned about people bumping their heads on PBB power units, particularly when maneuvering the air hose cart.	4/9/24	1. Promote bump cap usage through SMS communications 2. ~~Explore installing high-vis markings to PBB power boxes~~ (unfeasible)	Medium (4C)	Medium (4C)	Yes	
24-004	4/3/2024	**Hazard Report:** Reporters are concerned about the placement of yield signs on vehicle service roads that cross aircraft taxi lanes.	4/17/24	None	Low (3E)	Low (3E)	Yes	
24-005	4/30/2024	**Hazard Report:** Reporters state that new surface markings would prevent PBB from contacting and damaging fueling stairs.	5/13/24	1. (Complete) Meet w/ tenant, offer to provide stenciled "no parking" markings based on their requirements. 2. Education on PBB stow box lines – add to ramp drivers training 3. Safety bulletin on PBB operation – look before you move PBB	Medium (4C)	Low (4D)	Yes	
24-006	4/29/2024	**Incident:** (see AOC Inc#125671) Two AAL baggage carts came disconnected from tug and collided with Delta aircraft engine.	5/13/24	1. (Complete) Briefed all ramp agents to ensure pintle hitches are properly engaged prior to moving equipment (AAL only). 2. Replacing all baggage cart pintle hitches with E-hitches (AAL only).	Medium (3C)	Medium (3C)	Yes	
24-008	4/12/2024	**Incident:** Security Breach (see AOC Ind#124100). BMA found sleeping inside GA aircraft @ Signature Blue lot.	5/14/24	1. (Complete) Will review all breaches except sterile to ramp breaches where no suspicious or unusual behavior is involved at monthly door alarm and breach review meeting. 2. (Complete) Installed additional razor wire to fortify Gate 15	High (1E)	High (1E)	Yes	
24-009	4/11/2024	**Incident:** Security Breach (see AOC Ind#124037). Unauthorized BMA discovered at 5 Star lobby.	5/14/24	1. (Complete) Will review all breaches except sterile to ramp breaches where no suspicious or unusual behavior is involved at monthly door alarm and breach review meeting.	High (1E)	High (1E)	Yes	

24-010	4/11/2024	**Incident:** Security Breach (see AOC Incl#123964). Unauthorized HMA discovered inside near Gate C-14.	5/14/24	1. (Complete) Will review all breaches except sterile to ramp breaches where no suspicious or unusual behavior is involved at monthly door alarm and breach review meeting.	Medium (1E)	Medium (1E)	Yes	
24-011	5/3/2024	**Incident:** Stripe Hog blower motor caught on fire, caused injury (see AOC Incl#123137 & 123136).	5/14/24	1. (Complete) All Stripe Hog operators received remedial training on procedures to prevent motor damage during such events. 2. (Complete) Fire extinguisher installed on Stripe Hog. Fire extinguishers verified on other similar equipment.	Low (3E)	Low (3E)	Yes	

Ongoing Mitigations

Event ID	Date of Triggering Event	Description	Status	POC
24-001	4/3/2024	1. Install speed bumps at terminal 3 tug bay #1 entrance. Monitor for 6 months.	1. Parts on hand. Install schedule in-work	1. Bobby Stapleton
24-002	4/3/2024	1. Publish Airside Operating Directive 01-1-R006 (new language requiring 2 wing walkers) 2. SMS Safety message / tenant bulletin – recommends 2 wing walkers anytime an aircraft is taxied into a gate, pushed off a gate, or towed on/off a parking stand 4. Offer AOC to help enforce wing walker policy if airline has one	1. Routing in-work 2. Working messaging system w/ Business Office 4. Awaiting other mitigations to respond to tenant once	1. John Witucki 2. Eric McCammond 4. Eric McCammond
24-003	4/3/2024	1. Promote bump cap usage through SMS communications	1. Working messaging system w/ Business Office	1. Eric McCammond
24-005	4/30/2024	2. Education on PBB stow box lines – add to ramp drivers training 3. Safety bulletin on PBB operation – look before you move PBB	2. Need status update 3. Working messaging system w/ Business Office	1. Matt Anhalt 2. Eric McCammond
24-006	4/29/2024	2. Replacing all baggage cart pintle hitches with E-hitches (AAL only).	2. Need status update	

Compliance Dashboard as of 6/1/2024				
		Checklist Completed	Comply?	Issues
SMS Implementation		4/19/2024	Yes	SMS Implementation on-track and on-schedule
139 Subpart D		N/A	Yes*	Checklist INW
139 Subpart E		4/19/2024	Yes*	SMS Implementation on-track and on-schedule
Safety Objectives				
#1	Safety Objective 1: Reduce the annual rate per 1K operations of SMS-reportable incidents in each category (minor, intermediate, major) between the end of calendar year 2023 and the beginning of calendar year 2027 (3 years). After year 3, data will be analyzed and a measurable reduction goal will be implemented.		INW	Anticipate decrease as SMS rolls out, SRMs conducted, awareness increases. Monitoring of incidents INW.
#2	Safety Objective 2: Develop two new processes by July 1, 2025, that proactively measure safe behaviors rather than reactively measure incidents that result from unsafe behaviors. Goal 2.1: By July 1, 2025, develop a safety enforcement process that promotes both individual and organizational accountability and provides quantifiable indicators of safety rules compliance. Goal 2.2: By July 1, 2025, develop an auditing process that provides quantifiable indicators of safety rules compliance.		INW	(2.1) Awaiting coordination w/ attorney on directives (2.2) Awaiting coordination between SMS & AOC
#3	Safety Objective 3: Raise awareness of airport hazard reporting system by 80% by April 1, 2026.		INW	Anticipate awarenss to increase with roll out of SMS. Will develop tools to measure awareness, e.g. surveys, etc. SMS implementation on-track and on-schedule.

Communications Dashboard as of 6/1/2024

Communications Distributed (past 365 days)			
Communication ID (yy-xxx)	Description	Method of Distribution	Date Distributed

Original Date: August 14, 2024
Revision Date: N/A

AE Approval: _____