Safety Program Manual

Table of Contents

Section 1   FAR Part 139 Safety Policy and Objectives

1.1   Overview

In order for the organization to have a successful Safety Management System (SMS) it is vital that the communication and support of this program be driven from top management. The Safety Policy reflects the Airport's values to safety and briefly describes why and how they plan to promote a Safety Culture throughout all levels.

1.2   Safety Policy

<div align="center">

Safety Management System (SMS)
Safety Policy
Lambert-St. Louis International Airport (STL)

</div>

Purpose: To concisely define the Director of Airport's commitment to safety of customers and the employees of the Lambert-St. Louis International Airport (STL or the Airport) within the confines of a clearly delineated Safety Management Systems (SMS) approach as defined by the FAA.

Definitions[1]:

1. **Safety Management Systems**:   The formal, top-down business-like approach to managing safety risk. It includes systematic procedures, practices, and policies for the management of safety (including safety statement, safety risk management, safety assurance, and safety promotion).

2. **Safety Risk Management (SRM):** A formal process within the SMS composed of describing the system, identifying the hazards, assessing the risk, analyzing the risk, and managing the risk.   The SRM process is embedded in the operational system; it is not a separate/distinct process.

3. **Safety Statement:** Defines the fundamental approach to managing safety that is to be adopted within an organization. Safety statement further defines the organization's commitment to safety and overall safety vision.

4. **Safety Culture:** Safety culture is both attitudinal and structural, relating to individuals and organizations. It concerns the requirement to not only perceive safety issues but also match them with appropriate action. Safety culture relates to such intangibles as personal attitudes and the style of the organization.

5. **Safety Assurance:** SMS process management functions that systematically provide confidence that organizational policies/processes/documentation meet or exceed safety requirements.

6. **Safety Promotion:** A combination of safety culture, training, and information sharing activities that supports the implementation and operation of an SMS in an organization.

---

[1] FAA Advisory Circular 150-5200-37, February 28, 2007.

STL Mission Statement: Our continuing mission is to provide the safest, most efficient, user-friendly airport, while meeting the air transportation and economic development needs of our stakeholders and our partners.

STL Vision Statement: Our vision is to strive to be the safest and most favored airport in the Midwest.

Safety Policy Statement Considerations[2]: Safety is a cooperative undertaking requiring an ever-present safety and health awareness on the part of every employee at the Airport. Safety is everyone's job and is a living program which incorporates continued improvement. This Policy resonates from the core leadership of the organization, and complements the overall mission of STL.

Safety Policy Statement: The Safety Policy of Lambert holds safety as a core value through commitment to managing a program with the intent of reducing risk of injury, loss of life, property damage and threats to the environment.

Implementing standards: We, the Senior Management Team of STL shall -

a. Support this statement by providing adequate structure, infrastructure and resources for safety management,

b. Set safety objectives and measure performance against them,

c. Implement a system that provides a basis towards a just safety culture,

d. Implement the procedures and practices required for safety management,

e. Provide training to foster an understanding of the importance of safety management, and safety assurance; and

f. Communicate and actively promote safety management to ensure that awareness and responsibility is instilled within the airport environment inclusive of employees and customers.

---

[2] This Far 139 SMS Policy acknowledges the City of St. Louis's Safety Policy currently in place

1.3 Authorization

Safety Program Manual Approvals

By the signature(s) below, the following official certifies that this document serves as an approved Safety Program Manual (SPM) for the STL and fully supports the safety policies, goals and practices of a SMS at STL.

Approved: _____ Date _____
                            [Name/Title]

Updates/Changes

Approved: _____ Date _____
                            [Name/Title]

Approved: _____ Date _____
                            [Name/Title]

Approved: _____ Date _____
                            [Name/Title]

Approved: _____ Date _____
                            [Name/Title]

1.4 Program Date Stamp

June 30, 2013

Safety Management System

REVISIONS

Revisions to this manual will be issued periodically by the SMS Coordinator. Revisions will be promptly incorporated in the manual and recorded in the space provided below. Updates and changes will be recorded in the "Approvals" section, prior page, as specified by the Accountable Executive. Manual revision updates will be recorded in the "Record of Distribution", next page.

RECORD OF REVISIONS

REVISIONS			
Number	Effective Date	Entered By	Principal Change
1			

RECORD OF DISTRIBUTION

Contact	Organization	Doc #	Date

1.5   Acronym List

AC	Advisory Circular
ACM	Airport Certification Manual
ACP	Access Control Point
ACR	Airport Condition Report
ADA	Americans with Disabilities Act
AL	Airline
ALEAN	Airport Law Enforcement Agency Network
ALERT I	Non-Aircraft Emergencies
ALERT II	Aircraft Incident/Difficulty
ALERT III	Aircraft Accident/Crash
ALPA	Air Line Pilots Association
ALS	Advanced Life Support
AMOD	Airline Manager on Duty
AOA	Air Operations Area
APD	Airport Police Department
APU	Auxiliary Power Unit (Generator)
ARC	American Red Cross
ARFF	Aircraft Rescue and Fire Fighting
ATCT	Air Traffic Control Tower
ATIS	Automatic Terminal Information Service
CFR	Code of Federal Regulations
CITY	City of St. Louis
CFR	Crash Fire and Rescue
COOP	Continuity of Operations Plan
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
EPA	Environmental Protection Agency
EPI	Emergency Public Information
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulation
FBO	Fixed Base Operator
FOD	Foreign Object Debris/Damage
GIS	Geographic Information System
HAZMAT	Hazardous Material
HI	Hazard Identification (forms)
ICAO	International Civil Aviation Organization
IE	Internal Evaluation
MOU	Memorandum of Understanding
MOANG	Missouri Air National Guard

MOD	Airport Manager on Duty
MODNR	Missouri Department of Natural Resources
MODOT	Missouri Department of Transportation
MSDS	Material Safety Data Sheet
NWS	National Weather Service
OFA	Obstacle Free Area
OSHA	Occupational Safety and Health Administration
PIO	Public Information Officer
RY or RWY	Runway
RA	Risk Assessment/Analysis (forms)
RM	Risk Management (forms)
RSA	Runway Safety Area
SA	Safety Assurance
SARA	Superfund Amendments and Reauthorization Act
SE	Self Evaluation (forms)
SIDA	Security Identification Display Area
SME	Subject Matter Expert(s)
SMS	Safety Management System
SOP	Standard Operating Procedure
SPM	Safety Program Manual
SRA	Safety Risk Assessment
SRM	Safety Risk Management
SRMD	Safety Risk Management Document
STLAA	St. Louis Airport Authority
TCP	Terminal Coordinating Point
TIC	Traffic Information Center
TSA	Transportation Security Administration
TSA	Taxiway Safety Area
TWY	Taxiway

1.6 Organization Chart

This represents the current Airport Executive Staff organization. These lines of authority delineate the day to day management structure of the Airport.
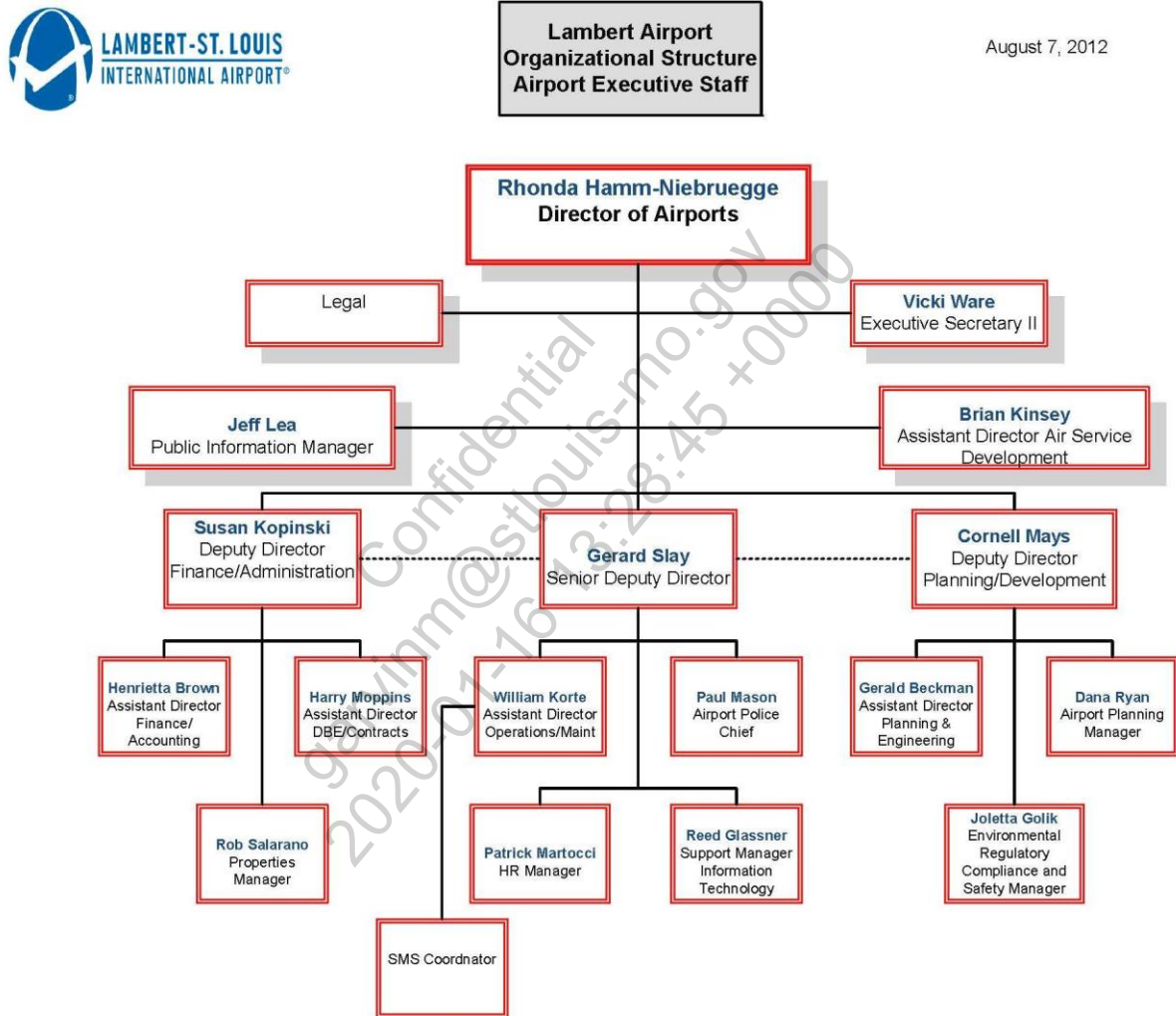

Figure 1: Organization Chart

1.7 Airport SMS Committee, Panel and Oversight Committee

1.7.1 Purpose:

The SMS Committee and Safety Panel is the group responsible for implementing and updating the program's SMS Manual and specifically focused on SRM and conducting Safety Risk Assessments (SRA) and Corrective Action Plans for mitigation and monitoring. The Safety Oversight Committee serves as approval and oversight. Roles and Responsibilities are discussed further on the next page.
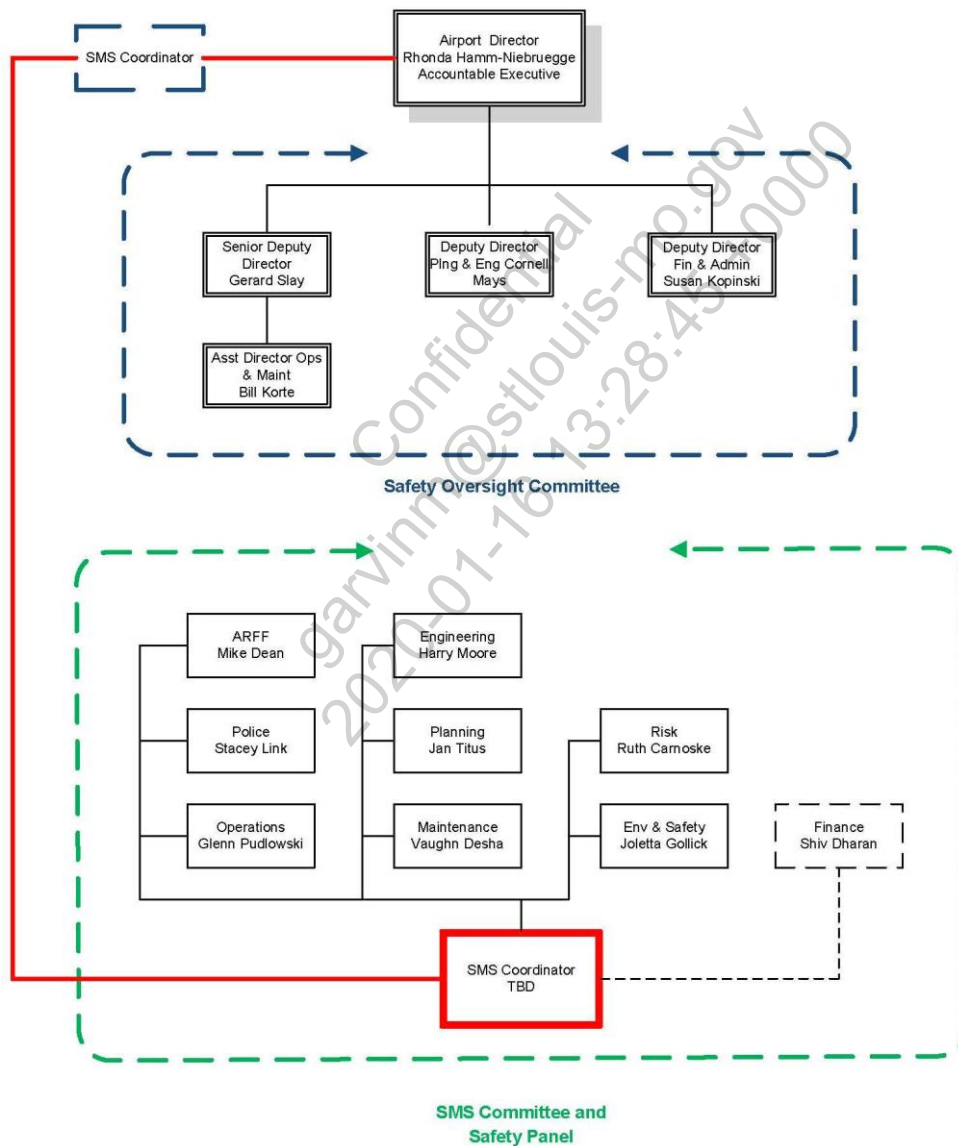

Figure 2: STL PART 139 SMS Organization Chart

1.7.2   Roles and Responsibilities

1.7.2.1   The Accountable Executive: Has overall authority and responsibility for the Airport's SMS Program. The Accountable Executive manages the Safety Oversight Committee comprised of executive management staff with authority over the airports operational and financial obligations.

1.7.2.2   Safety Oversight Committee: Will meet as needed to support the SMS Committee and Safety Panel workshops to address responses to hazards in a timely manner. They will actively participate in discussions concerning the SMS program including hazard prioritization and SRAs revealing consequences to life safety, continuity of airport operations, environmental impacts and financial obligations that may impact the Airport. They will make final decisions concerning Corrective Action Plans which the SMS Coordinator will communicate to them.

1.7.2.3   The SMS Coordinator: Will report to the Assistant Director of Operations and Maintenance on a daily basis. This position will have a dotted reporting line to the Accountable Executive for FAR Part 139 SMS issues and be involved in the Oversight Committee meetings to communicate findings from the SMS Committee and /or Safety Panel. The SMS Coordinator shall be responsible for the day to day management of the Airport's SMS program including updates to the manual. The SMS Coordinator will manage the SMS Committee members, Safety Panels and Stakeholder Committee including meetings, meeting minutes, documentation and communication concerning the SMS program. The SMS Coordinator will ensure the program is in FAR Part 139 compliance[3] at all times and respond to program deficiencies in a timely manner.

1.7.2.4   SMS Committee and Safety Panel: Support the SMS Coordinator by engaging in discussions concerning the Airport's SMS program including policy changes and updates, SRM, Safety Assurance and Promotion. When acting as a panel member their particular focus will be on the Safety Risk Assessment process and Corrective Action planning. The Committee members are expected to share their specific expertise concerning the airport environment in discussions concerning hazards and mitigation plans. They will also co-chair the Stakeholder Committee with the SMS Coordinator. Committee meeting schedules will be set by the SMS Coordinator.

1.7.2.5   Finance Liaison: This liaison to the SMS Committee will help the committee understand funding sources available during Corrective Action Planning and by observing the process of an SRA the liaison can communicate back to the finance department impacts some mitigation plans have on either the operating budget or capital improvement planning process. Their involvement should help strategize best business process to support the Airport's SMS program.

---

[3] In accordance with the expected rule yet to be published

1.7.3   SMS Committee and Safety Panel Member Rotation

The Committee members will rotate every two years from implementation with the exception of Finance. The following rotation schedule is suggested:

Representative	Calendar Month Rotation			
	January 1st	April 1st	June 1st	September 1st
ARFF	X			
Engineering	X			
Police		X		
Planning		X		
Operations			X	
Risk			X	
Maintenance				X
Environmental Health and Safety				X

1.8 Airport Stakeholder Safety Committee

1.8.1 Purpose:
This committee represents the stakeholder tenants who operate in the movement and non movement areas of the airport on a regular basis.
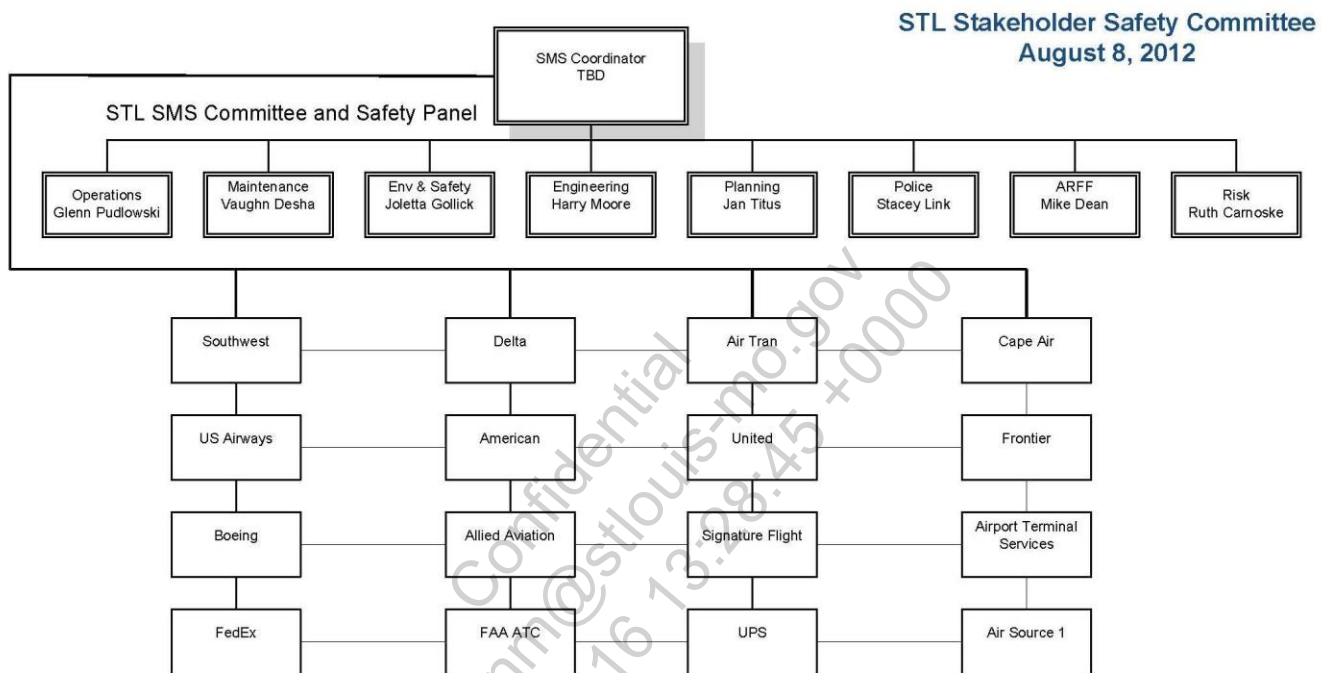

Figure 3: Stakeholder Safety Committee

1.8.2 Roles and Responsibilities
Each Stakeholder organization should dedicate one or two persons to regularly attend the Stakeholder Safety Committee meetings to be scheduled by the SMS Coordinator. The Stakeholders are encouraged to report out on hazards brought to their attention by employees for discussion with the SMS Committee. The SMS Coordinator will also brief the Stakeholders on current status of hazard reports as well as any S RA and Corrective Action status. The intention is for the Stakeholders to take this information and update their employees. Stakeholders may also play a role as a Safety Panel member should the hazard being assessed directly affect their operating area or in order to gain their expertise during an assessment. The Stakeholders also play a key role in meeting the Airport's objectives as described in this Policy section.

1.9 Safety Objectives

1.9.1 Purpose:
Safety objectives and goals serve as a measurement of the Airport's SMS effectiveness. The following objectives have been agreed upon by the Safety Committee and approved by the Oversight Committee. Each of the following objectives will be effective for one year from implementation unless otherwise noted such as for Foreign Object Debris (FOD). Each objective will need to be baselined for current factors to be measured from. These objectives will be updated in accordance with their calendar timeline and/or as the Airport chooses to include additional objectives in the program. These objectives will be shared with the Stakeholder Safety Committee. The success of most of these objectives relies on all Stakeholders taking responsibility while working in the airport environment. These objectives will be reviewed in the Safety Assurance section of this manual.

1.9.2 Objective #1: Reduce fuel spills (amount of fuel) by 5% (work with Environmental, Health and Safety)

Goals:
- a. Better/increased training – fuel amounts for specific airframes
- b. Increase spot fueler inspections/visibility
- c. Trend spills by geographic area
- d. Increase quantity of spill carts
- e. Possible incentives

1.9.3 Objective #2: Reduce ramp accidents 5%

Goals:
- a. Increasing patrols
- b. Increase enforcement
- c. Recurrent ramp driver training
- d. Increase markings
- e. Formalize enforcement policy

1.9.4 Objective #3: Reduce vehicle/pedestrian runway incursions to nil

Goals:
- a. Increased training
- b. Control access
- c. Communicating badge removal & recurrent training enforcement
- d. Track vehicles with transponders

1.9.5 Objective #4: Reduce damage to taxiway/runway lighting and signage during snow removal operations by 10%

Goals:
- a. Stress protection of lights and signs in training

b. Visible display of damage stats after event
c. Install light ID flags
    i. Heavy snow season

1.9.6 Objective #5: Year 2 increase FOD collection by 10%

Goals:
a. Increase training
b. Increase number of FOD buckets
    i. Marked FOD
c. Increase FOD walks
d. Increase inspections around trash cans
e. Incentives

1.10 Existing Controls for STL

1.10.1 Purpose:
Documenting existing controls serves as a tool to help guide the SMS Committee and Safety Panel during the Corrective Action design phase by utilizing or referring to tools already available and in use by the airport. These tools may also be represented in the corrective action plan as needing to be updated or expanded upon. Existing controls should also be referenced when discussing goals to meet objectives. This list should be reviewed annually and updated as necessary.

1.10.2 Rules/Regulations/Laws:

a. 14 CFR Part 139
b. 14 CFR Part 77
c. 49 CFR 1542
d. State, Federal, St. Louis City & County environmental laws
e. Environmental Management Systems (EMS) Brochure
f. Use & Lease Agreements
g. Airfield driver's enforcement program (citations)
h. Police Ordinance
i. Operations Procedures
j. OSHA rules and regs (not required/but follow)

1.10.3 Training:

a. Airfield drivers training program
b. Initial new hire training (practical)
c. Recurrent through Interactive Employee Training System
d. FAR 139
e. Runway Incursion
f. Ramp/non-movement area driver

g. Security Awareness
h. Security Identification Display Aare (SIDA) Training
i. Vehicle Inspection
j. Escort procedures for unfamiliar persons/drivers
k. Wildlife Hazard Training
l. Airline training programs
m. Ground handler training programs
n. Catering training programs
o. Fueler training programs
p. Air Traffic Control training programs
q. Operations training program
r. ARFF training programs
s. Police training programs
t. Initial 3-month academy
u. Airport familiarization
v. Emergency Medical Services Training
w. Defensive Driving Training
x. Snow Rodeo (Pre-Snow Season) Training
y. Commercial Drivers License (CDL) Training
z. Environmental Response Training
aa. HAZWOPER Training
bb. General Safety
cc. SMGCS training program

1.10.4 Standard Operating Procedures/Guidelines/Understandings:

a. Airline Standard Operating Procedures (SOPs)
b. Ground handler SOPs
c. Catering SOPs
d. Fueling company SOPs
e. Air Traffic Control SOPs
f. Operations SOPs
g. Maintenance SOPs
h. ARFF SOPs
i. Police Department General Orders
j. Letters of Agreement
k. Environmental Health and Safety (EHS)
l. Personal Protective Equipment (PPE)

1.10.5 Operational Practices:

a. Airport Operations daily inspections/monitoring
b. Environmental best practices procedures
c. Safety Inspections/best practices

d. STL Airline Station Manager/Customer Service Meetings
e. FOD Committee
f. ATC Monthly Customer Service Meeting
g. Quarterly Air Carrier/STL Environmental Meeting
h. Safety Committee Meeting

1.10.6 Engineering/Barriers/Containers

a. Secured fenceline
b. Wildlife sub fence buried around perimeter (not 100%)
c. Concrete barriers for security on perimeter
d. Fence security barrier cable
e. All obstacles inside safety areas are frangible at 3" or less
f. FOD cans
g. Airlines
h. Airport Vehicles
i. Dumpsters with lids
j. Spill carts/kits
k. ASDE-X
l. Serpentine Jersey Barriers
m. Heavy concrete planters and/or heavy steel vehicle barricades (sometimes referred to as Tank Traps).

1.10.7 Marking/Lighting/Signage:

a. Driving lanes painted including stop, yield and speed limits
b. Movement and non-movement areas delineated
c. Deicing pad delineation
d. Obstacle free zones area delineated
e. Safety box for aircraft parking delineated
f. Gate number and lead in lines delineated (on some)
g. Taxiway signage
h. Taxiway lighting
i. Runway signage
j. Runway lighting
k. ILS critical area delineated and signed
l. Surface Movement Guidance Control System (SMGCS) lighting, marking
m. SMGCS plan during low vis operations
n. Ramp/Gate area lighting
o. Airport vehicles marked and lighted
p. Signage delineating emergency shut off for fueling
q. Cape Air ground boarding marking

1.11 Confidential and Anonymous Reporting

1.11.1 Purpose:

To set out the parameters and to provide the framework to encourage reporting of safety issues by all airport employees

1.11.2 Rationale:

The SMS of the airport, as intended by the Federal Aviation Administration (FAA), depends heavily on the regular, uninhibited reporting of any safety event perceived to be a hazard.

The system's main goal is preventive and it encourages the reporting of any problem within the total airport system that is perceived by the reporter as a hazard to the safety of employees, contractors or passengers, can damage equipment and/or infrastructure or harm the environment. The ideal is to pick up any potential problem or condition (hazard) before it leads to either an incident or an accident. Research has shown that most hazards are not always easily detectable, but rather hidden within the airport system. An easily detectable hazard is in many instances only the 'tip of the iceberg' and the real condition can only be uncovered once a root cause analysis has been done.

As 60-80% of all incidents and accidents can be traced back to human factors, it is important that the humans within the system and their actions (or behavior) be analyzed thoroughly. It is necessary to always investigate the root cause of human behavior to identify any hidden systemic factors that played a role.

It is human nature to err and errors can be made when certain factors (such as stress, motivation, etc.) lead to unsafe acts (actions) by humans when combined with hidden systemic problems within the airport. It is therefore critical to understand 'why' the errors were made and what other factors contributed towards the unsafe behavior, before any action can be taken to prevent the unsafe act from happening again.

1.11.3 Reporting:

All stakeholders of the airport are encouraged to report hazards in the airport's hazard identification system. Although hazard information will be validated, the names of reporters of hazards will be kept confidential at all times should they request such. In instances where additional information is required the reporter will be contacted by the Safety Coordinator or his/her delegate. The Safety Coordinator will ensure that feedback is provided to the reporter with respect to the hazard identified, its validity and the action taken with respect to the hazard.

1.11.4 Root Cause Analysis

A root cause analysis or investigation may be required in instances where an unsafe act has been identified as a hazard or if the report reveals a systemic issue. The root cause analysis or investigation must uncover the following:

    a. What happened (facts of what went wrong),

b. What caused the unsafe act (situation analysis of contributing factors),

c. Why the unsafe act was performed/conducted (any reasons listed to be investigated further),

d. Any systemic (underlying hidden) factors that played a role.

e. Information uncovered in the root cause analysis or investigation must be used in risk analysis and assessment.

f. Information uncovered regarding the reasons behind the unsafe act will be used to implement the provisions of this policy.

The requirement to perform root cause analysis (investigation) is identified by the Safety Coordinator or his/her delegate. Root Cause Analysis will be further discussed in the SRM section of this manual.

1.11.5 Anonymous Reporting

The airport has made anonymous reporting convenient in order to encourage reports of potential hazards without fear of retribution. Hazard Identification Self Reporting forms are made available to all tenants. The reporter may also fill out an electronic self report made available through the airport's internet utilizing a generic username and password. Another alternative may be to call the SMS reporting line at 000-000-0000 and speak with a call taker anonymously.

1.12 Record Keeping

Records regarding the Airport's SMS program will be kept by the SMS Coordinator for a minimum of 5 years.