



SOUTH BEND REGIONAL AIRPORT

South Bend Regional Airport Safety Management System

Case Study
November 6, 2008

Safety Management System

FAA SMS Recommendations

VS

ICAO SMS

Advisory Circular 150/5200-37: The FAA supports harmonization of international standards, and has worked to make U.S. aviation safety regulations consistent with ICAO standards and recommended practices.

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South Bend Regional Airport (SBN)

- The St. Joseph County Airport Authority owns and operates SBN with approximately 60 personnel
- Three runways: two parallel, one crosswind
- 389,000 enplanements in 2007
- Five (5) airlines, including major carriers or their subsidiaries

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Areas Included in the SBN SMS

- AOA all Part 139 areas and operations (Part 139 is good)
- Two cargo ramps
- Main commercial ramp
- Fuel farm
- FBO ramp and operation
- GA aircraft maintenance
- Written in a way to include:
 - Terminal operations
 - Parking/landside operations (SMS includes the whole airport, 139 is part of it)

Safety Management System





Safety Management System



Gap Analysis Results

- Conducted safety audit
- Overall safety policy
- Clearly defined safety responsibilities
- Communication flow and reporting structure
- Safety Risk Management process
- Data tracking and reporting
- Analysis of safety data

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Safety Policy Statement

The St. Joseph County Airport Authority (Airport Authority) is committed to the implementation of a Safety Management System (SMS) that enables its management, employees, the airlines, tenants, and other business partners to operate in a safe environment. Safety is among the Airport Authority's highest priorities. The Airport Authority is dedicated to creating an environment that minimizes exposure to hazards and risks, expects continuous safety improvement, and encourages reporting of any safety related situation, incident or accident. (Adopted October 18, 2007)

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Safety Policy Objectives

- Provide clear guidance
 - Accountable Executive: John Schalliol, Executive Director
 - Safety Manager: Bruce MacLachlan, Manager Operations & Maintenance
- Provide the tools for success
- Meet or exceed all applicable regulations
- Encourage participation by ALL employees at the airport
- Clear communication
- Safety is among the highest priorities
- Monitor and measure progress

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Safety Risk Management (SRM)

SRM is the process by which hazards and their associated risks are identified, analyzed and treated through executing a Safety Risk Assessment (SRA). SRM is applied:

- Changes to Part 139 facilities
- Change in the operation
- Trends in Key Performance Indicators (KPI) are outside acceptable limits
- Management feels an SRA needs to be conducted

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SRM Process

- Conducted an airline and tenant workshop
- “Owner” of the area initiates an SRA
- Risk Matrix (not the same for every airport)
- Treatment of risks
- Tracking and monitoring

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FAA Risk Matrix

| Severity \ Likelihood | No Safety Effect | Minor | Major | Hazardous | Catastrophic |
|-----------------------|------------------|-------------|-------------|-------------|--------------|
| Frequent | Low Risk | Medium Risk | High Risk | High Risk | High Risk |
| Probable | Low Risk | Medium Risk | High Risk | High Risk | High Risk |
| Remote | Low Risk | Low Risk | Medium Risk | High Risk | High Risk |
| Extremely Remote | Low Risk | Low Risk | Low Risk | Medium Risk | High Risk |
| Extremely Improbable | Low Risk | Low Risk | Low Risk | Low Risk | Medium Risk |



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SBN Risk Matrix Definitions

| | |
|-----------------------------|---|
| Likelihood: | |
| Frequently | <i>Occurs once every <u>week</u></i> |
| Probable | <i>Occurs once every <u>month</u></i> |
| Remote | <i>Occurs once every <u>5 years</u></i> |
| Extremely Remote | <i>Occurs once every <u>10 years</u></i> |
| Extremely Improbable | <i>Occurs once every <u>20 years</u></i> |
| Severity: | |
| Catastrophic | Loss of <u>aircraft</u> , <u>life</u> and/or damage in excess of <u>\$1,000,000</u> |
| Hazardous | Severe <u>injury</u> or damage in excess of <u>\$100,000</u> and/or disruption of critical services (NAVAIDS, etc.) |
| Major | Significant (but repairable) damage to an aircraft, equipment or facility and/or minor injury |
| Minor | Minor damage to equipment or facilities |
| No Safety Effect | No injury, equipment or facility damage is possible |

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Safety Assurance

Audits are the starting point

- Part 139
- Commercial ramp
- Monthly safety audits
 - Staff
 - Areas
- Daily safety audits
- Post incident and accident
- Reporting results

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Safety Assurance

Key Performance Indicator (KPI) provides measurements

- Part 139 (all inclusive)
- Non-Part 139 areas
 - Medical runs
 - OSHA reportable incidents and accidents
 - Passenger medical runs
 - Tenant medical runs
 - Vehicle accidents: airside and landside
 - Equipment damage

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Safety Assurance

Communication

- No new meetings!
 - 59 standing meetings per year, 12 safety audits
- Add as standing agenda items
- Communication requires efficiency and clear responsibility
- Management staff meetings
- Management communication with staff
- Safety committee
- Stakeholder (tenants and airlines)
- Alternative methods of communication

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Safety Assurance

Non-Punitive Reporting

- Purpose
 - Change the culture
 - Capture and track data
- Methods of reporting
 - Web page
 - Intranet
- Follow up to reports
- Authority Discretion for Punitive Action

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Safety Promotion

Communication

- Safety-first culture
- Quarterly all hands meetings
- Bulletin boards
- Daily safety communication

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Safety Promotion

Training

- Human and organizational
- Introduction to SMS
- Identification of safety requirements
- Job specific
- Measure effectiveness
- Recurring

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Challenges of the New SMS

- Culture change
- Data collection and retention
- Privacy of data
- Minimal costs ... staff time
- Implementation process (Time!)

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Questions?

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