

**Federal Aviation Administration  
Airport Safety Management Systems (SMS)  
Pilot Studies**

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Office of Airports  
Federal Aviation Administration  
800 Independence Ave SW  
Washington, DC 20591

Prepared by:

Innovative Solutions International  
1201 Maryland Ave SW Suite 510  
Washington, DC 20024

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## EXECUTIVE SUMMARY

The United States is a member state of the International Civil Aviation Organization (ICAO) and supported ICAO's adoption of Safety Management Systems (SMS) as a means of moving aviation to the next level of safety. To promote SMS, ICAO amended Annex 14, Aerodromes, to require states to implement SMS at international airports.

SMS is a formalized process for collecting safety data, identifying hazards and trends, determining safety risk severity, and mitigating risk to an acceptable level. The FAA Office of Airports is implementing SMS within its internal organization. In addition, we initiated a rulemaking action to require commercial service airports certificated under 14 CFR Part 139 to implement SMS.

Starting in 2008, over 25 airport operators volunteered to participate in SMS Pilot Studies. The majority of those participating received federal-financial assistance through the Airport Improvement Program (AIP). These airport operators experienced the challenges and benefits of developing and implementing SMS at 14 CFR 139 airports. In spring 2011, as part of the rulemaking effort, the FAA formed a team to gather information from the ongoing Pilot Studies and prepare a Technical Report documenting the participating airports' experiences and lessons learned. The team interviewed airport operators and analyzed the responses to make a number of observations.

### Observations

*Workload Impact:* Pilot Study airports found the workload impact of SMS-related elements manageable. Although unable to make staffing changes, many airports were still able to reasonably accommodate development of SMS guidance and implementation.

*Gap Analysis:* The airport operators found the Gap Analysis useful. It enabled the airport operators to identify those requirements of SMS that are not part of 14 CFR 139 compliance activities and showed them that many 14 CFR 139 activities (such as daily self-inspection, airport emergency plans, and notifications) can serve as a foundation for the components and elements of SMS.

*Benefits:* Overall, airport operators benefitted from improved communication and increased safety awareness.

*SMS Guidance:* In general, airport operators found the guidance was sufficient. They suggested we further clarify areas such as SMS development, support tools, and templates.

## 1. Why SMS

In the early days of aviation safety, efforts were focused on the prevention of accidents. The principal means of prevention were increased regulation and investigation of accidents to correct identified problems. Technological advances in aircraft design and construction, improvements in engine reliability, and the development of airport infrastructure led to a decreasing accident rate. By the 1950s, commercial aviation (in terms of accidents) was one of the safest industries.

Accident investigation generated a number of safety recommendations. However, the recommendations placed little emphasis on the hazardous conditions that, although present, were not identified as causal in the accident investigation. Accident investigation was quite good at identifying “what” happened and “who” did it, but it became clear that it was also important to identify “why” and “how” the accident occurred.

The early 1970s saw the introduction of commercial jet aircraft, airborne and ground radar, autopilots, flight directors, and improved navigation and communications. The safety focus started to shift to human factors and human performance. The development of crew resource management and training further improved safety, but human performance remained a recurring factor in safety breakdowns. By the mid-1990s, human factors tended to focus on the individual and not on the operational context in which individuals did their work.

Industry started to accept that human failures at the operational level (active failures) can trigger conditions that help breach the system’s inherent safety defenses (latent failures). From the perspective of these organizational accidents, safety is improved through organizational structure and processes that identify latent failure conditions. Corrections or mitigations are implemented to reduce active failures and avoid accidents.

This understanding led to the development of Safety Management Systems. SMS is a integrated collection of processes and procedures that ensures a formalized and proactive approach to system safety through risk management. The table below identifies noteworthy comparisons between 14 CFR 139 and SMS:

<b>14 CFR 139</b>	<b>SMS</b>
Formalized, rigid structure	Formalized, dynamic structure
Does not analyze new risk	Analyzes new and existing risk
Regulatory structure is a static-state condition	Management process is a dynamic, evolving condition
Regulatory requirements are applicable to certain airports in certain conditions	Scalable, flexible process is applicable to all airports in all conditions

## 2. Notice of Proposed SMS Rulemaking and Pilot Studies

The FAA initiated a rulemaking process to require certificated airports to implement SMS. In October 2010, FAA issued a Notice of Proposed Rulemaking (NPRM) in the Federal Register. The NPRM proposed amending 14 CFR 139 to include a requirement for certificate holders to develop, implement, and maintain an SMS. The comment period for the NPRM has been extended twice and is now scheduled to end July 5, 2011. The FAA piloted SMS development at a number of certificated airports. The majority of participating airports received federal-financial assistance through the Airport Improvement Program. The Pilot Studies were intended to allow the FAA and individual airports to gather data and gain experience through onsite development and implementation of SMS.

The FAA intends to use the information from the Pilot Studies to help with the review of comments to the SMS NPRM and to improve the guidance included in the SMS Advisory Circular. The information in this Technical Report may also assist individuals or groups submitting comments about the NPRM.

## 3. FAA SMS Airport Pilot Studies

### Background

The FAA conducted two types of Pilot Studies to evaluate the development and implementation of SMS at airports of varying size and complexity.<sup>1</sup> FAA conducted two rounds of the initial study where airports developed their SMS policies, procedures, and processes.<sup>2</sup> Participants conducted a gap analysis and SMS Manual and Implementation Plan. A second study, using three of the original participants, conducted a proof-of-concept.

The scope of the pilot studies may significantly differ from the scope of proposed requirements in the NPRM because the FAA was investigating SMS through the pilot studies. We selected the participating airports in part because they represented a cross-section of all 14 CFR 139 airports. The Pilot Studies allowed these airports and the FAA to gain experience establishing airport-specific SMS that were tailored for the individual airport. The results of the Pilot Studies provide information about SMS best practices and benefits.

### Benefits Anticipated

SMS is a systematic and proactive method that airport operators can use to improve safety in the face of significant forecasted air traffic growth. Airport operators using SMS are more likely to detect and correct safety problems before they result in an aircraft

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<sup>1</sup> Currently, a third pilot study is underway to gather best practices and information on implementation of certain components and elements of SMS.

<sup>2</sup> FAA opened a second round to gain participation from smaller Class II, III, and IV certificated airports.

accident or incident. Through these Pilot Studies, the FAA learned from the experiences of airport operators developing SMS at airports of widely varying activity levels and operational complexity.

## **4. Technical Report on the Pilot Studies**

### Background

The FAA has received questions and comments from industry in response to the SMS NPRM. One comment provided before we extended the comment period indicated that it would be difficult for industry to provide comments on the SMS NPRM without knowing the results of the SMS Pilot Studies. In response, we extended the comment period and agreed to provide this Technical Report summarizing the findings of the Pilot Studies.

### Objective

This Technical Report gathers preliminary information from Pilot Study airports that will be useful to those commenting on the NPRM. It also allows us to share the information we have gathered so far with airports and the aviation industry. The report will help industry familiarize itself with SMS and the FAA's intent with the SMS NPRM. This document does not represent a final agency decision on any aspect of the NPRM. The FAA expects the final rule may vary significantly from the proposal, and the FAA remains open to all comments by interested parties.

### Methodology

The FAA formed a team to collect information informally about each Pilot Study airport's experiences. The team gathered information from the Pilot Study airports through a series of face-to-face and telephone interviews using scripted questions (Appendix B). These questions addressed the following topics:

- Personnel dedicated to SMS-related tasks during the Pilot Study and planned SMS staffing after conclusion of the Pilot Study;
- Resources employed during the Pilot Study for SMS development and implementation;
- Interpretation of the SMS;
- Results of the Gap Analysis conducted as part of the Pilot Study;
- Benefits observed from employing SMS;
- Key findings made by the airport as a result of SMS during the Pilot Study;
- Difficulties, challenges, and lessons learned during the Pilot Study; and
- Adequacy of the FAA guidance and recommendations for improvement.

We reviewed and normalized the collected information to create the Interview Results/Workload Assessment included as Appendix B. Interview responses that

consisted of comments to the NPRM rather than observations from the pilot studies have been edited as irrelevant to the scope of this report. Additionally, some interview responses may vary slightly from data the FAA relied on for the NPRM because the intervening airport experience between drafting and the interviews. Based on the interview results, the team made observations about the Pilot Study airports' experiences. The Summary Observations section below contains the team's observations. Appendix C includes the team's notes from the airport interviews.

## 5. Summary Observations

Information summarized in Appendix B of this report allowed the team to make the following observations:

- a. Results indicate the proposed SMS framework can be implemented in a scalable and flexible fashion. Pilot Study airports have used varying levels of personnel, consultant support, and technological tools to achieve the intended safety goal.
- b. Results show that most of the Pilot Study airports find value in SMS as it improves:
  - (1) Overall communication, training, and safety awareness;
  - (2) Safety consideration throughout the organization as it encourages a systemic process; and
  - (3) Evaluation of hazards (through Safety Risk Management<sup>3</sup> processes).
- c. Results suggest that SMS will provide benefits to airport safety beyond those operations regulated by 14 CFR 139, such as interdepartmental communications, general aviation customs issues, and vehicle operations near hazardous features.
- d. Results found that many of the Pilot Study airports acknowledge their existing 14 CFR 139 compliance programs contain elements similar to those of SMS.
- e. Results found that most Pilot Study airports thought a confidential reporting system is preferable to a non-punitive reporting system.
- f. Results emphasize concerns about the implementation cost of SMS among the Pilot Study airports.
- g. Results included the following recommendations for improving SMS guidance:
  - (1) Clarify confidential / non-punitive reporting;
  - (2) Outline process steps to define SMS to the airport organization (what does SMS mean to their department and to the airport as a whole);

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<sup>3</sup> Many pilot study airports refer to their SRM processes as the Safety Risk Assessment (SRA). The terms will be used interchangeably throughout the document.

- (3) Clarify the apparent incompatibilities between the different FAA SMS efforts (Airports, Aviation Safety, Air Traffic);
  - (4) Provide tools for developing and implementing SMS—templates, checklists, examples of SRM, assurance/training requirements, and data collection and analysis;
  - (5) Provide knowledge sharing relative to workload assessment and distribution;
  - (6) Suggest/support/provide outreach to promote participation by executive management and end users, such as tenants; and
- h. Results found many of the airports were willing to share lessons learned and the documentation they developed during the Pilot Studies. We have posted this documentation— including SMS Gap Analyses, SMS Manuals, and SMS Implementation Plans—to the SMS docket (see <http://www.regulations.gov> – Docket number FAA-2010-0997).

## **APPENDIX A: Airports Participating in the SMS Pilot Studies**

### First Pilot Study

1. Atlanta Hartsfield International, GA
2. Austin-Bergstrom International, TX
3. Baltimore-Washington International Airport, MD
4. Concord Regional Airport, NC
5. Dallas-Ft. Worth International Airport, TX
6. Daytona Beach, FL
7. Detroit Metro - Wayne County, MI
8. Dubuque Regional Airport, IA
9. Indianapolis International, IN
10. Jacksonville, FL
11. Jackson Municipal Airport, MS
12. Kona International at Keahole, HI
13. Lexington - Blue Grass Airport, KY
14. Pittsburgh - Allegheny County, PA
15. Sacramento International Airport, CA
16. San Antonio International, TX
17. Santa Maria Public Airport, CA
18. Seattle - Tacoma International, WA
19. South Bend Regional, IN
20. Southern Illinois, IL
21. Tallahassee Regional Airport, FL
22. Toledo Express Airport, OH

### Second Pilot Study

1. Boeing Field, WA
2. Cheyenne Regional, WY
3. Fort Worth Alliance, TX
4. North Las Vegas, NV
5. Ohio State University, OH
6. Show Low Regional, AZ
7. Sloulin Field, ND
8. Talladega Municipal, AL
9. Teterboro, NJ

### Proof-of-Concept Study

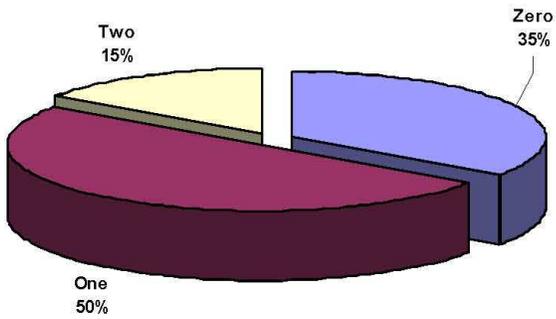
1. Concord Regional Airport, NC
2. Seattle - Tacoma International Airport, WA
3. South Bend Regional, IN

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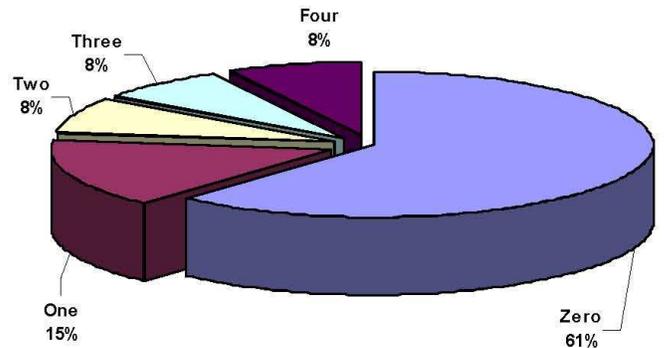
## APPENDIX B: Interview Results/Workload Assessment by Pilot Study Airports

### Interview Results of Workload Assessment by Pilot Study Airports

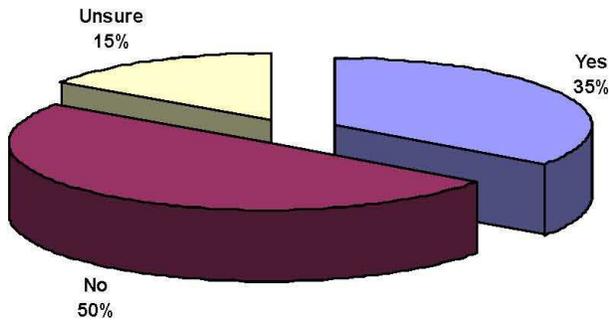
How Many Full-Time Equivalent (FTE) positions worked on SMS during the Pilot Study?



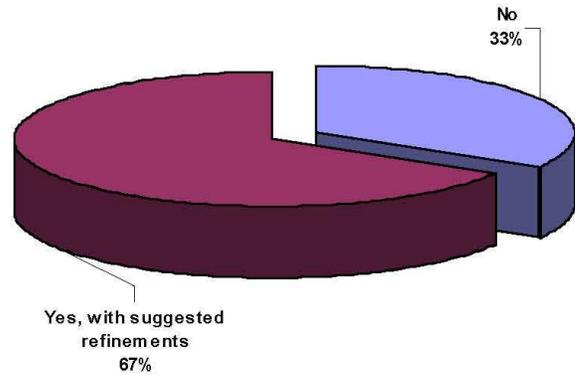
How many Part-Time Equivalent (PTE) positions worked on SMS during the Pilot Study?



Do you plan to add an FTE for SMS?



Was the FAA guidance provided for the Pilot Study sufficient?



LOCID / #of Operations	SMS-tasks Employees	FTE / PT	Adding SMS FTEs?	What were your challenges in interpreting SMS?
SBN 24000	0	2	No	No significant challenges encountered. Consultant is experienced in 139 and ICAO. One future challenge is to correlate SMS with 139 - are they integrated, separate, redundant? Airport needed to figure out the "what" of SMS, then the "how". Next step was to sell it to the users. An overall challenge is to get buy-in from people who feel this is redundant to 139 and "get them to the table".
ASN 41000	0	0	Unsure	The match between part 139 and the SMS was difficult to digest as well as trying to determine if part 139 was a subset of SMS, or vice versa. No guidance as to the applicability or relationship was or is provided. In addition, the ICAO and FAA SMS ACs regarding SMS are not always consistent with industry SMS standards. In particular, as defined by the AC 150/5200-37, SMS expectations are at times clearly communicated (e.g., Responsibility for assigning a safety manager) and at other times vague (such as establishing Objectives to achieve SMS or in the performance of Investigations). As a result, our Gap Analysis added Elements to the SMS outline to reflect some of the industry standards. In particular, we added an element on Incident Investigations under Risk Management and Recognition under Safety Promotion, Encouragement. We also defined Business Integration under Safety Assurance to include Preventative Maintenance and Emergency Preparedness. Associated criteria were added to these elements, again, based on industry standards.
TOL 47000	1	0	Unsure	Guidelines seemed directed for airlines - the airport environment is different. Problem interpreting and applying the Gap Analysis, not sure how to use SMS for different parts of the airport
DBQ 50000	0	4	No	DBQ has been involved in SMS since the beginning. They had the benefit of having an airport manager that was prior military and had extensive SMS experience.
SMX 51217	1	0	No	There was not a lot of direction from the FAA. Was not sure what the FAA was looking for
CYS 58000	1	1	No	Definitions- What is significant, catastrophic. Auditor Inspection requirements that could be foreseen. Technology Integration. Cultural buy in.
JQF 60000	1	0	No	(1) Trying to determine where SMS applied. The scope and the extent, beyond 139.(2) Non-punitive reporting was (and still is) an issue. It contradicts the City's regulations. Airport employees are city employees. (3) Trying to keep attendance at "SMS's safety committees was an issue, especially for non-airport participants
JAN 65000	0	1	Unsure	1. Educating Staff, 2. Non-Punitive system, 3. Scope, 4. Not much background provided by FAA
OSU 73000	1	4	Yes	Not all that much literature out there. Had to explore around. It was a challenge to be one of the first to do it.

LOCID / #of Operations	SMS- tasked Employees	FTE / PT	Adding SMS FTEs?	What were your challenges in interpreting SMS?
SIU 80000	1	0	Yes	Concept was difficult to grasp at first. Guidance was vague, nebulous. Airport felt like it was stumbling through the process, with little idea of where the FAA wanted the study to go other than the 21 deliverable items to use as guidance. When constructing a foundation, airport had difficulty defining the difference between SMS and safety program. Airport sought background information by attending AAAE meetings and reviewing ACRP and ICAO material. The airport had a theory that the FAA was intentionally vague on its instructions in order to spark creativity among airports. The Airport felt the Gap Analysis was challenging because of a lack of guidance. The airport used ICAO as a reference to perform the Gap Analysis.
JAX 94614	1	0	No	Safety Risk analysis, to what depth, how complicated, What is the threshold? Participation of tenants is a challenge. Not all airlines participate because they have their own SMS programs. If not all tenants participate, the airport's SMS program will suffer.
AFW 105000	2	0	Yes	The process was challenging due to the fact that SMS overall is more of a mindset than actual regulation. During and after the SMS study we found that getting our FTEs to understand the process was challenging. We were asking them to take a process that would improve safety and apply it to operational situations without providing particular areas of focus. In the end we found that our team was ultimately using SMS, such as SRM when evaluating air show planning and AOA construction. In my opinion the SMS process talks too broadly and asks the users to apply the tools where necessary without giving particular guidance, which is different than what most ACs and FARs provide. As an example: One FTE might think that an SRM process is needed for a particular project, but another may see it differently and feel that the process is not necessary. So how do you determine what's worthy of an SRM analysis and what's not?
TLH 118000	0	3	No	Conflicting information. When is SMS really required? Begin with trigger events? What does FAA expect? It would help if the final rule includes specific staff positions and qualifying attributes ( similar to TSA)
KOA 123772	1	0	Yes	There were no known problems; the challenge came with interviews and long distance communication
PIT 144563	2	0	1	One difficulty in preparing our SMS plan was the fact that we developed the plan in advance of the NPRM. As such, this necessitated our revising the plan in order to meet the new pending requirements of the NPRM.
TEB 150000	0	0	No	1. Non-Punitive system - how would that work, 2. Who is the accountable Executive, 3. What type of reporting system, 4. Costs and who pay for them
SMF 150000			No	Will need to review the report and reach out to other staff involved to
AUS 176914	0	1	Yes	SMS process has not yet been fully developed.

LOCID / #of Operations	SMS- tasked Employees	FTE / PT	Adding SMS FTEs?	What were your challenges in interpreting SMS?
SAT 178484	2	2	Unsure	Changing the culture, stakeholder acceptance of some safety initiatives, participation of stakeholders in the SRA process and getting usable information from the previous pilot programs.
BWI 268005	2	0		Defining SMS to the organization / management (what does SMS mean)?
BFI 280000	0	1	No	Applying to scope of operations.
VGT 313143	0	0	Yes	Determining the responsibilities of the airport operator and third parties regarding the development and maintenance of SMS. Ascertaining if the airport sponsor can delegate SMS responsibilities to tenants within exclusive leaseholds. Determining legal liabilities of the accountable executive and acceptance of known risks identified on the risk assessment
SEA 318000	1	0	4	No SMS alignment within FAA: ATO and Airports- Who's on first to initiate and perform SRAs and SRMs?, No common Language/reference; No provisions or process to share data across hazard databases; No protection from "Public Information" statutes.
DAB 350000	1	0	No	Many. Was pilot for consultant too. Who does what? Tower, ERAU, air carriers, each have their own separate SMS, this is the biggest challenge.
DFW 652261	1	0	No	o Interpretation of possible legal/liability issues with no guidance. Accountability of tenants not defined/regulated. Methodology for "inspection"/FAA oversight of SMS within ACM/139 framework not defined
ATL 950119	1	3	Yes	Some of the instructions were not as clear in the pilot study documents, especially with providing resource information to conduct research.
DTW 4622520	1	0	1	Airports in the continental US have not worked on SMS before; therefore, it was difficult to have a point of reference for development of a SMS implementation document. Our SMS document was done by a consultant familiar with how SMS was implemented in the European countries. The Airport Authority had to ensure that the consultant understood what the US airports have to comply with, pertaining to the FAA regulations. Despite the challenges, the airport was able to create a good working document for SMS.

LOCID / #of Operations	SMS- tasked Employees FTE / PT	Adding SMS FTEs?	What did the Gap Analysis reveal?
SBN 24000	0 2	No	<p>Self Inspection: Upward reporting of inspection and correction process - making senior management aware of activity; Airfield Inspections: Capture current self-inspection practices (1 inspection per shift vs. 1 per day in the ACM) in writing; Commercial aircraft operations ramp: Documenting specific inspection items on self-inspection documentation; Safety Manager: Designate a safety manager to oversee SMS and ensure communication with senior management; Non-Punitive Reporting System: Establish a system; Training Records: Document procedures for conducting the established practice of auditing FBO fueling personnel training records; Recurring Training: Establish consistent recurrent training timelines and consider establishing 12 month cycle for all training; Condition Reports: Establish and document timelines for filing condition reports; Communication: Evaluate and capture current practices in writing (ACM); Pedestrian and Ground Vehicle Procedures: Evaluate content and effectiveness of training program; Obstructions: Identify ownership of obstructions and develop a notification / tracking system for ensuring obstructions are monitored and addressed; Wildlife: Include training requirements in the WHMP</p>
ASN 41000	0 0	Unsure	<p>As part of the Gap Analysis, a Perception Survey was also performed, to gauge the perception of management commitment and safety program performance on the part of the workforce. The results of the gap analysis represent an overall strong perception that safety is important; its importance is communicated and considered of value in terms of Talladega airport operations. There was only one question that did not rank as a strength and that was "Safety Suggestions" (vulnerability). There were no "gaps" identified by the Perception Survey. Therefore, based on the Gap Analysis, the findings and scores indicate that there is about a 20-25% overall agreement between what is required by part 139, and future SMS expectations (75-80% gap). However, one element in particular registered a score of 60% (Inspections and Self-Auditing) and along with Requirements, was the highest of any of the Elements. The remainder of the Elements and Sections all showed "Gaps" as defined by this pilot assessment process. As a result of this comparison, part 139 and ACM requirements provide some of the documentation expected of an SMS; however, the majority of the implementation strategy and responsibilities are undefined, except for Inspections, Integration of Maintenance and Emergency Preparedness. Some other element of SMS, (i.e., Tracking Systems, Roles and Responsibilities) would only provide a few of the expected documents. Overall, the documentation expectations of SMS would require the ACM to be enhanced quite a bit. Upon comparing ICAO and AC SMS expectations to other industry SMS standards (ANSI Z10, OSHA's VPP, OHSAS 18000, etc.), there are a number of gaps to the proposed FAA SMS. ESIS recommends that, at a minimum, FAA consider either adding or better integrating or expanding the concepts of: • Safety Policy and Objectives: Objective setting based on Leading Trend Data and Performance Indicators. • Safety Policy and Objectives: Safety Committee Expectations • Safety Risk Management: Requirements • Safety Risk Management: Ongoing Risk Reductions (this is the biggest gap between industry standards and the FAA / ICAO SMS) the FAA/ ICAO seems to stop at a one-time treat and mitigate, rather than ongoing risk reductions. • Safety Risk Management: Incident Investigations and Root Cause Analysis. • Safety Risk Management: Emphasize the Risk</p>

LOCID / #of Operations	SMS- tasked Employees FTE / PT	Adding SMS FTEs?	What did the Gap Analysis reveal?
			Management Portion, Especially in Terms of Continuous Improvement and Risk Reduction. Safety Promotion: Recognition and Encouragement (ESIS recommends that FAA refer to OSHA's VPP (Voluntary Protection Program) and ANSI Z 10 Health and Safety Management Systems) for better clarification of the above integration and expansion suggestions,
TOL 47000	1 0	Unsure	Not sure how to interpret part 139 and the Gap analysis
DBQ 50000	0 4	No	Couldn't recall
SMX 51217	1 0	No	We were not conducting regular meetings with tenants. There were informal safety resolution procedures. The airport would take care of issues as notified. The SMS processes allowed airport personnel to actively communicate with the airport users.
CYS 58000	1 1	No	They had gaps in all areas. Some minor and some significant. There was no area where they were fully compliant with SMS.
JQF 60000	1 0	No	Management and front line personnel had different interpretation and opinion of safety. This revealed gaps in communication, and the "buying-in" of safety.
JAN 65000	0 1	Unsure	Some gaps with respect to SMS
OSU 73000	1 4	Yes	Part 139 does not go into non-movement area. Formality of safety program required for SMS. More paperwork and process. Proactive Safety policy and promotion.
SIU 80000	1 0	Yes	Safety must be formalized through: 1) Adjusting documentation where it is lacking; 2) developing committees; 3) setting up data collection (e.g., providing a website to collect confidential safety reports); 4) ensuring visibility of/attention to safety is maximized.
JAX 94614	1 0	No	Risk analysis process needs to be put in place. Have a lot of issues inside the gate & baggage areas.
AFW 105000	2 0	Yes	The Gap Analysis revealed that we meet all components of FAR139 and currently unintentionally meet some parts of the SMS guidelines. The Gap Analysis identified weaknesses in resolving maintenance items, record keeping and training. As a result these areas were reviewed and strengthened. It helped identify programs such as safety committees and showed the value of the program.
TLH 118000	0 3	No	Reporting mechanism for unsafe conditions. Airport developed branded safety [products to advertise the program, voice mail 891SAFE, drop boxes]. Still struggling with Staffing issues, how are Ops supposed to interact with capital programs.

LOCID / #of Operations	SMS-tasked Employees FTE / PT	Adding SMS FTEs?	What did the Gap Analysis reveal?
KOA 123772	1 0	Yes	Gap Analysis for ICAO vs. FAR part 139 did not reveal anything too earthshaking , but there were issues with Emergency Equipment traversing level surfaces.
PIT 144563	2 0	1	To implement SMS, the airport was required to review our organizational structure and assign specific duties related to SMS. Additionally, we found that we could improve upon safety promotion efforts. Finally, we found that we were in need of an incident reporting database that would allow for the easy review of incidents and hazards in order to conduct trend analysis.
TEB 150000	0 0	No	TEB has a solid safety foundation, SMS will require centralized reporting system, Management guidelines need to be developed
SMF 150000		No	Have no answer at this time, will comment at a later date.
AUS 176914	0 1	Yes	Gaps existed in the following areas: SMS Policy Statement, Training, Non-punitive reporting systems, Implementation Plan, detailed SRA documentation, approval and follow-up of mitigations by senior management, description of airport risk management program, self-auditing process, plan to integrate SMS program into overall airport operations, promotion of safety awareness, documentation of lessons learned
SAT 178484	2 2	Unsure	That 139 is a good base for SMS.
BWI 268005	2 0		Shortcomings in communication / training (not willing to speak in any specifics).
BFI 280000	0 1	No	Non-movement area safety. Hot spots in movement area. Signing marking and lighting. Safety area focus at BI intersection.
VGT 313143	0 0	Yes	The results of comparisons between existing conditions, including the documentation of practices at the airport, and SMS standards revealed that in some instances certain practices or procedures are in place, but may not be collectively gathered or documented to meet the intent of a formal SMS. In other instances, data collection or record-keeping is being completed as part of a database managed by CCDOA, but has not been formally included as part of the SMS program.
SEA 318000	1 0	4	Reflection of philosophy. Part 139 relies on checklists, SMS is bigger picture and requires more judgment.
DAB 350000	1 0	No	FBO, NASCAR, ERAU, Flight schools...how do we get them under one umbrella? Need a formal system under SMS program. Larger airports will have more challenges.

LOCID / #of Operations	SMS- tasked Employees FTE / PT		Adding SMS FTEs?	What did the Gap Analysis reveal?
DFW 652261	1	0	No	<p>Gap Analysis results determined and reported by consultant as part of first pilot study. Several SMS elements are present, though not yet all formalized, and, therefore, not consistently or systematically applied. Need to establish/refine formal "safety policy." Responsibilities – need to clarify with respect to SMS at all level so Coordination – many SMS processes require cross-functional working coordination and cooperation, this occurs on a case-by-case basis currently but organizational processes will need to be improved. Documentation – with the exception of all those required by regulation, all other actions and activities related to safety issues or hazards will need to be formalized. Risk management – hazard identification, risk assessment and mitigation will need to become a systematic part of all processes, in particular with regard to current airside hazards facing the organization and change management. Communication – there is a need for a formalized and systematic process and mechanism to promote and ensure the free exchange of safety information between staff at all levels of the organization, between sections and departments, between divisions and with external service providers. Accountability – current FAA framework does not extend airport authority to the non-movement area. The efforts made by the Airport to improve safety performance by fostering cooperation amongst all is sometimes met with diverging and competing interests. To resolve this and ensure SMS is successful, the accountability and responsibility can only be accepted by the Airport if supported by the authority under an unambiguous regulatory framework.</p> <ul style="list-style-type: none"> <li>o Performance Indicators – there will need to be a process for establishing and measuring comprehensive safety goals, objectives and key performance indicators – collection of safety data will need to be linked to such safety objectives</li> </ul>
ATL 950119	1	3	Yes	<p>Did not have a comprehensive Safety Policy Statement, although the City of Atlanta and DOA have internal safety policies in safety manuals. Did not have Safety Risk Assessment Process</p>
DTW 4622520	1	0	1	<p>No response received.</p>

LOCID / #of Operations	SMS- tasked Employees	FTE / PT	Adding SMS FTEs?	What benefits have you seen to your airport from SMS development and implementation?
SBN 24000	0	2	No	Unknown Hazards: One SRA did identify previously unknown hazards relating to the issue with tug operations on the air carrier ramp. Other SRAs were conducted for system changes; Active Safety Committee: Good participation in SRAs, considering safety-related work is a collateral duty for most of the SRMP members; Tracking System: System is in development; One party identified as responsible/in charge of safety concerns: No real change - there's awareness of the process, reliance on the chain of command. Familiarization will occur through recurrent badge training; Lower long term costs: No change, too early to tell. There is an anticipated cost reduction similar to the workers' comp multiplier. Cost savings under 139 may not be significant because it is already saving costs by preventing accidents; Others: Relationship with tenants improved. The process inherently and actively involves impacted parties/users to provide data, resulting in better communication / awareness of hazards and risk. It also forces the airport into a leadership role, bringing everyone into a collaborative effort. The approach an airport takes to SMS speaks to the way the airport is managed.
ASN 41000	0	0	Unsure	None... The airport staff is simply doing what it deems is necessary to exist for 50 out of 52 weeks each year. The two other weeks it is a well run, well-staffed, well-protected facility with numerous safety programs in place. Once the NASCAR races are over, the airport reverts back to a sleepy, GA-style airport with minimal operations. An SMS can provide an airport with the capacity to anticipate and address safety issues before they lead to a catastrophic incident or accident. SMS provides management with the ability to deal effectively with accidents and near misses so that valuable lessons are applied to improve safety and efficiency. Research has shown that safety and efficiency are positively linked.
TOL 47000	1	0	Unsure	1. SMS does raise the level of safety awareness, 2. discovered interesting chemistry between different people and airport departments
DBQ 50000	0	4	No	They already had a safety culture, but this experience really enforced the big picture mentality and made them look outside the box at safety in general, as well as safety areas. Approaches to best possible solutions. DQB has also created an anonymous safety reporting hotline on their website starting soon. The reports will go directly to the airport manager and safety chief.
SMX 51217	1	0	No	We have taken a more proactive approach with holding tenant safety meetings using the local FAA Safety Team comprised of tenants.
CYS 58000	1	1	No	1. Improve communication among all stakeholders. 2. Increased awareness of airport environment itself. 3. Creation of process does not allow items to fall through cracks.
JQF 60000	1	0	No	(1) our Safety Programs were not as effective as we initially thought, (2) there were some disconnects between programs, (3) communication across the organizations needs to be improved (4) lower costs by preventing litigation, (5) effective documentation system is key

LOCID / #of Operations	SMS- tasked Employees	FTE / PT	Adding SMS FTEs?	What benefits have you seen to your airport from SMS development and implementation?
JAN 65000	0	1	Unsure	More safety awareness for the staff - cultural changes
OSU 73000	1	4	Yes	1.Revealed potential hazards on non-movement area- blind spots. 2. Formalizing movement of vehicles. 3. Wildlife mitigation - Finding birds on runway in morning when tower has been closed. 4. Formal lines of communication on safety have been facilitated, they now meet quarterly. 4. Brings in a culture of safety. 5. Have not experienced cost savings yet, it will cost to hire new staff person.
SIU 80000	1	0	Yes	Unknown Hazards: Some issues may be more efficiently dealt with using longer term, continuing SRAs as opposed to multiple SRAs on individual issues that are all related. SMS is building a culture that, combined with improved data collection, will bring out hazards more efficiently. A more active safety committee: Results in more activity - information sharing. People respond to the tone set by the airport manager through the Safety Committee, which leads to improved identification of hazards. Formalization of the safety culture through elements like the safety committee establishes the SMS's credibility among users. A tracking system that leads to a more proactive approach: Incident Reporter by OMNI Air Group (data collection software) was cumbersome. SIU developed a web-based data collection site that collects, organizes and tracks data, reducing workload on the person responsible for monitoring the system (currently airport manager). Email functionality allows immediate receipt, evaluation and action on safety reports submitted through the website. One party identified as being responsible /in charge of safety concerns: Greater impact using the web based data collection system. The system allows one person to address issues more efficiently. With efficient data collection and notification, one person can address issues efficiently and consistently. Lower long-term costs: Too early to determine - no cost savings noted yet, but enough data to evaluate. Others: SIU's SMS project has been a boon to SIU for professional development, aviation industry and airports. The system increases communication, which has led to increased safety-related activity and awareness.
JAX 94614	1	0	No	Heightened level of awareness of hazards and documenting the process. Proactive about documenting hazards and then investigating and correcting, things get acted upon. The safety committee was very active at first but now participation is lower, as the novelty has worn off.

LOCID / #of Operations	SMS- tasked Employees	FTE / PT	Adding SMS FTEs?	What benefits have you seen to your airport from SMS development and implementation?
AFW 105000	2	0	Yes	a. Unknown hazards. Nothing identified during or after the pilot study. b. A more active safety committee- As a result of the SMS pilot study we established and maintained an Airport Safety Committee comprised of all major stakeholders on the airport. Next meeting is planned for June of 2011. c. A tracking system that leads to a more proactive approach - As a result of the SMS study we implemented a better tracking system for open items such as damaged airport signs and missing lights. Our challenge with this has been consistent application. In addition to this we still use the standard airport inspection to list any non-complying items found during the required airport inspections. Better application and consistency would allow for more detailed trend analysis, better long term planning, and could show unknown problems with the airport environment. d. One party identified as being responsible/in charge of safety concerns. Senior Leaders do play an active role in safety and have implemented several components from the SMS pilot study. e. Lower long-term cost- None at this time. Although we do anticipate lower cost in the future as it relates to tracking repair and maintenance issues. f. Others- None
TLH 118000	0	3	No	1- Greater focus on safety 2- More people involved- they check the reporting hotline daily, 3- Hard to quantify cost savings, yes if you save one life., 4- Better responsibility, accountability, reporting, 5- Got safety vests for increased visibility for ramp workers
KOA 123772	1	0	Yes	A more robust driver's training program should be part of SMS. The safety committee should have been better developed. It took a year after the consultant/Engineers and FAA program Manager went out to the site to improve the process. Tracking system consists of email for linkage on new positions. The airport system's fire chief is designated as the decision maker. There is no significant change in airport operating cost for SMS. The Self Inspection program ties into SMS.
PIT 144563	2	0	1	As a result of our implementing SMS there is a greater safety awareness among employees. Once role out is complete, we anticipate improved means of monitoring and trending safety incidents/hazards. Finally, we have received positive input from our liability insurance carrier resulting from our use of SMS, though no reduction in rates have been realized.
TEB 150000	0	0	No	More safety awareness for the staff - cultural changes
SMF 150000			No	Because we have not implemented, minimal benefit has been gained. We did discover some potential hazards that we resolved, so did result in improved safety.
AUS 176914	0	1	Yes	Not yet implemented.

LOCID / #of Operations	SMS- tasked Employees	FTE / PT	Adding SMS FTEs?	What benefits have you seen to your airport from SMS development and implementation?
SAT 178484	2	2	Unsure	There are many, and this section should be formally developed in a working group of Pilot Study Airports prior to final rule making. Here are a few we see: trend tracking of unsafe issues, a formal safety process and structure, SRA and the associated benefits, overall awareness of safety culture.
BWI 268005	2	0		BWI has not implemented SMS fully. Have noticed an increase in safety awareness
BFI 280000	0	1	No	1. More proactive on safety. 2. Overall Awareness.
VGT 313143	0	0	Yes	The SMS process has not been implemented at the airport. During the pilot study only a few specific test items were subjected to the process. Benefits cannot be determined until a large sampling of items can be achieved.
SEA 318000	1	0	4	Track and trend hazards to ID and mitigate safety risks, Evaluate previous studies proposed policies and practices, develop a quality management program, align airport, airline, ground handler safety programs, incorporate non-movement areas into inspections/audits, reinforce safety culture, improve safety awareness
DAB 350000	1	0	No	More active safety committee meetings every week, safety is now a major component of monthly tenant meetings. Interns from Embry Riddle are tracking projects such as wildlife, alert calls, medical calls, sign changes. John Murray is the point person.
DFW 652261	1	0	No	o Unknown hazards proactively identified (in theory) o A more active safety committee. A tracking system that leads to a more proactive Approach. One party identified as being responsible/in charge of safety concerns - not just the "accountable executive" but accountability at all levels within the organization (in theory) o Lower long-term costs – quite possibly difficult to measure/quantify or categorize. Enhanced collaboration between departments regarding hazards/SRA process. Review and adjustment of current policies and procedures with regards to not only SMS, but other business processes - SMS merely provides the reason/"excuse" for review and adjustment
ATL 950119	1	3	Yes	SRA process is helping to effectively evaluate hazards with construction projects and changes on the airfield; Establishing a SMS Work Group with tenant involvement in the development and refinement of our SMS Program. The SMS Work Group will become the Safety Committees defined in the SMS Program; The ASOCS database system is very beneficial for Part 139 reporting and being able to fulfill our SMS reporting requirements. The SMS Dashboard will supplement the ASOCS data with trend analysis and tracking capability.
DTW 4622520	1	0	1	No response received.

LOCID / #of Operations	SMS- tasked Employees	FTE / PT	Adding SMS FTEs?	What was/were the key finding(s) at your airport as part of the pilot studies?
SBN 24000	0	2	No	The pilot study work validated the airport's current activity relative to safety and provided ideas for formalizing and tweaking the process to improve it.
ASN 41000	0	0	Unsure	This was basically a GA airport with 139 credentials. It is not funded by the City, and the Airport Board uses its funds to match FAA/AIP projects. The FBO runs the airport on a day-to-day basis, and their financial situation at the airport is poor, due to low revenues, etc. All of this contributed to the airport's relinquishing its 139 certification.
TOL 47000	1	0	Unsure	Made us aware that processes and procedures need to be revisited and improved all the time. Cultural changes. Talking about Safety and SMS
DBQ 50000	0	4	No	Found a high rate of damage with pushing and pulling aircraft into and out of hangars and gate areas. Training and fatigue issues, general awareness
SMX 51217	1	0	No	Tenants want to help out as long as it doesn't cost them anything. Since our size allows us easy access and a familiarity with our tenants, a formal SMS seemed to add another layer of bureaucracy into a community that already has skepticism over additional controls.
CYS 58000	1	1	No	Sensitivity to perceived criticisms, Verbiage issues amongst airports Governance and legal, ATC and airports have different focus. ATC hazard life risk only, SRM is a PROCESS that must fit the airport, not the other way around, Risk Matrix Chart color variations, Identification verbiage for severity and probability variances, Definitions developed over time, Tolerance levels vary, Assessments became more calculated
JQF 60000	1	0	No	Gaps in communication between management and front line
JAN 65000	0	1	Unsure	Able to identify that a legacy safety culture does already exist at the airport
OSU 73000	1	4	Yes	Self identifying hot spots, mitigate before it happens for safety in non-movement areas.
SIU 80000	1	0	Yes	Performing the SRAs at the airport demonstrated value early on. It helped direct specific attention to safety issues and mitigation. SRAs were valuable in bringing together different perspectives and allowing participants to understand the perspectives of the other parties involved.
JAX 94614	1	0	No	Need to start somewhere. Develop a foundation for SMS to get a grasp, then once foundation is set, easy to modify. Can make adjustments easily in the future once you have developed a reporting system. A consultant may be helpful to make sure things stay on track with the Implementation

LOCID / #of Operations	SMS- tasked Employees	FTE / PT	Adding SMS FTEs?	What was/were the key finding(s) at your airport as part of the pilot studies?
AFW 105000	2	0	Yes	a. Some aspects of the SMS system are already being used. b. Safety Culture exists but needs improving. Since SMS study this has improved. c. Training in all areas needed to be strengthened.
TLH 118000	0	3	No	Need to do a better job with the business process. If issues are identified, follow it through until the issue is closed out with documentation. Work toward better airport visibility for SMS, need a platform for organizing safety & outstanding work orders in the same manner that you have a platform for security.
KOA 123772	1	0	Yes	Require additional: Driver's training, SMS qualified training, Self inspection training.
PIT 144563	2	0	1	In many respects we are operating under SMS in much the same way as we have always operated, reviewing hazards and identifying ways in which to minimize risk. We tend to have a more methodical approach to safety reviews. It has been our experience that SMS has brought a significant increase in required documentation.
TEB 150000	0	0	No	Nothing yet
SMF 150000			No	Again, the details will be in the report.
AUS 176914	0	1	Yes	The Gap Analysis indicates that in order to implement SMS a formal process must be developed by management to lead the way in the promotion of a safety culture.
SAT 178484	2	2	Unsure	No response received.
BWI 268005	2	0		Noticed an improvement in communication throughout the organization, quality of training and safety awareness
BFI 280000	0	1	No	BFI focused on unique elements on the airport from a safety prospective.
VGW 313143	0	0	Yes	The SMS process has not been implemented. No prevalent findings were ascertained. We are only in the process of defining the SMS.
SEA 318000	1	0	4	Culture change in risk from legal and operations wanting just the facts (no interpretation) to SMS looking at root cause and this incurs more potential liability.

LOCID / #of Operations	SMS- tasked		Adding SMS FTEs?	What was/were the key finding(s) at your airport as part of the pilot studies?
	Employees	FTE / PT		
DAB 350000	1	0	No	Development is needed- need higher management involvement and
DFW 652261	1	0	No	o Gap analysis findings. Many processes already done today are key components of SMS – just need to refine and “formalize” through policy/procedure, documentation, and accountability.
ATL 950119	1	3	Yes	We realized a lot of what we were doing is part of Safety Management System with Part 139 responsibilities, Risk Management Office, DOA and City of Atlanta Safety Policy Manuals
DTW 4622520	1	0	1	No response received.

LOCID / #of Operations	SMS- tasked Employees	FTE / PT	Adding SMS FTEs?	What difficulties / challenges have you experienced during the pilot studies? Do you have any Lessons Learned?
SBN 24000	0	2	No	Challenges: Legality/confidentiality of the non-punitive reporting system; Presenting SMS to an industry structure and culture that has changed greatly (employee/employer loyalty, subcontracting, dedication to aviation; Encouraging communication of safety related activities (e.g., getting air carriers to report incidents/damage to their equipment on the ramp); Encouraging documentation of conversational information (water cooler talk) to collect relevant data; Determining who calls a SRMP and when, how; Concern about multiple SMSs for ATO, ARP, AVS, Air Carriers - how will multiple SMSs be integrated / correlated to prevent duplication of effort?; Addressing the issue of LOBs convening competing SRMPs to produce a desired outcome; Non-Punitive Reporting - A subcontractor was hired to research confidentiality and data susceptibility to FOIA. Data storage alternatives were proposed to isolate the data from the airport or entities where it would be subject to FOIA. Appendix A of the Follow-On report SBM submitted details these alternatives.
ASN 41000	0	0	Unsure	Multiple entities controlling life-safety issues during the race weekends at the nearby speedway. Also, staff during these periods is subject to change, and specific training for the NASCAR events is on-going... race to race... year to year.
TOL 47000	1	0	Unsure	As a smaller organization, hard to implement SMS. Problems with FAA LOB's to attend meetings, etc. Also not always the right people, upper mgt delegated some lower level people. How many people to participate in these SMS meetings (too many at times, too few at other times)
DBQ 50000	0	4	No	How does the airport implement, maintain and fund with current staffing and resources in a challenging budget environment?
SMX 51217	1	0	No	Development of a true safety policy and objective was hard since you really wouldn't promote unsafe activities. We didn't really know where this document and the mandatory records fall within SSI and FOIA standards and how that could affect future responses. We are not sure if documenting a mitigation would come back to haunt us. We learned that we are already communicating hazards fairly well since we are a smaller airport. Daily interaction with our tenants has provided a good flow of communication.
CYS 58000	1	1	No	Public Disclosure protection, SMS in Non Movement Tenant Areas; SMS technology development, "Non-Punitive" Policy, Definitions for SRM, Budget: Implementation, Corrective Actions, Staffing SMS when employees already wear several hats. Airport pilot similarities: all had 139 Safety Self-Inspections, Gap Analyses varied in size/complexity, Full time SMS employee is challenging, Budgeting will be difficult, All had some technology for support, Training tracking could be tied to existing SIDA/driver's training, Culture CHANGE is a challenge Airport pilot differences: the larger the airport the more complicated the safety issues, Governance varies ("Policy"), Safety threats vary. Larger airports have more resources including technology, Smaller airports can implement more easily, Employee turnover at small airports is lower

LOCID / #of Operations	SMS-tasked Employees	FTE / PT	Adding SMS FTEs?	What difficulties / challenges have you experienced during the pilot studies? Do you have any Lessons Learned?
JQF 60000	1	0	No	Difficulties in introducing technology to all. Financial incentives to help with the safety efforts did not work. Use of field-tough tablets makes sense though.
JAN 65000	0	1	Unsure	Issue with the word "Policy", non-punitive approach, cultural change
OSU 73000	1	4	Yes	Easier than expected to get buy in from users. Challenge was to get buy in from wider airport community to collect hazards. Experimenting with different hazard reporting models. Education of IT staff takes time. Overall, not as challenging as we had thought. It will take a long time to change the culture.
SIU 80000	1	0	Yes	1) How do airports get funding for staffing, training delivery, developing tools? This will test Airport Managers' creativity. 2) How do airports get funding for mitigation that requires construction? 3) Question: Is liability assumed when mitigations are made known but not acted on? This may create a risk of airport sponsors minimizing hazards to avoid spending money. Lessons Learned: 1) Ensuring management involvement / buy-in. Leadership is critical. 2) Communication should come early and often to front-end load information from the FAA through the airport to the tenants (end users).
JAX 94614	1	0	No	The consultant recommended a drop box for hazard reports- too archaic. Instead went 'high tech' with a web based report designed by a local contractor. Promotion is a major challenge, have to be a cheerleader to promote the program.
AFW 105000	2	0	Yes	We struggled, and currently struggle with the overall implementation of SMS. We often find that making the time to manage the SMS process is our main obstacle. Some areas within SMS require additional manpower to perform analysis, reports or training. Ultimately, this process will add layers to already existing FARs.
TLH 118000	0	3	No	Lessons learned from study: the need to foster interest, "Bleed Safety". Developed posters, banners, safety candy jars, lanyards, badge reels etc. Make a BIG DEAL about safety. Patterned his program off of military aviation Risk management program called "ANY MOUSE".
KOA 123772	1	0	Yes	Selection of a well-qualified consultant is paramount. In order for ANY safety plan, program or management system to be effective it MUST have dedicated staff to administer it. Time and time again my experience is that this task is an add on to someone or some unit that already has a full plate. The consultants recognized this and recommended the creation of an SMS safety officer position. Such a position remains to be established at Kona.
PIT 144563	2	0	1	We underestimated the amount of staff time required in order to implement SMS. Training time for staff is significant, as is the time and effort related to the documentation of the SRM process. Our desire to integrate incident reporting software with a legacy work order management software has also been a challenge.

LOCID / #of Operations	SMS- tasked Employees	Adding SMS FTEs?	What difficulties / challenges have you experienced during the pilot studies? Do you have any Lessons Learned?
	FTE / PT		
TEB 150000	0 0	No	Very time-consuming, 18 months to complete the draft, but overall a positive experience, was handled by manager groups only
SMF 150000		No	The challenges were primarily addressed by the consultant
AUS 176914	0 1	Yes	Approval of SMS Policy with inclusion of non-punitive policy
SAT 178484	2 2	Unsure	Need to communicate with stakeholders, understand the time it will take to implement SMS at the Airport (5-7 years)
BWI 268005	2 0		Non-punitive reporting is a big problem with organization and Legal Dept. Highly suggest hiring a consultant to develop the manual and implementation plan. Said they brought an outside perspective and viewpoint that is really important.
BFI 280000	0 1	No	Potential liability exposure, Program scalability, Third party roles and responsibilities, electronic vs. paper format, database.

LOCID / #of Operations	SMS- tasked Employees	Adding SMS FTEs?	What difficulties / challenges have you experienced during the pilot studies? Do you have any Lessons Learned?
VGT 313143	FTE / PT 0 0	Yes	<p>SMS introduces new requirements for record keeping, ensuring that all SMS documentation is current and accurate. This includes the introduction and maintenance of SMS training records for all airport employees, documentation of hazard identification and analysis, documentation of the effectiveness of corrective and preventative measures taken, and the documentation and dissemination of the results from accident and incident investigations. There is not presently sufficient administrative staff to accomplish these tasks. SMS annual record keeping and the training requirements outlined below would necessitate the hire of a full time Management Analyst I at \$84,460 annually including benefits. The SMS process includes new requirements for initial and annual recurrent training of airport employees in overall airport safety objectives, safety risk management principles, safety assurance topics, airport rules and regulations, and overall department organization and functions. A plan to validate training effectiveness and a process to obtain feedback, including useable metrics, is also required. Providing eight hours of annual training for 450 employees would require 30 classes with 15 employees per class. Ten weeks would be required to complete training at 3 classes per week. The training would consume 3,600 man hours. Assuming an average hourly wage of \$28 for each CCDOA employee, CCDOA training costs for 30 employees would total \$6,720. Assuming an average hourly wage of \$15 for each commercial airport tenant employee, tenant training costs for 420 employees would total \$50,400. Annual training costs total \$57,120. SMS requires change management, a formal process to identify, anticipate, and prepare for potential hazards introduced into the airport environment. Trigger events include such common occurrences as the introduction of a new commercial aircraft type, the commissioning of new equipment or the adoption of new procedures or regulations. The airport embraces a non-punitive safety reporting policy as outlined in the Clark County Workplace Safety and Health Policy. However, certain violations of applicable laws, policies, or procedures may require additional disciplinary action. This issue is not addressed by SMS. Safety communication to promote a safety culture through all levels of the airport organization is a requirement of SMS. Although some communication processes are currently in place, such as newsletters and tenant meetings, other systems for disseminating information regarding airport operations, facility maintenance, airfield construction, employee safety awareness, tenant safety awareness, airside safety, and wildlife safety would be required. The additional cost cannot be calculated until the specific media are selected, but the expense would be significant. Implementation and maintenance of SMS would be challenging and labor intensive, particularly at North Las Vegas Airport. A new management analyst position would be required at \$84,460. Annual training costs are estimated at \$57,120. These staffing and training costs together total \$141,580. These costs do not take into account the time necessary for the duties of the Deputy Director of Aviation as the SMS Accountable Executive, the Assistant Director of Aviation, General Aviation as SMS Responsible Executive, or the duties of the Airport Manager under the draft SMS manual submitted to the FAA. The annual cost of communication and file storage would also be a significant factor. This represents a financial and administrative burden during a time of economic difficulty and budgetary constraints.</p>

LOCID / #of Operations	SMS- tasked Employees	FTE / PT	Adding SMS FTEs?	What difficulties / challenges have you experienced during the pilot studies? Do you have any Lessons Learned?
SEA 318000	1	0	4	ATO and Airport SRAs/SRMs- Conflicting and overlapping assignments, roles, responsibilities; Will FAA defer safety to SRA process in lieu of their "intuition" or expert opinion; FAA ARP does not have staff or resources to support participation or facilitation of SRAs, their review, and approval; No way to ensure continuity of findings amount airport SRAs or their associated mitigations.
DAB 350000	1	0	No	Understand what it is you're being asked to do. Try to get as much info as you can. Try to get buy-in from tenants- they have weekly meetings to talk about safety issues. Communication is critical.
DFW 652261	1	0	No	o Coordination of key stakeholders for SRA panel meetings challenging – possibly establish a “core” identified group committed to the effort that can easily convene at short notice. Inherent bias/natural human instinct with internal and external stakeholders – people have the tendency to “defend” their businesses in the name of safety, also they realize that identification of hazards may “create work” for their organization, these may skew their hazard risk ratings (lower risk)o Non-movement area inclusion will be a challenge without more explicit regulatory oversight. Internal FAA Order 5200.11 is now required prior to airports SMS being required. This, in essence, requires SMS be in place (at least for AIP funded projects) prior to a published rule for airports.
ATL 950119	1	3	Yes	The SRA process requires a lot of preparation, time allocation, especially to conduct the SRM Panel that could take a full day or more to complete the process. Develop a documented process/protocol for the airport and its business partners ensuring acceptance and harmonization of the decision making process and defining responsibilities to evaluate, accept, and mitigate risks. These items will need to be addressed in each operator’s particular SMS (ie MOUs MOAs, Lease Agreements); With the stakeholder data, we only received a few reports from companies which were de-identified. The challenge was most of the companies were concerned about the data protection and FOIA laws. Airline concerns are on the (a) incompatibles between an airport SMS and air carrier SMS, (b) lack of ownership of data in control of an external sources, and (c) company data subject to sunshine laws at a public airport. Most of the companies believe it could result in an unintended lack of protection by the company for its employees and potential non-compliance of regulatory issue that affect their reputation. Most companies would require clarity in (a) the protection for ensuring their documents and data are maintained as confidential documents not subject to release to the public under government disclosures laws, (b) possession and control of the data acquired, (c) use of accident and incident data in tenant risk assessment exercises, and (d) use of stakeholder data for creating and or modifying processes for all tenant at an airport.

LOCID / #of Operations	SMS- tasked Employees	Adding SMS FTEs?	What difficulties / challenges have you experienced during the pilot studies? Do you have any Lessons Learned?
DTW 4622520	FTE / PT 1 0	1	<p>Airports should start the process by building the foundation of their respective SMS structure. It's essential to begin by evolving/improving your airport's current data retention systems into a comprehensive information system that bridges and communicates with all divisions that are accountable for the airfield, while you learn to understand and develop the four main components of SMS. Develop, improve, and/or recreate all reports and information structured, or organized, reflective of the functions (Safety Critical Systems-SCS) of the airfield and outlined in FAR 139. Engage your airport's cross functional SME's to champion each SCS throughout the development. Utilize computer and mobile technology to streamline reporting, foster decision making, improve asset management, track and trend risks, reduce frustration, and build relationships. Many airports are already performing much of the activities that make up the components required for a SMS. These activities may just need to be formalized, organized, documented and improved.</p>

LOCID / #of Operations	SMS- tasked Employees	FTE / PT	Adding SMS FTEs?	Do you feel the FAA guidance was sufficient? What would you want to see included in Advisory Circular guidance material?
SBN 24000	0	2	No	Yes. Further guidance came from teleconferences, consultants, networking with other airports. With basics laid out by the FAA, the study became a "community thing." The guidance got parties started down the road and left enough leeway for interpretation. AC: Include written clarification describing how FAA approaches SMS. Does it intend for SMS to be a standalone document or part of the ACM? If SMS is part of the ACM, and an airport includes information about operations outside of 139, can the ACSI inspect and cite the airport for violations in those areas? Will the airport need to maintain 2 SMSs - 1 within the ACM and another for everything outside of 139? This will be counterproductive. Make sure the AC does not move airports too far toward procedure-based documents (overreliance on checklists). Too much documentation will be a distraction to the SRM process.
ASN 41000	0	0	Unsure	FAA had very little input during the preparation of the report, and provided no feedback on GAP analysis submittal.
TOL 47000	1	0	Unsure	Guidance was not sufficient: some was misleading (in terms of what is applicable - and scalability). Need clear definition of responsible parties: e.g. for runways - AT vs. the airport.
DBQ 50000	0	4	No	Thought the guidance was sufficient (had prior SMS experience on their side). They highlighted that scope and complexity will affect the overall program. They felt they had a good grasp on what they needed. They said they relied heavily on the consultants to create the documents for them.
SMX 51217	1	0	No	An option for smaller airports like SMX is to have an informal Safety Management System that will allow us flexibility with recording and tracking hazards, and Safety Policy language and some sort of clearinghouse where safety information can be distributed to all participants. An example would be a place that will provide safety videos and hazard mitigation courses without too much cost.
CYS 58000	1	1	No	It was sufficient for pilot studies. Needs to be more clearly defined in AC relative to the Part 139 requirement.
JQF 60000	1	0	No	Outside guidance was required. For the AC, the following is desirable: Flexibility, Scalability, and Encouragement to use technology, i.e. use of simple-to-use reporting and training systems
JAN 65000	0	1	Unsure	No. Lack of details for airport environments. Would like more guidance, more cost-benefit analysis, and measurable data and rationale from the pilot studies
OSU 73000	1	4	Yes	Still trying to figure out.
SIU 80000	1	0	Yes	No. Include examples or samples of SMS Manual or ACM with SMS. The CSPP example in the current AC 150-5200-37 was helpful. Develop the guidance to be helpful to the end user. Cater the guidance to those airports that do not have many resources (like consultants) available.

LOCID / #of Operations	SMS- tasked Employees	FTE / PT	Adding SMS FTEs?	Do you feel the FAA guidance was sufficient? What would you want to see included in Advisory Circular guidance material?
JAX 94614	1	0	No	Guidance was adequate. It was easy to tap in to SMS from other industries. In the AC, would like to see documentation of safety risk analysis, a standardized method across the aviation industry. Risk matrix needs to be the same, with the same training for everyone. The consultant was using their own format for the risk matrix.
AFW 105000	2	0	Yes	We do feel the FAA guidance was sufficient, but could be strengthened and more clearly defined. The FAA issued the AC in early 2007 that addressed the "concepts". In our opinion airports would benefit by knowing the particulars of the SMS regulation. The SMS AC was written in a broad sense and ultimately offered a basic understanding and not clear guidance as you would expect from an AC. In addition, it would be nice to have a chart that shows how SMS will be implemented at the different classes of airports (Ex: Will Class IV airports be held to the same standards as Class I airports?) Having a breakdown of the requirements would be helpful and eliminate questions. We would suggest that those airports that participated in the first and second pilot studies be allowed to participate or offer information to the airports division before and during the rewrite of the AC. Overall better alignment with ACs and current 139 regulations would be helpful.
TLH 118000	0	3	No	Guidance was okay. Need to focus on what are FAA's expectations for key positions for SMS implementation. Describe minimum qualifications, reporting relationships etc. Describe specifically in the manner that, for example, TSA has specific requirements for airport security
KOA 123772	1	0	Yes	Many airports, not just in Hawaii, do not have staff enough to produce the kinds of documents and training to promote and implement the program effectively. SMS is a cultural change and therefore should receive any and all coverage to accomplish this; even in the circulars. The topics covered in the present circular AC150-5200-37, are sufficient. I would just add forms and templates.
PIT 144563	2	0	1	It is important that the SMS AC is updated to reflect provisions specified in the final SMS rule making. This document was developed as a general guidance document and in order to provide an orientation to SMS. It would also be beneficial to clarify how various SMS initiatives (airport, airline, FAA ATO, FAA ADO) will coincide and become a comprehensive as opposed to a segmented approach to safety.
TEB 150000	0	0	No	First AC only provided start-up guidance. Did everything per the AC. Need better risk matrix definitions, training requirements, how is SMS going to be implemented?, specify a baseline vs. gap analysis
SMF 150000			No	Many areas need clarification.
AUS 176914	0	1	Yes	The FAA guidance is sufficient in most areas. State and local laws/ordinances relating to open records make it nearly impossible to protect identities of individuals who identify hazards.

LOCID / #of Operations	SMS- tasked		Adding SMS FTEs?	Do you feel the FAA guidance was sufficient? What would you want to see included in Advisory Circular guidance material?
	Employees	FTE / PT		
SAT 178484	2	2	Unsure	Yes, but with some limitations. We appreciate the cooperation and dialogue with the pilot airports. SAT would suggest that a working group of the Pilot Airport be developed to discuss their experiences, lessons learned and input to the AC and Final Rule.
BWI 268005	2	0		1. Forms 2. Examples of SRM 3. Example of complete SMS manual 4. Define what the FAA Certification Inspector will cover/look for 5. Define step by step process for implementing SMS 6. Clear and specific auditing requirements 7. SRM documentation 8. Policy statement requirement 9. What are the requirements for training / education? 10. Define non-punitive reporting 11. How is data protected (FOIA) 12. Clear and specific definition of all terms
BFI 280000	0	1	No	Guidance was sufficient. Tie in of regulator as a third party. For example, BFI held an RSA meeting after an aircraft hit a fuel truck and FS, ARP were involved and they agreed on new signage and marking. Six months later ANM held an RSAT and they tried to change what had just been done.
VGT 313143	0	0	Yes	The practical and legal problems inherent in imposing SMS responsibilities on airports for non-movement areas under the control of tenants. The operational costs (including especially personnel, recordkeeping, training and liability) for airports and the mechanisms by which airports will fund compliance with their ongoing SMS obligations. The manner by which airports should resolve conflicts or competing obligations imposed by the proposed part 139 SMS manual, by other SMS requirements (including, but not limited to, Order 5200.11), SMS requirements imposed on other airfield users (including part 121 operators and ATO), existing contractual obligations, and other grant assurance obligations. The liability and public information issues raised by the obligation to prepare safety risk assessments and to keep records on safety evaluations of all sorts that may necessarily be available to the public under federal or state law. The responsibilities of the accountable executive in the context of the practical realities of staff organization and responsibilities at large complex airports. The agency needs to provide a clear and unequivocal hierarchy of authority among the various proposed and forthcoming SMS requirements so that airports do not have to guess who has authority and which SMS program governs a particular activity.
SEA 318000	1	0	4	Guidance is sufficient for now as we are trying to learn as we go. The AC should stress consistent continuity of data and information. There should only be one SRA, not one the airport, one for FAA Airports Division, and one for ATO. There should be some language that gives relief with regard to data sharing, i.e. exempt from FOIA requests and some anonymousness. Much more to learn as we continue to
DAB 350000	1	0	No	Guidance was sufficient, you have to read it and understand it. Would like to see language to make it clear enough for the airport operator to be able to get buy-in from the tenants and encourage the carriers and flight schools that we're all in this together. Templates would be a good idea, similar to the template for the AEP. Need a guideline to walk someone through the process (especially the airports without a

LOCID / #of Operations	SMS- tasked Employees	FTE / PT	Adding SMS FTEs?	Do you feel the FAA guidance was sufficient? What would you want to see included in Advisory Circular guidance material?
DFW 652261	1	0	No	o Personally, I feel the FAA guidance is sufficient, however I am quite familiar with safety risk management and associated processes. The AC, and all associated SMS documents published by the FAA should be better aligned with one another and include consistent verbiage/definitions (i.e. SRA vs. Safety Assessment Screening)o The current AC provides an appendix and uses an example of SRM during a construction plan, this may be more appropriate to include in FAA Order 5200.11, possibly include a different example (maybe 2 or 3)?
ATL 950119	1	3	Yes	I felt there was a lack of guidance material made available for the pilot studies; However the airport collaboration has helped in the area. We would like to see more guidance documents on Safety Risk Management Resources, and SMS Training Material.
DTW 4622520	1	0	1	AC: Description what an airport will be responsible to prove or provide for SMS certification and also during a certificate inspection.

### APPENDIX C: SMS Pilot Study Interview Comments

Airport: <b>King County International Airport/Boeing Field, Seattle WA</b>			Documents delivered for Pilot Study: Gap Analysis, SMS Manual
Team Member: Bill Watson	# of Operations: 280,000	# of Employees: 64	
Airport contact: Mike Colmant			
How many FTEs currently work on SMS?	One-half FTE		
Do you anticipate adding FTEs when implementation is complete?	No		
Do you envision FTEs or consultants managing your SMS after implementation?	No		
Did you use a consultant in your SMS process? If so, which one? In what areas?	Yes, Jacobs Consultancy		
What were your challenges in interpreting the SMS process?	Applying to scope of operations		
What types of risks/hazards did you put through the SRM process during the Pilot Study?	1. Stop bar on taxiway leading to non standard use pavement, 2. Hazard investigation after wind tip went thru fuel truck cab		
What did the Gap Analysis Reveal?	Non-movement area safety. Hot spots in movement area. Signing marking and lighting. Safety area focus at BI intersection.		
What difficulties/ challenges have you experienced during the Pilot Study? Lessons learned?	Potential liability exposure, Program scalability, Third party roles and responsibilities, electronic vs. paper format, database.		
What benefits have you seen to your airport from the SMS process? <ul style="list-style-type: none"> <li>• Unknown hazards</li> <li>• A more active safety committee,</li> <li>• A tracking system that leads to a more proactive approach</li> <li>• One party identified as being responsible/in charge of safety concerns</li> <li>• Lower long-term costs</li> <li>• Others</li> </ul>	1. More proactive on safety. 2. Overall Awareness.		
What were the key findings at your airport, as part of the Pilot Study?	This caused BFI to focus on unique elements on airport from a safety prospective.		
Did you feel the FAA guidance was sufficient? What would you want to see included in the SMS AC?	Guidance was sufficient. Tie in of regulator as a third party. For example, BFI held a RSA meeting after an aircraft hit a fuel truck and FS, ARP were involved and they agreed on new signage and marking. Six months later ANM held and RSAT and they tried to change what had just been done.		
May we put your information on the public docket? Please send electronic copies along with your ok to use the information.	Yes, Will send copies		

**Table 1 – Boeing Field, WA**

Airport: <b>Concord Regional Airport, NC</b>			Documents delivered for Pilot Study: Gap Analysis, SMS Manual, Training Manual, SOP, Implementation Manual
Team Member: Michel Hovan			
Airport contact: Richard Lewis	# of Operations: 60,000	# of Employees: 34 FTE 10 PTE	
How many FTEs currently work on SMS?	One FTE		
Do you anticipate adding FTEs when implementation is complete?	No		
Do you envision FTEs or consultants managing your SMS after implementation?	Yes, partially, but the airport takes the lead also		
Did you use a consultant in your SMS process? If so, which one? In what areas?	Yes, Aviation Safety Consultants. Used in all areas		
What were your challenges in interpreting the SMS process?	(1) Trying to determine where SMS applied. The scope and the extent, beyond 139.(2) Non-punitive reporting was (and still is) an issue. It contradicts the City's regulations. Airport employees are city employees. (3) Trying to keep attendance at "SMS' safety committees was an issue, especially for non-airport participants		
What types of risks/hazards did you put through the SRM process during the Pilot Study?	(1) Fueling mats - procedures, (2) Refueling trucks - getting on top of the trucks - limit this, (3) managing people traffic on ramps during race days (solution was to paint walkways)		
What did the Gap Analysis Reveal?	Management and front line personnel had different interpretation and opinion of safety. This revealed gaps in communication, and the "buying-in" of safety.		
What difficulties/ challenges have you experienced during the Pilot Study? Lessons learned?	Difficulties in introducing technology to all. Financial incentives to help with the safety efforts did not work. Use of field-tough tablets makes sense though		
What benefits have you seen to your airport from the SMS process? <ul style="list-style-type: none"> <li>• Unknown hazards</li> <li>• A more active safety committee,</li> <li>• A tracking system that leads to a more proactive approach</li> <li>• One party identified as being responsible/in charge of safety concerns</li> <li>• Lower long-term costs</li> <li>• Others</li> </ul>	(1) our Safety Programs were not as effective as we initially thought, (2) There were some disconnects between programs, (3) communication across the organizations needs to be improved (4) lower costs by preventing litigation, (5) effective documentation system is key		
What were the key findings at your airport, as part of the Pilot Study?	Gaps in communication between management and front line		
Did you feel the FAA guidance was sufficient? What would you want to see included in the SMS AC?	Outside guidance was required. For the AC, the following is desirable: Flexibility, Scalability, and Encouragement to use technology, i.e. use of simple to use reporting and training systems		
May we put your information on the	Yes, did send copies already		

Airport: <b>Concord Regional Airport, NC</b>			Documents delivered for Pilot Study: Gap Analysis, SMS Manual, Training Manual, SOP, Implementation Manual
Team Member: Michel Hovan			
Airport contact: Richard Lewis	# of Operations: 60,000	# of Employees: 34 FTE 10 PTE	
public docket? Please send electronic copies along with your ok to use the information.			

**Table 2 – Concord Regional Airport, NC**

Airport: <b>Toledo, Ohio</b>			Documents delivered for Pilot Study: Gap Analysis, SMS Manual, Implementation Manual (part of the Study Plan), three SRA's
Team Member: Michel Hovan			
Airport contact: Steve Arnold	# of Operations: 47,000	# of Employees: 28	
How many FTEs currently work on SMS?	One FTE		
Do you anticipate adding FTEs when implementation is complete?	Depends on the NPRM final rule		
Do you envision FTEs or consultants managing your SMS after implementation?	Depends on the NPRM final rule, at first yes to get up to speed		
Did you use a consultant in your SMS process? If so, which one? In what areas?	Yes, SMQ Airport Services, in all areas		
What were your challenges in interpreting the SMS process?	Guidelines were for airlines, was different for airports. Problem interpreting and applying the Gap Analysis, not sure how to use SMS for different parts of the airport		
What types of risks/hazards did you put through the SRM process during the Pilot Study?	1. Annual Sports Car Event, 2. Snow removal equipment, 3. runway markings, all issues were mitigated		
What did the Gap Analysis Reveal?	Not sure how to interpret part 139 and the Gap analysis		
What difficulties/ challenges have you experienced during the Pilot Study? Lessons learned?	As a smaller organization, hard to implement SMS. Problems with FAA LOBs to attend meetings, etc. Also not always the right people, upper mgt delegated some lower level people. How many people to participate in these SMS meetings (too many at times, too few at other times)		
What benefits have you seen to your airport from the SMS process? <ul style="list-style-type: none"> <li>• Unknown hazards</li> <li>• A more active safety committee,</li> <li>• A tracking system that leads to a more proactive approach</li> <li>• One party identified as being responsible/in charge of safety concerns</li> <li>• Lower long-term costs</li> <li>• Others</li> </ul>	1. SMS does raise the level of safety awareness, 2. discovered interesting chemistry between different people and airport departments		
What were the key findings at your airport, as part of the Pilot Study?	Made us aware that processes and procedures need to be revisited and improved all the time. Cultural changes. Talk about Safety and SMS helped		
Did you feel the FAA guidance was sufficient? What would you want to see included in the SMS AC?	Guidance was not sufficient: some was misleading (in terms of what is applicable - and scalability). Need clear definition of responsible parties: e.g. for runways - AT vs. the airport		
May we put your information on	No, not at this time		

Airport: <b>Toledo, Ohio</b>			Documents delivered for Pilot Study: Gap Analysis, SMS Manual, Implementation Manual (part of the Study Plan), three SRA's
Team Member: Michel Hovan			
Airport contact: Steve Arnold	# of Operations: 47,000	# of Employees: 28	
the public docket? Please send electronic copies along with your ok to use the information.			

**Table 3 – Toledo, OH**

Airport: <b>Cheyenne Regional Airport</b>			Documents delivered for Pilot Study: SMS Manual, SMS Implementation Plan, Gap Analysis, SMS Report
Team Member: Bill Watson			
Airport contact: Dave Haring	# of Operations: 58,000	# of Employees: 10	
How many FTEs currently work on SMS?	One FTE		
Do you anticipate adding FTEs when implementation is complete?	No		
Do you envision FTEs or consultants managing your SMS after implementation?	One FTE		
Did you use a consultant in your SMS process? If so, which one? In what areas?	Heidi Beneman, Faith Group Wrote SMS Manual and Implementation Plan. Wrote and vetted forms. Did Technology evaluation. Ran first two assessments and assisted in third.		
What were your challenges in interpreting the SMS process?	Definitions- What is significant, catastrophic. Auditor Inspection requirements that could be foreseen. Technology Integration. Cultural buy in.		
What types of risks/hazards did you put through the SRM process during the Pilot Study?	1. Rwy 27 Retaining Wall, 2. Movement Area Signs, 3. Safety Area Demarcation, 4. Take trees down for approach zone clearances.		
What did the Gap Analysis Reveal?	They had gaps in all areas. Some minor and some significant. No area where they were fully compliant.		
What difficulties/ challenges have you experienced during the Pilot Study? Lessons learned?	<p>Public Disclosure Protection, SMS in Non Movement Tenant Areas, SMS Technology Development, "Non Punitive" Policy, Definitions for SRM, Budget: Implementation, Corrective Actions, Staffing SMS when employees already wear several hats.</p> <p>Airport Pilot Similarities: All had 139 Safety Self Inspections, Gap Analysis varied in size/complexity, Full time SMS employee is challenging, Budgeting will be difficult, All had some technology for support, Training tracking could be tied to existing SIDA/Driver's Training, Culture CHANGE is a challenge</p> <p>Airport Pilot Differences: The larger the airport the more complicated the safety issues, Governance varies ("Policy"), Safety threats vary, Larger airports have more resources including technology, Smaller airports can implement more easily, Employee turnover at small airports is lower</p>		
What benefits have you seen to your airport from the SMS process?	<ul style="list-style-type: none"> <li>• Unknown hazards</li> <li>• A more active safety committee,</li> <li>• A tracking system that leads to a more proactive approach</li> </ul> <p>1. Improve communication among all stakeholders. 2. Increased awareness of airport environment itself. 3. Creation of process does not allow items to fall through cracks</p>		

<b>Airport: Cheyenne Regional Airport</b>			Documents delivered for Pilot Study: SMS Manual, SMS Implementation Plan, Gap Analysis, SMS Report
Team Member: Bill Watson			
Airport contact: Dave Haring	# of Operations: 58,000	# of Employees: 10	
<ul style="list-style-type: none"> <li>• One party identified as being responsible/in charge of safety concerns</li> <li>• Lower long-term costs</li> <li>• Others</li> </ul>			
What were the key findings at your airport, as part of the Pilot Study?	<ul style="list-style-type: none"> <li>• Sensitivity to perceived criticisms, Verbiage issues amongst airports</li> <li>• Governance and Legal, ATC and airports have different focus</li> <li>• ATC hazard life risk only</li> <li>• SMS is a PROCESS that must fit the airport, not the other way around</li> <li>• Risk Matrix Chart color variations</li> <li>• Identification verbiage for Severity and Probability Variances</li> <li>• Definitions developed over time</li> <li>• Tolerance levels vary</li> <li>• Assessments became more calculated</li> </ul>		
Did you feel the FAA guidance was sufficient? What would you want to see included in the SMS AC?	It was sufficient for Pilot Study. Needs to be more clearly defined in AC for a regulatory environment. See other comments		
May we put your information on the public docket? Please send electronic copies along with your ok to use the information.	Yes, will send a copy		

**Table 4 – Cheyenne Regional Airport, WY**

Airport: <b>Ohio State University</b>			Documents delivered for Pilot Study: SMS Manual, SMS Implementation Plan, SMS Gap Analysis
Team Member: Bill Watson			
Airport contact: Seth Young	# of Operations: 73,000	# of Employees: 70	
How many FTEs currently work on SMS?	3 FTE's One full time and 3-4 part time		
Do you anticipate adding FTEs when implementation is complete?	Add one full time. Use existing employees as part time		
Do you envision FTEs or consultants managing your SMS after implementation?	Probably not- Maybe use a vender for software		
Did you use a consultant in your SMS process? If so, which one? In what areas?	No, Used internal resources from the university		
What were your challenges in interpreting the SMS process?	Not all that much literature out there. Had to explore around. It was a challenge to be one of the first to do it		
What types of risks/hazards did you put through the SRM process during the Pilot Study?	1. Risk assessment of airfield incursion hot spots. 2. Wildlife Hazards, birds, unreported bird strikes. 3. Non Movement Area Operations		
What did the Gap Analysis Reveal?	Part 139 does not go into non movement area. Formality of safety program required for SMS. More paperwork and process. Proactive Safety policy and promotion		
What difficulties/ challenges have you experienced during the Pilot Study? Lessons learned?	Easier than expected to get buy in from users. Challenge was to get buy in from wider airport community to collect hazards. Experimenting with different hazard reporting models. Education of IT staff takes time. Overall, not as challenging as he had thought. It will take a long time to change the culture		
What benefits have you seen to your airport from the SMS process? <ul style="list-style-type: none"> <li>• Unknown hazards</li> <li>• A more active safety committee,</li> <li>• A tracking system that leads to a more proactive approach</li> <li>• One party identified as being responsible/in charge of safety concerns</li> <li>• Lower long-term costs</li> <li>• Others</li> </ul>	1. Revealed potential hazards on non movement area- blind spots. 2. Formalizing movement of vehicles. 3. Wildlife mitigation - Finding birds on runway in morning when tower has been closed. 4. Formal lines of communication on safety has been facilitated, they now meet quarterly. 4. Brings in a culture of safety. 5. Have not experienced cost savings yet, it will cost to hire new staff person		
What were the key findings at your airport, as part of the Pilot program?	Self identifying hot spots, mitigate before it happens for safety in non movement areas		
Did you feel the FAA guidance was sufficient? What would you want to see included in the SMS AC?	Still trying to figure out.		
May we put your information on the public docket? Please send	Will send to me with caveats by 10-15 April		

Airport: <b>Ohio State University</b>			Documents delivered for Pilot Study: SMS Manual, SMS Implementation Plan, SMS Gap Analysis
Team Member: Bill Watson			
Airport contact: Seth Young	# of Operations: 73,000	# of Employees: 70	
electronic copies along with your ok to use the information.			

**Table 5 – Ohio State University, OH**

Airport: <b>Austin-Bergstrom Intl Airport</b>			Documents delivered for Pilot Study: Gap Analysis Safety Management Manual
Team Member: Joe Washington			
Airport contact: Scott Madole	# of Operations: 176,914	# of Employees: 340 (Department of Aviation)	
How many FTEs currently work on SMS?	One (part-time)		
Do you anticipate adding FTEs when implementation is complete?	Yes		
Do you envision FTEs or consultants managing your SMS after implementation?	FTEs		
Did you use a consultant in your SMS process? If so, which one? In what areas?	Yes - Jacobs Carter Burgess		
What were your challenges in interpreting the SMS process?	SMS process has not yet been fully developed.		
What types of risks/hazards did you put through the SRM process during the Pilot Study?	None		
What did the Gap Analysis Reveal?	Gaps existed in the following areas: SMS Policy Statement, Training, Non-punitive reporting systems, Implementation Plan, detailed SRA documentation, approval and follow-up of mitigations by senior management, description of airport risk management program, self-auditing process, plan to integrate SMS program into overall airport operations, promotion of safety awareness, documentation of lessons learned		
What difficulties/ challenges have you experienced during the Pilot Study? Lessons learned?	Approval of SMS Policy with inclusion of non-punitive policy		
What benefits have you seen to your airport from the SMS process? <ul style="list-style-type: none"> <li>• Unknown hazards</li> <li>• A more active safety committee,</li> <li>• A tracking system that leads to a more proactive approach</li> <li>• One party identified as being responsible/in charge of safety concerns</li> <li>• Lower long-term costs</li> <li>• Others</li> </ul>	Not yet implemented		
What were the key findings at your airport, as part of the Pilot Study?	The FAA guidance is sufficient in most areas. However, the timeline for incorporating airport tenants is unreasonable (we need to put the SMS in-place for airport owner employees first). State and local laws/ordinances relating to open records make it nearly impossible to protect identities of individuals who identify hazards.		
Did you feel the FAA guidance	The FAA guidance is sufficient in most areas. State and		

Airport: <b>Austin-Bergstrom Intl Airport</b>			Documents delivered for Pilot Study: Gap Analysis Safety Management Manual
Team Member: Joe Washington			
Airport contact: Scott Madole	# of Operations: 176,914	# of Employees: 340 (Department of Aviation)	
was sufficient? What would you want to see included in the SMS AC?	local laws/ordinances relating to open records make it nearly impossible to protect identities of individuals who identify hazards.		
May we put your information on the public docket? Please send electronic copies along with your ok to use the information.	Yes		

**Table 6 – Austin-Bergstrom International, TX**

Airport: <b>San Antonio International Airport</b>			Documents delivered for Pilot Study: Gap Analysis, SMS Manual
Team Member: Joe Washington			
Airport contact: Tim O'Krongley or John Chase	# of Operations:	# of Employees:	
How many FTEs currently work on SMS?	One (1) SMS Manager, One (1) Safety Specialist. Two other who have some responsibilities on a limited basis with SMS		
Do you anticipate adding FTEs when implementation is complete?	Will depend upon requirements of Final Rule		
Do you envision FTEs or consultants managing your SMS after implementation?	City Staff		
Did you use a consultant in your SMS process? If so, which one? In what areas?	Yes. First Pilot Study - Critical Path, Inc. for initial program documents. Third Pilot Study we are using Landry Consultants and their sub-consultant team members for SRAs and some training materials		
What were your challenges in interpreting the SMS process?	Changing the culture, stakeholder acceptance of some safety initiatives, participation of stakeholders in the SRA process and getting usable information from the previous Pilot Studies.		
What types of risks/hazards did you put through the SRM process during the Pilot Study?	RSAT issue, GA/Customs issue, Wildlife issue and a Terminal fire evacuation plan		
What did the Gap Analysis Reveal?	That 139 is a good base for SMS		
What difficulties/ challenges have you experienced during the Pilot Study? Lessons learned?	Need to communicate with stakeholders, understand the time it will take to implement SMS at the Airport (5-7 years)		
What benefits have you seen to your airport from the SMS process? <ul style="list-style-type: none"> <li>• Unknown hazards</li> <li>• A more active safety committee,</li> <li>• A tracking system that leads to a more proactive approach</li> <li>• One party identified as being responsible/in charge of safety concerns</li> <li>• Lower long-term costs</li> <li>• Others</li> </ul>	There are many, and this section should be formally developed in a working group of Pilot Study Airports prior to final rule making. Here are a few we see: trend tracking of unsafe issues, a formal safety process and structure, SRA and the associated benefits, overall awareness of safety culture		
What were the key findings at your airport, as part of the Pilot Study?			
Did you feel the FAA guidance was sufficient? What would you want to see included in the SMS AC?	Yes, but with some limitations. We appreciate the cooperation and dialogue with the Pilot Study airports. SAT would suggest that a working group of the Pilot Study airports be developed to discuss their experiences, lessons learned and input to the A/C and Final Rule		
May we put your information on the public docket? Please send electronic copies along with your ok to use the information.	Yes		

**Table 7 – San Antonio International Airport, TX**

Airport: <b>Baltimore Washington International</b>			Documents delivered for Pilot Study: Manual, Gap Analysis, Implementation Plan
Team Member: Travis Fiebelkorn	# of Operations: 346 Daily Departures	# of Employees: Approx 550	
Airport contact: George Haehl			
How many FTEs currently work on SMS?	2		
Do you anticipate adding FTEs when implementation is complete?	Unknown at this time. Current budget issues		
Do you envision FTEs or consultants managing your SMS after implementation?	Unknown at this time. Current budget issues		
Did you use a consultant in your SMS process? If so, which one? In what areas?	Hired a consultant for the entire process. ADCI (Airport Design Consultants INC)		
What were your challenges in interpreting the SMS process?	Defining SMS to the organization / management (what does SMS mean)?		
What types of risks/hazards did you put through the SRM process during the Pilot Study?	None		
What did the Gap Analysis Reveal?	Shortcomings in communication / training (not willing to speak in any specifics).		
What difficulties/ challenges have you experienced during the Pilot Study? Lessons learned?	Non-punitive reporting is a big problem with organization and Legal Dept. Highly suggest hiring a consultant to develop the manual and implementation plan. Said they brought an outside perspective and viewpoint that is really important		
What benefits have you seen to your airport from the SMS process? <ul style="list-style-type: none"> <li>• Unknown hazards</li> <li>• A more active safety committee,</li> <li>• A tracking system that leads to a more proactive approach</li> <li>• One party identified as being responsible/in charge of safety concerns</li> <li>• Lower long-term costs</li> <li>• Others</li> </ul>	BWI has not implemented SMS fully. However, they have noticed an increase in safety awareness.		
What were the key findings at your airport, as part of the Pilot Study?	He noticed an improvement in communication throughout the organization, quality of training and safety awareness		
Did you feel the FAA guidance was sufficient? What would you want to see included in the SMS AC?	1. Forms 2. Examples of SRM 3. Example of complete SMS manual 4. Define what the FAA Certification Inspector will cover/look for 5. Define step by step process for implementing SMS 6. Clear and specific auditing requirements 7. SRM documentation 8. Policy statement requirement 9. What are the requirements for training / education 10. Define non-punitive reporting 11. How is data protected (FOIA) 12. Clear and specific definition of all terms		
May we put your information on the public docket? Please send electronic copies along with your ok to use the information.	Yes, SMS Manual (sending disk in the mail)		

**Table 8 – Baltimore Washington International, MD**

<p><b>Airport: Daytona Beach International Airport, Daytona Beach, FL</b></p>			<p>Documents delivered for Pilot Study: Gap Analysis, SMS Manual, SMS Implementation Plan</p>
<p>Team Member: Laurie Jane Dragonas</p>	<p># of Operations:</p>	<p># of Employees:</p>	
<p>Airport contact: John Murray-Operations Manager</p>	<p>350,000</p>	<p>38</p>	
<p>How many FTEs currently work on SMS?</p>	<p>One</p>		
<p>Do you anticipate adding FTEs when implementation is complete?</p>	<p>No. Will not add anymore unless there is federal \$ assistance</p>		
<p>Do you envision FTEs or consultants managing your SMS after implementation?</p>	<p>No</p>		
<p>Did you use a consultant in your SMS process? If so, which one? In what areas?</p>	<p>Yes, Wilbur Smith</p>		
<p>What were your challenges in interpreting the SMS process?</p>	<p>Many. Was Pilot Study for consultant too. Who does what? Tower, ERAU, air carriers, each have their own separate SMS this is biggest challenge</p>		
<p>What types of risks/hazards did you put through the SRM process during the Pilot Study?</p>	<p>1. Alert calls - have a lot of them and ARFF staffing is issue. 2. Vehicle Pedestrian deviations. 3. Pilot training, have a lot of flight schools on airport, ERAU has 250 ops / day at peak</p>		
<p>What did the Gap Analysis Reveal?</p>	<p>FBO, Nasser, ERAU, Flight schools...how do we get them under ONE umbrella? Need a formal system under SMS program. Larger airports will have more challenges</p>		
<p>What difficulties/ challenges have you experienced during the Pilot Study? Lessons learned?</p>	<p>Understand what it is you're being asked to do. Try to get as much info as you can. Try to get buy-in from tenants- they have weekly meetings to talk about safety issues. Communication is critical</p>		
<p>What benefits have you seen to your airport from the SMS process?</p> <ul style="list-style-type: none"> <li>• Unknown hazards</li> <li>• A more active safety committee,</li> <li>• A tracking system that leads to a more proactive approach</li> <li>• One party identified as being responsible/in charge of safety concerns</li> <li>• Lower long-term costs</li> <li>• Others</li> </ul>	<p>More active safety committee meets every week, safety is now a major component of monthly tenant meetings. Interns from Embry Riddle are tracking projects such as wildlife, alert calls, medical calls, sign changes. John Murray is the point person</p>		
<p>What were the key findings at your airport, as part of the Pilot Study?</p>	<p>Development is needed- need higher management involvement and support</p>		
<p>Did you feel the FAA guidance was sufficient? What would you want to see included in the SMS AC?</p>	<p>Guidance was sufficient, have to read it and understand it. Would like to see language to make it clear enough for the airport operator to be able to get buy-in from the tenants and encourage the carriers, &amp; flight schools that we're all in this together. Templates would be a good idea, similar to the template for the AEP. need a guideline to walk someone through the process ( specially the airports without a consultant)</p>		

Airport: <b>Daytona Beach International Airport, Daytona Beach, FL</b>			Documents delivered for Pilot Study: Gap Analysis, SMS Manual, SMS Implementation Plan
Team Member: Laurie Jane Dragonas	# of Operations:	# of Employees:	
Airport contact: John Murray-Operations Manager	350,000	38	
May we put your information on the public docket? Please send electronic copies along with your ok to use the information.	Yes, willing to share documents on the docket. Will send a PowerPoint about the race, use of graphic style NOTAM, gap analysis, manual and SMS implementation plan		

**Table 9 – Daytona Beach International, FL**

Airport: <b>Dubuque, Iowa</b>			Documents delivered for Pilot Study: SMS Manual, Gap Analysis, Implementation Manual
Team Member: Travis Fiebelkorn			
Airport contact: Todd Dalsing	# of Operations: 50,000/year	# of Employees: 23	
How many FTEs currently work on SMS?	4 (limited Basis...not full time on SMS...absorbed into other duties)		
Do you anticipate adding FTEs when implementation is complete?	No.....possibility of adding consultant support		
Do you envision FTEs or consultants managing your SMS after implementation?	Depends on future budget. At this point, they would need to absorb into existing numbers		
Did you use a consultant in your SMS process? If so, which one? In what areas?	ARA - Applied Research Associates (Prime) Also used a sub		
What were your challenges in interpreting the SMS process?	DBQ has been involved in SMS since the beginning. They had the benefit of having an airport manager that was prior military and had extensive SMS experience		
What types of risks/hazards did you put through the SRM process during the Pilot Study?	Construction safety issues, ground handling and aircraft receipt and dispatch (pushing and pulling aircraft), hot spots (runway movement areas)		
What did the Gap Analysis Reveal?	Couldn't recall		
What difficulties/ challenges have you experienced during the Pilot Study? Lessons learned?	How do they implement, maintain and fund with current staffing and resources? In a challenging budget environment		
What benefits have you seen to your airport from the SMS process? <ul style="list-style-type: none"> <li>• Unknown hazards</li> <li>• A more active safety committee,</li> <li>• A tracking system that leads to a more proactive approach</li> <li>• One party identified as being responsible/in charge of safety concerns</li> <li>• Lower long-term costs</li> <li>• Others</li> </ul>	DBQ said they already had a safety culture, but this experience really enforced the big picture mentality and made them look outside the box at safety in general, as well as safety areas. Approaches to best possible solutions. DQB has also created an anonymous safety reporting hotline on their website starting soon. The reports will go directly to the airport manager and safety chief		
What were the key findings at your airport, as part of the Pilot Study?	Found a high rate of damage with pushing and pulling aircraft into and out of hangars and gate areas. Training and fatigue issues, general awareness		
Did you feel the FAA guidance was sufficient? What would you want to see included in the SMS AC?	Thought the guidance was sufficient. (had prior SMS experience on their side) They highlighted that scope and complexity will affect the overall program. They felt they had a good grasp on what they needed. They said they relied heavily on the consultants to create the documents for them		
May we put your information on the public docket? Please send electronic copies along with your ok to use the information.	Yes		

**Table 10 – Dubuque, IA**

Airport: <b>Jacksonville International Airport/ Jacksonville, FL</b>			Documents delivered for Pilot Study: Gap Analysis, SMS Manual, SMS Implementation Study, SMS Implementation Plan
Team Member: Laurie Jane Dragonas			
Airport contact: Roger Studenski	# of Operations: ?	# of Employees: 3500	
How many FTEs currently work on SMS?	One		
Do you anticipate adding FTEs when implementation is complete?	No. Will be rolling out SMS at GA airports, maybe 1 more FTE for the GA		
Do you envision FTEs or consultants managing your SMS after implementation?	No		
Did you use a consultant in your SMS process? If so, which one? In what areas?	Yes, ARA did 1st Pilot Study and developed manual. ESIS consultants did third Pilot Study		
What were your challenges in interpreting the SMS process?	Safety Risk analysis, to what depth, how complicated, What is the threshold? Participation of tenants is a challenge. Not all airlines participate because they have their own SMS programs. If not all tenants participate, the airport's SMS program will suffer		
What types of risks/hazards did you put through the SRM process during the Pilot Study?	1. Wildlife. 2. FOD. 3. aircraft/ vehicle movements		
What did the Gap Analysis Reveal?	Risk analysis process needs to be put in place. Have a lot of issues inside the gate & baggage areas		
What difficulties/ challenges have you experienced during the Pilot Study? Lessons learned?	The consultant recommended a drop box for hazard reports- too archaic. Instead went 'high tech' with a web-based report designed by a local contractor. Promotion is a major challenge, have to be a cheerleader to promote the program		
What benefits have you seen to your airport from the SMS process? <ul style="list-style-type: none"> <li>• Unknown hazards</li> <li>• A more active safety committee,</li> <li>• A tracking system that leads to a more proactive approach</li> <li>• One party identified as being responsible/in charge of safety concerns</li> <li>• Lower long-term costs</li> <li>• Others</li> </ul>	Heightened level of awareness of hazards and documenting the process. Proactive about documenting hazards and then investigating and correcting, things get acted upon. The safety committee was very active at first but now participation is lower, as the novelty has worn off		
What were the key findings at your airport, as part of the Pilot Study?	Need to start somewhere. Develop a foundation for SMS to get a grasp, then once foundation is set, easy to modify. Can make adjustments easily in the future once you have developed a reporting system. A consultant may be helpful to make sure things stay on track with the implementation plan		
Did you feel the FAA guidance	Guidance was adequate. It was easy to tap in to SMS from		

<p>Airport: <b>Jacksonville International Airport/ Jacksonville, FL</b></p>			<p>Documents delivered for Pilot Study: Gap Analysis, SMS Manual, SMS Implementation Study, SMS Implementation Plan</p>
<p>Team Member: Laurie Jane Dragonas</p>			
<p>Airport contact: Roger Studenski</p>	<p># of Operations: ?</p>	<p># of Employees: 3500</p>	
<p>was sufficient? What would you want to see included in the SMS AC?</p>	<p>other industries. In the AC, would like to see documentation of safety risk analysis, a standardized method across the aviation industry. Risk matrix needs to be the same, with the same training for everyone. The consultant was using their own format of risk matrix</p>		
<p>May we put your information on the public docket? Please send electronic copies along with your ok to use the information.</p>	<p>Yes, Keri already has copies of everything from JAX</p>		

**Table 11 – Jacksonville International, FL**

Airport: <b>Kona International</b>			Documents delivered for Pilot Study: SMS manual, gap analysis and implementation plan
Team Member: Abel Tapia			
Airport contact: Martinez Jacobs	# of Operations: XXX	# of Employees: XXX	
How many FTEs currently work on SMS?	Five for the airport system		
Do you anticipate adding FTEs when implementation is complete?	Yes, 1 per airport in our system of 15 airports		
Do you envision FTEs or consultants managing your SMS after implementation?	I would very much like to add at least one staff person to manage and/or support the program. We were unable to do this previously, however, there may be opportunity in the new administration to bring staff aboard		
Did you use a consultant in your SMS process? If so, which one? In what areas?	Jacobs Consultant		
What were your challenges in interpreting the SMS process?	There were no known problems; the challenge came with interviews and long distance communication		
What types of risks/hazards did you put through the SRM process during the Pilot Study?	Obstacle Free Zone, however the consultant did a poor job assessing the hazard		
What did the Gap Analysis Reveal?	Gap Analysis for ICAO vs FAR part 139 did not reveal anything too earthshaking , but there was issues with Emergency Equipment traversing level surfaces		
What difficulties/ challenges have you experienced during the Pilot Study? Lessons learned?			
What benefits have you seen to your airport from the SMS process? <ul style="list-style-type: none"> <li>• Unknown hazards</li> <li>• A more active safety committee,</li> <li>• A tracking system that leads to a more proactive approach</li> <li>• One party identified as being responsible/in charge of safety concerns</li> <li>• Lower long-term costs</li> <li>• Others</li> </ul>	<p>Selection of a well qualified consultant is paramount. In order for ANY safety plan, program or management system to be effective it MUST have dedicated staff to administer it. Time and time again my experience is that this task is an add-on to someone or some unit that already has a full plate. The consultants recognized this and recommended the creation of an SMS safety officer position. Such position remains to be established at Kona.</p> <p>A more robust driver's training program should be part of SMS. The safety committee should have been better developed. It took a year after the consultant/Engineers and FAA program Manager went out to the site to improve the process. Tracking system consists of email for linkage on new positions. The Airport system's fire chief is designated as the decision maker. There is no significant change in airport operating cost for SMS. the Self Inspection program ties into SMS</p>		
What were the key findings at your airport, as part of the Pilot Study?	Require additional: Driver's training, SMS qualified training, Self inspection training		
Did you feel the FAA guidance was sufficient? What would you	Many airports, not just in Hawaii, do not have staff enough to produce the kinds of documents and training to promote and		

Airport: <b>Kona International</b>			Documents delivered for Pilot Study: SMS manual, gap analysis and implementation plan
Team Member: Abel Tapia			
Airport contact: Martinez Jacobs	# of Operations: XXX	# of Employees: XXX	
want to see included in the SMS AC?	implement the program effectively. SMS is a cultural change and therefore should receive any and all coverage to accomplish this; even in the circulars. The topics covered in the present circular AC 150/5200-37, are sufficient. I would just add forms and templates		
May we put your information on the public docket? Please send electronic copies along with your ok to use the information.	Yes, will email allowable documents		

**Table 12 – Kona International, HI**

Airport: <b>Sacramento International</b>			Documents delivered for Pilot Study: Draft SMS manual and report
Team Member: Abel Tapia			
Airport contact: Bonnie Hankins	# of Operations: 150,000	# of Employees: 425	
How many FTEs currently work on SMS?	Zero - we have not implemented		
Do you anticipate adding FTEs when implementation is complete?	No - it will be incorporated into existing positions in Airport Operations		
Do you envision FTEs or consultants managing your SMS after implementation?	No		
Did you use a consultant in your SMS process? If so, which one? In what areas?	Yes, the Faith Group, first Pilot Study		
What were your challenges in interpreting the SMS process?	Will need to review the report and reach out to other staff involved to answer		
What types of risks/hazards did you put through the SRM process during the Pilot Study?	Airfield facilities and operational practices (ramps, perimeter, etc)		
What did the Gap Analysis Reveal?	Have no answer at this time, will comment at a later date		
What difficulties/ challenges have you experienced during the Pilot Study? Lessons learned?	The challenges were primarily addressed by the consultant		
What benefits have you seen to your airport from the SMS process? <ul style="list-style-type: none"> <li>• Unknown hazards</li> <li>• A more active safety committee,</li> <li>• A tracking system that leads to a more proactive approach</li> <li>• One party identified as being responsible/in charge of safety concerns</li> <li>• Lower long-term costs</li> <li>• Others</li> </ul>	Because we have not implemented, minimal benefit has been gained. We did discover some potential hazards that we resolved, so did result in improved safety		
What were the key findings at your airport, as part of the Pilot Study?	Again, the details will be in the report		
Did you feel the FAA guidance was sufficient? What would you want to see included in the SMS AC?	Many areas need clarification.		
May we put your information on the public docket? Please send electronic copies along with your ok to use the information.	Will need to obtain clearance from upper management		

**Table 13 – Sacramento International, CA**

Airport: <b>Santa Maria Municipal</b>			Documents delivered for Pilot Study: Gap Analysis, and SMS Manual
Team Member: Abel Tapia			
Airport contact: Chris Hastert / Rick Tokoph	# of Operations: 51,217	# of Employees: 10	
How many FTEs currently work on SMS?	One		
Do you anticipate adding FTEs when implementation is complete?	No		
Do you envision FTEs or consultants managing your SMS after implementation?	Due to the additional cost, most likely it would be done in house		
Did you use a consultant in your SMS process? If so, which one? In what areas?	Jacobs consulting produced the gap analysis and SMS document. Side note they provided a document that had a different airports name throughout. They also provided an abbreviated training session		
What were your challenges in interpreting the SMS process?	There was not a lot of direction from the FAA. Was not sure what the FAA was looking for		
What types of risks/hazards did you put through the SRM process during the Pilot Study?	We used a simulated FOD hazard. At the time the document was produced there were not a lot of safety issues that have been unmitigated		
What did the Gap Analysis Reveal?	We were not conducting regular meetings with tenants. There were informal safety resolution procedures. The airport would take care of issues as notified. The SMS process allowed airport personnel to actively communicate with the airport users		
What difficulties/ challenges have you experienced during the Pilot Study? Lessons learned?	Development of a true safety policy and objective was hard since you really wouldn't promote unsafe activities. We didn't really know where this document and the mandatory records fall within SSI and FOIA standards and how that could affect future responses. We are not sure if documenting a mitigation would come back to haunt us. We learned that we are already communicating hazards fairly well since we are a smaller airport. Daily interaction with our tenants has provided a good flow of communication		
What benefits have you seen to your airport from the SMS process? <ul style="list-style-type: none"> <li>• Unknown hazards</li> <li>• A more active safety committee,</li> <li>• A tracking system that leads to a more proactive approach</li> <li>• One party identified as being responsible/in charge of safety concerns</li> <li>• Lower long-term costs</li> <li>• Others</li> </ul>	We have taken a more proactive approach with holding tenant safety meetings using the local FAA Safety Team comprised of tenants		
What were the key findings at your airport, as part of the Pilot Study?	Tenants want to help out as long as it doesn't cost them anything. Since our size allows us easy access and a familiarity with our tenants, a formal SMS seemed to add another layer of bureaucracy into a community that already		

Airport: <b>Santa Maria Municipal</b>			Documents delivered for Pilot Study: Gap Analysis, and SMS Manual
Team Member: Abel Tapia			
Airport contact: Chris Hastert / Rick Tokoph	# of Operations: 51,217	# of Employees: 10	
	has skepticism over additional controls		
Did you feel the FAA guidance was sufficient? What would you want to see included in the SMS AC?	An option for smaller airports like SMX to have an informal safety Management System that will allow us flexibility with recording and tracking hazards. Safety Policy language and some sort of clearinghouse where safety information can be distributed to all participants. Such as, a place that will provide safety videos and hazard mitigation courses without too much cost		
May we put your information on the public docket? Please send electronic copies along with your ok to use the information.	Yes, will email documents		

**Table 14 – Santa Maria Municipal, CA**

Airport: <b>Dallas Fort Worth, TX</b>			Documents delivered for Pilot Study: Gap analysis, SMS Implementation Plan ,SMS Manual and Selected Tools
Team Member: Joe Washington			
Airport contact: Julie Schrecke	# of Operations: 652,261	# of Employees: 1,775	
How many FTEs currently work on SMS?	1 FTE Operations Safety Administrator dedicated to SMS (manager level)		
Do you anticipate adding FTEs when implementation is complete?	Additional employees dedicated to the SMS effort are not currently planned for the DFW FY12 budget, however that need will be revisited in upcoming months		
Do you envision FTEs or consultants managing your SMS after implementation?	The current Operations Safety Administrator position is planned to be maintained after implementation and other positions will be considered based on need		
Did you use a consultant in your SMS process? If so, which one? In what areas?	Yes, a consultant was used for the first Pilot Study and is currently being used for the implementation study Applied Research Associates (ARA) has been the principle consultant for all deliverables/activities in both Pilot Studies (they have enlisted the assistance of sub-consultants in their efforts		
What were your challenges in interpreting the SMS process?	Interpretation of possible legal/liability issues with no guidance Accountability of tenants not defined/regulated Methodology for "inspection"/FAA oversight of SMS within ACM/139 framework not defined		
What types of risks/hazards did you put through the SRM process during the Pilot Study?	Winter weather operations Surface incidents on the aircraft movement areas (AMA) Construction ramp safety (DFW Terminal Redevelopment and Improvement Plan) Results/findings are still pending with consultant		
What did the Gap Analysis Reveal?	<ul style="list-style-type: none"> <li>• Gap Analysis results determined and reported by consultant as part of first Pilot study</li> <li>• Several SMS elements are present, though not yet all formalized, and, therefore, not consistently or systematically applied. Need to establish/refine formal "safety policy."</li> <li>• Responsibilities – need to clarify with respect to SMS at all levels</li> <li>• Coordination – many SMS processes require cross-functional working coordination and cooperation, this occurs on a case-by-case basis currently but organizational processes will need to be improved</li> <li>• Documentation – with the exception of all those required by regulation, all other actions and activities related to safety issues or hazards will need to be formalized</li> <li>• Risk management – hazard identification, risk assessment and mitigation will need to become a systematic part of all processes, in particular with regard to current airside hazards facing the organization and change management</li> </ul>		

Airport: <b>Dallas Fort Worth, TX</b> Team Member: Joe Washington			Documents delivered for Pilot Study: Gap analysis, SMS Implementation Plan ,SMS Manual and Selected Tools
Airport contact: Julie Schrecke	# of Operations: 652,261	# of Employees: 1,775	
	<ul style="list-style-type: none"> <li>• Communication – there is a need for a formalized and systematic process and mechanism to promote and ensure the free exchange of safety information between staff at all levels of the organization, between sections and departments, between divisions and with external service providers</li> <li>• Accountability – current FAA framework does not extend airport authority to the non-movement area. The efforts made by the Airport to improve safety performance by fostering cooperation amongst all is sometimes met with diverging and competing interests. To resolve this and ensure SMS is successful, the accountability and responsibility can only be accepted by the Airport if supported by the authority under an unambiguous regulatory framework.</li> <li>• Performance Indicators – there will need to be a process for establishing and measuring comprehensive safety goals, objectives and key performance indicators – collection of safety data will need to be linked to such safety objectives</li> </ul>		
What difficulties/ challenges have you experienced during the Pilot Study? Lessons learned?	<ul style="list-style-type: none"> <li>• Coordination of key stakeholders for SRA panel meetings challenging – possibly establish a “core” identified group committed to the effort that can easily convene at short notice</li> <li>• Inherent bias/natural human instinct with internal and external stakeholders – people have the tendency to “defend” their businesses in the name of safety, also they realize that identification of hazards may “create work” for their organization, these may skew their hazard risk ratings (lower risk)</li> <li>• Non-movement area inclusion will be a challenge without more explicit regulatory oversight</li> <li>• Internal FAA Order 5200.11 is now required prior to Airports SMS being required. This, in essence, requires SMS be in place (at least for AIP funded projects) prior to a published rule for Airports.</li> </ul>		
What benefits have you seen to your airport from the SMS process? <ul style="list-style-type: none"> <li>• Unknown hazards</li> <li>• A more active safety committee,</li> <li>• A tracking system that leads to a more proactive approach</li> <li>• One party identified as being responsible/in charge of safety concerns</li> </ul>	<ul style="list-style-type: none"> <li>• Unknown hazards proactively identified (in theory)</li> <li>• A more active safety committee</li> <li>• A tracking system that leads to a more proactive approach</li> <li>• One party identified as being responsible/in charge of safety concerns - not just the “accountable executive” but accountability at all levels within the organization (in theory)</li> <li>• Lower long-term costs – quite possibly difficult to measure/quantify or categorize</li> <li>• Enhanced collaboration between departments regarding</li> </ul>		

Airport: <b>Dallas Fort Worth, TX</b>			Documents delivered for Pilot Study: Gap analysis, SMS Implementation Plan ,SMS Manual and Selected Tools
Team Member: Joe Washington			
Airport contact: Julie Schrecke	# of Operations: 652,261	# of Employees: 1,775	
<ul style="list-style-type: none"> <li>• Lower long-term costs</li> <li>• Others</li> </ul>	<ul style="list-style-type: none"> <li>• hazards/SRA process</li> <li>• Review and adjustment of current policies and procedures with regards to not only SMS, but other business processes - SMS merely provides the reason/"excuse" for review and adjustment</li> </ul>		
What were the key findings at your airport, as part of the Pilot Study?	<ul style="list-style-type: none"> <li>• Gap analysis findings</li> <li>• Many processes already done today are key components of SMS – just need to refine and “formalize” through policy/procedure, documentation, and accountability</li> </ul>		
Did you feel the FAA guidance was sufficient? What would you want to see included in the SMS AC?	<ul style="list-style-type: none"> <li>• Personally, I feel the FAA guidance is sufficient, however I am quite familiar with safety risk management and associated processes</li> <li>• The AC, and all associated SMS documents published by the FAA should be better aligned with one another and include consistent verbiage/definitions (i.e. SRA vs Safety Assessment Screening)</li> <li>• The current AC provides an appendix and uses an example of SRM during a construction plan, this may be more appropriate to include in FAA Order 5200.11, possibly include a different example (maybe 2 or 3)?</li> </ul>		
May we put your information on the public docket? Please send electronic copies along with your ok to use the information.	<ul style="list-style-type: none"> <li>• Assuming “information” equates to Gap analysis, SMS implementation plan, and SMS manual (?)</li> <li>• Our manual is still a “living” document in its earliest stages of development and many components are undergoing revision/editing based on results from the current Pilot Study and review with our consultant. That said, we recognize the importance of “sharing” with our industry partners and are still reviewing the possibility of publishing to the public docketed internally</li> </ul>		

**Table 15 – Dallas Fort Worth, TX**

<p><b>Airport: Tallahassee Regional Airport, Tallahassee, FL</b></p>			<p>Documents delivered for Pilot Study: Gap Analysis, SMS Manual, SMS Implementation Study, about to submit third SRA</p>
<p>Team Member: Laurie Jane Dragonas</p>			
<p>Airport contact: David Pollard</p>	<p># of Operations: 118,000 annual Ops</p>	<p># of Employees: 51</p>	
<p>How many FTEs currently work on SMS?</p>	<p>Three, but none are full time</p>		
<p>Do you anticipate adding FTEs when implementation is complete?</p>	<p>No. Will be putting in budget recommendation for more staffing. NPRM should address the amount and type of staffing that FAA wants airport operator to have</p>		
<p>Do you envision FTEs or consultants managing your SMS after implementation?</p>	<p>Yes, one of the employees</p>		
<p>Did you use a consultant in your SMS process? If so, which one? In what areas?</p>	<p>Yes, worked with two different consultants Wilbur Smith Associates and also with Reynolds, Smith &amp; Hills Kimberly Horne is working current grant</p>		
<p>What were your challenges in interpreting the SMS process?</p>	<p>Conflicting information. When is SMS really required? Begin with trigger events? What does AA expect? Fuel needs to more specific about expectations, organizational structures, reporting relationships. It would help when final rule goes out with the rule requires specific positions and qualifying attributes ( similar to TSA)</p>		
<p>What types of risks/hazards did you put through the SRM process during the Pilot Study?</p>	<p>1- Studied ramp safety. 2-Studied irregular operations, such as during severe weather, or when airport is supporting a multitude of diversions from airports around the state. 3- Also studied water intrusion ( terminal roof project)</p>		
<p>What did the Gap Analysis Reveal?</p>	<p>Reporting mechanism for unsafe conditions. Airport developed branded safety [products to advertise the program, voice mail 891SAFE, drop boxes], still struggling with staffing issues, how are ops supposed to interact with capital programs</p>		
<p>What difficulties/ challenges have you experienced during the Pilot Study? Lessons learned?</p>	<p>Need to foster interest "Bleed Safety". Developed posts, banners, safety candy jars, lanyards, badge reels etc. Make a BIG DEAL about safety. Patterned his program off of military aviation Risk management program called "ANY MOUSE"</p>		
<p>What benefits have you seen to your airport from the SMS process?</p> <ul style="list-style-type: none"> <li>• Unknown hazards</li> <li>• A more active safety committee,</li> <li>• A tracking system that leads to a more proactive approach</li> <li>• One party identified as being responsible/in charge of safety concerns</li> <li>• Lower long-term costs</li> <li>• Others</li> </ul>	<p>1- Greater focus on safety 2- More people involved- they check the reporting hotline daily, 3- Hard to quantify cost savings, yes if you save one life, 4- Better responsibility, accountability, reporting, 5- Got safety vests for increased visibility for ramp workers</p>		
<p>What were the key findings at your airport, as part of the Pilot Study?</p>	<p>Need to do a better job with the business process. Issues are identified... follow it thru to until the issue is closed out w documentation. Work toward better airport visibility for SMS,</p>		

<p><b>Airport: Tallahassee Regional Airport, Tallahassee, FL</b></p>			<p>Documents delivered for Pilot Study: Gap Analysis, SMS Manual, SMS Implementation Study, about to submit third SRA</p>
<p>Team Member: Laurie Jane Dragonas</p>			
<p>Airport contact: David Pollard</p>	<p># of Operations: 118,000 annual Ops</p>	<p># of Employees: 51</p>	
	<p>need a platform for organizing safety &amp; outstanding work orders in the same manner that you have a platform for security</p>		
<p>Did you feel the FAA guidance was sufficient? What would you want to see included in the SMS AC?</p>	<p>Guidance was okay. Need to focus on what are FAA's expectations for key positions for SMS implementation. Describe minimum qualifications, reporting relationships Etc. Describe specifically what you for example such as the way TSA has specific requirements for Airport Security Coordinator</p>		
<p>May we put your information on the public docket? Please send electronic copies along with your ok to use the information.</p>	<p>Okay to put on docket, Keri already has copies of everything from TLH</p>		

**Table 16 – Tallahassee Regional, FL**

Airport: <b>Alliance Fort Worth</b>			Documents delivered for Pilot Study:
Team Member: Joe Washington	# of Operations:		
Airport contact: C. Ash	105,000	# of Employees: 21	
How many FTEs currently work on SMS?	Two FTEs currently. It's a slow process that has added value to our overall safety and awareness		
Do you anticipate adding FTEs when implementation is complete?	<p>We hope to add one or two FTEs before implementation. Our staff handles both the FBO and airport operation component and must multitask and balance time between airport operations and service delivery. Adding a SMS to FAR139 would require additional manpower to ensure appropriate application and compliance of SMS.</p> <p>Implementation of SMS will increase our operating and administrative budget, primarily for additional FTEs needed to support the program but also includes miscellaneous equipment, hardware and software</p>		
Do you envision FTEs or consultants managing your SMS after implementation?	FTEs		
Did you use a consultant in your SMS process? If so, which one? In what areas?			
What were your challenges in interpreting the SMS process?	<p>The process was challenging due to the fact that SMS overall is more of a mindset than actual regulation. During and after the SMS study we found that getting our FTEs to understand the process was challenging. We were asking them to take a process that would improve safety and apply it operational situations without providing particular areas of focus. In the end we found that our team was ultimately using SMS, such as SRM when evaluating air show planning and AOA construction.</p> <p>In my opinion the SMS process talks too broadly and ask the users to apply the tools where necessary without giving particular guidance, which is different than what most AC's and FARs provide. As an example: One FTE might think that a SRM process is needed for a particular project, but another may see it differently; therefore they may feel that the process is not necessary. So how do you determine what's worthy of a SRM analysis and what's not?</p>		
What types of risks/hazards did you put through the SRM process during the Pilot Study?	<p>We used a taxiway intersection located at midfield. Several aircraft departing the FBO ramp have mistaken Taxiway A as the part of the apron. The challenge at the time was some pilots mistakenly thought the taxiway intersection was the entrance to the TAXIWAY when it was actually the runway. What makes this intersection challenging is the fact that the main ramp and taxiway A are only separated by a non-movement boundary marker. So if a pilot is task saturated during taxi or has failed to properly identify the intersection he/she could mistake the intersection as the entrance to the taxiway system from the main ramp and ultimately enter the</p>		

Airport: <b>Alliance Fort Worth</b>			Documents delivered for Pilot Study:
Team Member: Joe Washington	# of Operations: 105,000	# of Employees: 21	
Airport contact: C. Ash			
	<p>runway 16L/34R environment.</p> <p>This exercise is where it all started to come together for our FTEs. Once they had a way to tie the SMS process to a particular process they began to understand the process</p>		
What did the Gap Analysis Reveal?	<p>The Gap Analysis revealed that we meet all components of FAR139 and currently unintentionally meet some parts of the SMS guidelines.</p> <p>It identified weaknesses in resolving maintenance items, record keeping and training. As a result these areas were reviewed and strengthened. It helped identify programs such as, safety committees and showed the value of the program</p>		
What difficulties/ challenges have you experienced during the Pilot Study? Lessons learned?	<p>We struggled, and currently struggle with the overall implementation of SMS. We often find that making the time to manage the SMS process is our main obstacle. Some areas within SMS require additional manpower to perform analysis, reports or training. Ultimately, this process will add layers to already existing FARs</p>		
<p>What benefits have you seen to your airport from the SMS process?</p> <ul style="list-style-type: none"> <li>• Unknown hazards</li> <li>• A more active safety committee,</li> <li>• A tracking system that leads to a more proactive approach</li> <li>• One party identified as being responsible/in charge of safety concerns</li> <li>• Lower long-term costs</li> <li>• Others</li> </ul>	<p>a. Unknown hazards Nothing identified during or after the Pilot Study</p> <p>b. A more active safety committee- As a result of the SMS Pilot Study we established and maintained an Airport Safety Committee comprised of all major stakeholders on the airport. Next meeting is planned for June of 2011.</p> <p>c. A tracking system that leads to a more proactive approach  As a result of the SMS study we implemented a better tracking system for open items such as damaged airport signs and missing lights. Our challenge with this has been consistent application. In addition to this we still use the standard airport inspection to list and non-complying items found during the required airport inspections. Better application and consistency would allow for more detailed trend analysis, better long term planning and could show unknown problems with the airport environment.</p> <p>d. One party identified as being responsible/in charge of safety concerns  Senior Leaders do play an active role in safety and have implemented several components from the SMS Pilot Study.</p> <p>e. Lower long-term cost- None at this time. Although we do anticipate lower cost in the future as it relates to tracking repair and maintenance issues.</p> <p>f. Others- None</p>		
What were the key findings at	a. Some aspects of the SMS system already being used.		

Airport: <b>Alliance Fort Worth</b>	# of Operations: 105,000	# of Employees: 21	Documents delivered for Pilot Study:
Team Member: Joe Washington			
Airport contact: C. Ash			
your airport, as part of the Pilot Study?	<p>b. Safety Culture exists but needs improving. Since SMS study this has improved.</p> <p>c. Training in all areas needed to be strengthened</p>		
Did you feel the FAA guidance was sufficient? What would you want to see included in the SMS AC?	<p>We do feel the FAA guidance was sufficient, but could be strengthened and more clearly defined. The FAA issued the AC in early 2007 that addressed the “concepts”. In our opinion airports would benefit by knowing the particulars of the SMS regulation. This AC was written in a broad sense and ultimately offered a basic understanding and not clear guidance as you would expect from an AC.</p> <p>In addition, it would be nice to have a chart that shows how SMS will be implemented at the different Classes of airports (Ex: Will Class IV airports be held to the same standards as Class I airports?) Having a breakdown of the requirements would be helpful and eliminate questions. We would suggest that those airports that participated in the first and second Pilot Studies be allowed to participate or offer information to the airports division before and during the rewrite of the AC. Overall better alignment with AC’s and current 139 regulations would be helpful</p>		
May we put your information on the public docket? Please send electronic copies along with your ok to use the information.	We do not object with putting our information on the public docket		

**Table 17 – Alliance Fort Worth, TX**

Airport: <b>Jackson, MS</b>			Documents delivered for Pilot Study: Gap Analysis, Manual
Team Member: Michel Hovan			
Airport contact: Denson Stachler	# of Operations: 65000	# of Employees: 110	
How many FTEs currently work on SMS?	0.5 or less		
Do you anticipate adding FTEs when implementation is complete?	Depends on the final rule		
Do you envision FTEs or consultants managing your SMS after implementation?	FTE, airport authority		
Did you use a consultant in your SMS process? If so, which one? In what areas?	Yes, Faith Group LLC, in all areas		
What were your challenges in interpreting the SMS process?	1. Educating staff, 2. Non-punitive system, 3. Scope, 4. Not much background provided by FAA		
What types of risks/hazards did you put through the SRM process during the Pilot Study?	1. Non-Movement Area hazards, 2. Passenger Hazards, 3. Vehicle Hazards		
What did the Gap Analysis Reveal?	Some gaps with respect to SMS		
What difficulties/ challenges have you experienced during the Pilot Study? Lessons learned?	Issue with the word "Policy", non-punitive approach, cultural change		
What benefits have you seen to your airport from the SMS process? <ul style="list-style-type: none"> <li>• Unknown hazards</li> <li>• A more active safety committee,</li> <li>• A tracking system that leads to a more proactive approach</li> <li>• One party identified as being responsible/in charge of safety concerns</li> <li>• Lower long-term costs</li> <li>• Others</li> </ul>	More safety awareness for the staff - cultural changes		
What were the key findings at your airport, as part of the Pilot Study?	Able to identify that a legacy safety culture does already exist at the airport		
Did you feel the FAA guidance was sufficient? What would you want to see included in the SMS AC?	No, Lack of details for airport environments, Would like: more guidance, more cost-benefit analysis, and measurable data and rationale from the Pilot Studies.		
May we put your information on the public docket? Please send electronic copies along with your ok to use the information.	Not yet, will get back		

**Table 18 – Jackson, MS**

Airport: <b>Teterboro, NJ</b>			Documents delivered for Pilot Study: Gap Analysis, draft SMS Manual, draft implementation plan
Team Member: Michel Hovan			
Airport contact: Richard Hesslin	# of Operations: 150,000	# of Employees: 3 PNNYNJ, 35 others	
How many FTEs currently work on SMS?	Zero right now		
Do you anticipate adding FTEs when implementation is complete?	No		
Do you envision FTEs or consultants managing your SMS after implementation?	Study found 1 FTE to be added		
Did you use a consultant in your SMS process? If so, which one? In what areas?	Yes, Louis Berger, in all areas		
What were your challenges in interpreting the SMS process?	1. Non-punitive system - how would that work, 2. Who is the accountable executive, 3. What type of reporting system, 4. Costs and who pay for them		
What types of risks/hazards did you put through the SRM process during the Pilot Study?	None at this time. All efforts were on the Manual		
What did the Gap Analysis Reveal?	EB has a solid safety foundation, SMS will require centralized reporting system, Management guidelines need to be developed		
What difficulties/ challenges have you experienced during the Pilot Study? Lessons learned?	Very time-consuming, 18 months to complete the draft, but overall a positive experience, was handled by manager groups only		
What benefits have you seen to your airport from the SMS process? <ul style="list-style-type: none"> <li>• Unknown hazards</li> <li>• A more active safety committee,</li> <li>• A tracking system that leads to a more proactive approach</li> <li>• One party identified as being responsible/in charge of safety concerns</li> <li>• Lower long-term costs</li> <li>• Others</li> </ul>	More safety awareness for the staff - cultural changes		
What were the key findings at your airport, as part of the Pilot Study?	Nothing yet		
Did you feel the FAA guidance was sufficient? What would you want to see included in the SMS AC?	First AC only provided start-up guidance. Did everything per the AC. Need better risk matrix definitions, training requirements, how is it going to be implemented?, specify a baseline vs. gap analysis		

Airport: <b>Teterboro, NJ</b>			Documents delivered for Pilot Study: Gap Analysis, draft SMS Manual, draft implementation plan
Team Member: Michel Hovan			
Airport contact: Richard Hesslin	# of Operations: 150,000	# of Employees: 3 PNNYNJ, 35 others	
May we put your information on the public docket? Please send electronic copies along with your ok to use the information.	No yet, need to confirm with legal		

**Table 19 – Teterboro, NJ**

Airport: <b>Atlanta, GA</b>			Documents delivered for Pilot Study:
Team Member: Travis Fiebelkorn	# of Operations:		
Airport contact: Scott M. Ayers	950, 119	# of Employees:	
How many FTEs currently work on SMS?	One fulltime Airport Operations Supervisor with assistance of 3 other representatives from Risk Management and Safety/Training		
Do you anticipate adding FTEs when implementation is complete?	SMS Position Fulltime		
Do you envision FTEs or consultants managing your SMS after implementation?	FTE		
Did you use a consultant in your SMS process? If so, which one? In what areas?	No		
What were your challenges in interpreting the SMS process?	Some of the instructions were not as clear in the Pilot Study documents, especially with providing resource information to conduct research		
What types of risks/hazards did you put through the SRM process during the Pilot Study?	Vehicle traffic on the ramp and FOD SRAs. We will be conducting another SRA on a taxiway conversion to a taxilane with a vehicle crossing in May 2011. The SRA process requires a lot of preparation, time allocation, especially to conduct the SRM Panel that could take a full day or more to complete the process		
What did the Gap Analysis Reveal?	Did not have a comprehensive Safety Policy Statement, although the City of Atlanta and DOA have internal safety policies in safety manuals. Did not have Safety Risk Assessment Process		
What difficulties/ challenges have you experienced during the Pilot Study? Lessons learned?	<p>Develop a documented process/protocol for the airport and its business partners ensuring acceptance and harmonization of the decision making process and defining responsibilities to evaluate, accept, and mitigate risks. These items will need to be addressed in each operator's particular SMS (ie MOUs MOAs, Lease Agreements); With the stakeholder data, we only received a few reports from companies which were de-identified. The challenge was most of the companies were concerned about the data protection and FOIA laws. Airline concerns are on the (a) incompatibles between an airport SMS and air carrier SMS, (b) lack of ownership of data in control of an external sources, and (c) company data subject to sunshine laws at a public airport. Most of the companies believe it could result in an unintended lack of protection by the company for its employees and potential non-compliance of regulatory issue that affect their reputation.</p> <p>Most companies would require clarity in (a) the protection for ensuring their documents and data are maintained as confidential documents not subject to release to the public under government disclosures laws, (b) possession and control of the data acquired, (c) use of accident and incident data in tenant risk assessment exercises, and (d) use of stakeholder data for creating and or modifying processes for all tenant at an airport</p>		

Airport: <b>Atlanta, GA</b>			Documents delivered for Pilot Study:
Team Member: Travis Fiebelkorn	# of Operations:		
Airport contact: Scott M. Ayers	950, 119	# of Employees:	
<p>What benefits have you seen to your airport from the SMS process?</p> <ul style="list-style-type: none"> <li>• Unknown hazards</li> <li>• A more active safety committee,</li> <li>• A tracking system that leads to a more proactive approach</li> <li>• One party identified as being responsible/in charge of safety concerns</li> <li>• Lower long-term costs</li> <li>• Others</li> </ul>	<p>SRA process is helping to effectively evaluate hazards with construction projects and changes on the airfield; Establishing a SMS Work Group with tenant involvement in the development and refinement of our SMS Program. The SMS Work Group will become the Safety Committees defined in the SMS Program; The ASOCS database system is very beneficial for part 139 reporting and being able to fulfill our SMS reporting requirements. The SMS Dashboard will supplement the ASOCS data with trend analysis and tracking capability</p>		
<p>What were the key findings at your airport, as part of the Pilot Study?</p>	<p>We realized a lot of what we were doing is part of Safety Management System with part 139 responsibilities, Risk Management Office, DOA and City of Atlanta Safety Policy Manuals</p>		
<p>Did you feel the FAA guidance was sufficient? What would you want to see included in the SMS AC?</p>	<p>I felt there was a lack of guidance material made available for the Pilot Studies. However the airport collaboration has helped in the area. We would like to see more guidance documents on Safety Risk Management Resources, and SMS Training Material</p>		
<p>May we put your information on the public docket? Please send electronic copies along with your ok to use the information.</p>			

**Table 20 – Atlanta, GA**

Airport: <b>North Las Vegas</b>			Documents delivered for Pilot Study: Pilot safety management system plan
Team Member: Abel Tapia			
Airport contact: Ben Czyzewski	# of Operations: 131,143	# of Employees: 27	
How many FTEs currently work on SMS?	0		
Do you anticipate adding FTEs when implementation is complete?	Yes		
Do you envision FTEs or consultants managing your SMS after implementation?	Definitely FTEs but we are still considering employing consultants to augment staffing		
Did you use a consultant in your SMS process? If so, which one? In what areas?	Yes, Ricondo and Associates. Consultant used to assist with gap analysis and draft the SMS Plan		
What were your challenges in interpreting the SMS process?	Clarifying the extent to which leaseholds within the non-movement area are subject to this SMS rule. Determining the responsibilities of the airport operator and third parties regarding the development and maintenance of SMS. Ascertaining if the airport sponsor can delegate SMS responsibilities to tenants within exclusive leaseholds. Determining legal liabilities of the accountable executive and acceptance of know risks identified on the risk assessment matrix		
What types of risks/hazards did you put through the SRM process during the Pilot Study?	Runway environment during construction at night. Existing driver training program and the use of escorts for construction vehicles. ATCT that does not have radio communications with construction vehicles, which are not radio equipped. Signs, markings, and lighting to the taxiways, runways, and construction areas		
What did the Gap Analysis Reveal?	The results of comparisons between existing conditions, including the documentation of practices at the Airport, and SMS standards revealed that in some instances certain practices or procedures are in place, but may not be collectively gathered or documented to meeting the intent of a formal SMS. In other instances, data collection of record-keeping is being completed as part of a database managed by CCDOA, but has not been formally included as part of the SMS program		
What difficulties/ challenges have you experienced during the Pilot Study? Lessons learned?	SMS introduces new requirements for record keeping, ensuring that all SMS documentation is current and accurate. This includes the introduction and maintenance of SMS training records for all airport employees, documentation of hazard identification and analysis, documentation of the effectiveness of corrective and preventative measures taken, and the documentation and dissemination of the results from accident and incident investigations. There is not presently sufficient administrative staff to accomplish these tasks. SMS annual record keeping and the training requirements outlined below would necessitate the hire of a full time Management Analyst		

Airport: <b>North Las Vegas</b>			Documents delivered for Pilot Study: Pilot safety management system plan
Team Member: Abel Tapia			
Airport contact: Ben Czyzewski	# of Operations: 131,143	# of Employees: 27	
	<p>I at \$84,460 annually including benefits.</p> <p>The SMS process includes new requirements for initial and annual recurrent training of airport employees in overall airport safety objectives, safety risk management principles, safety assurance topics, airport rules and regulations, and overall department organization and functions. A plan to validate training effectiveness and a process to obtain feedback, including useable metrics, is also required. Providing 8 hours of annual training for 450 employees would require 30 classes with 15 employees per class. Ten weeks would be required to complete training at 3 classes per week. The training would consume 3,600 man hours. Assuming an average hourly wage of \$28 for each CCDOA employee, CCDOA training costs for 30 employees would total \$6,720. Assuming an average hourly wage of \$15 for each commercial airport tenant employee, tenant training costs for 420 employees would total \$50,400. Annual training costs total \$57,120.</p> <p>SMS requires change management, a formal process to identify, anticipate, and prepare for potential hazards introduced into the airport environment. Trigger events include such common occurrences as the introduction of a new commercial aircraft type, the commissioning of new equipment or the adoption of new procedures or regulations. The airport embraces a non-punitive safety reporting policy as outlined in the Clark County Workplace Safety and Health Policy. However, certain violations of applicable laws, policies, or procedures may require additional disciplinary action. This issue is not addressed by SMS.</p> <p>Safety communication to promote a safety culture through all levels of the airport organization is a requirement of SMS. Although some communication processes are currently in place, such as newsletters and tenant meetings, other systems for disseminating information regarding airport operations, facility maintenance, airfield construction, employee safety awareness, tenant safety awareness, airside safety, and wildlife safety would be required. The additional cost cannot be calculated until the specific media are selected, but the expense would be significant. Implementation and maintenance of SMS would be challenging and labor intensive, particularly at North Las Vegas Airport. A new management analyst position would be required at \$84,460. Annual training costs are estimated at \$57,120. These staffing and training costs together total \$141,580. These costs do not take into account the time necessary for the duties of the Deputy Director of Aviation as the SMS Accountable Executive, the Assistant Director of Aviation, General Aviation as SMS Responsible Executive, or the duties of the Airport Manager under the draft SMS manual submitted to the FAA. The annual cost of</p>		

Airport: <b>North Las Vegas</b>			Documents delivered for Pilot Study: Pilot safety management system plan
Team Member: Abel Tapia			
Airport contact: Ben Czyzewski	# of Operations: 131,143	# of Employees: 27	
	communication and file storage would also be a significant factor. This represents a financial and administrative burden during a time of economic difficulty and budgetary constraints.		
<p>What benefits have you seen to your airport from the SMS process?</p> <ul style="list-style-type: none"> <li>• Unknown hazards</li> <li>• A more active safety committee,</li> <li>• A tracking system that leads to a more proactive approach</li> <li>• One party identified as being responsible/in charge of safety concerns</li> <li>• Lower long-term costs</li> <li>• Others</li> </ul>	<p>The SMS process has not been implemented at the airport. During the Pilot Study only a few specific test items were subjected to the process. Benefits cannot be determined until a large sampling of items can be achieved.</p>		
<p>What were the key findings at your airport, as part of the Pilot Study?</p>	<p>The SMS process has not been implemented. No prevalent findings were ascertained. We are only in the process of defining the SMS.</p>		
<p>Did you feel the FAA guidance was sufficient? What would you want to see included in the SMS AC?</p>	<p>The practical and legal problems inherent in imposing SMS responsibilities on airports for non-movement areas under the control of tenants.</p> <p>The operational costs (including especially personnel, recordkeeping, training and liability) for airports and the mechanisms by which airports will fund compliance with their ongoing SMS obligations.</p> <p>The manner by which airports should resolve conflicts or competing obligations imposed by the proposed part 139 SMS manual, by other SMS requirements (including, but not limited to, Order 5200.11), SMS requirements imposed on other airfield users (including part 121 operators and ATO), existing contractual obligations, and other grant assurance obligations.</p> <p>The liability and public information issues raised by the obligation to prepare safety risk assessments and to keep records on safety evaluations of all sorts that may necessarily be available to the public under federal or state law.</p> <p>The responsibilities of the accountable executive in the context of the practical realities of staff organization and responsibilities at large complex airports.</p> <p>The agency needs to provide a clear and unequivocal hierarchy of authority among the various proposed and forthcoming SMS requirements so that airports do not have to guess who has authority and which SMS program governs a particular activity.</p> <p>The proprietor's safety obligations should be scaled and adapted depending upon (a) the activities that occur within</p>		

Airport: <b>North Las Vegas</b>			Documents delivered for Pilot Study: Pilot safety management system plan
Team Member: Abel Tapia			
Airport contact: Ben Czyzewski	# of Operations: 131,143	# of Employees: 27	
	each non-movement area; (b) the practical level of control that the proprietor exercises over activities within these areas and (c) the extent to which access is within the control of a tenant.		
May we put your information on the public docket? Please send electronic copies along with your ok to use the information.	No		

**Table 21 – North Las Vegas, NV**

Airport: <b>Pittsburgh, PA</b>			Documents delivered for Pilot Study: In Progress
Team Member: Travis Fiebelkorn			
Airport contact: Kurt Sopp	# of Operations: 144,563	# of Employees: 6000	
How many FTEs currently work on SMS?	Collectively, two FTEs		
Do you anticipate adding FTEs when implementation is complete?	Yes, one additional FTE		
Do you envision FTEs or consultants managing your SMS after implementation?	FTEs will manage our program after full implementation. We may use a consultant periodically to conduct an audit in support of safety assurance efforts.		
Did you use a consultant in your SMS process? If so, which one? In what areas?	We utilized Jacobs Consultancy (now Leigh Fisher) to conduct GAP analysis and the drafting of our SMS Program and implementation plan		
What were your challenges in interpreting the SMS process?	One difficulty in preparing our SMS plan was the fact that we developed the plan in advance of the NPRM. As such, this necessitated our revising the plan in order to meet the new pending requirements of the NPRM.		
What types of risks/hazards did you put through the SRM process during the Pilot Study?	As part of the implementation Pilot Study we will conduct three SRA. We have completed one dealing with Jetway Hazards. Other planned SRA will include runway construction, and wildlife hazards.		
What did the Gap Analysis Reveal?	To implement SMS, the airport was required to review our organizational structure and assign specific duties related to SMS. Additionally, we found that we could improve upon safety promotion efforts. Finally, we found that we were in need of an incident reporting database that would allow for the easy review of incidents and hazards in order to conduct trend analysis.		
What difficulties/ challenges have you experienced during the Pilot Study? Lessons learned?	We underestimated the amount of staff time required in order to implement SMS. Training time for staff is significant, as is the time and effort related to the documentation of the SRM process. Our desire to integrate incident reporting software with a legacy work order management software has also been a challenge.		
What benefits have you seen to your airport from the SMS process? <ul style="list-style-type: none"> <li>• Unknown hazards</li> <li>• A more active safety committee,</li> <li>• A tracking system that leads to a more proactive approach</li> <li>• One party identified as being responsible/in charge of safety concerns</li> <li>• Lower long-term costs</li> <li>• Others</li> </ul>	As a result of our implementing SMS there is a greater safety awareness among employees. Once role out is complete, we anticipate improved means of monitoring and trending safety incidents/hazards. Finally, we have received positive input from our liability insurance carrier resulting from our use of SMS, though no reduction in rates have been realized.		
What were the key findings at your airport, as part of the Pilot Study?	In many respects we are operating under SMS in much the same way as we have always operated, reviewing hazards and identifying ways in which to minimize risk. We tend to have a more methodical approach to safety reviews. It has been our experience that SMS has brought a significant		

Airport: <b>Pittsburgh, PA</b>			Documents delivered for Pilot Study: In Progress
Team Member: Travis Fiebelkorn			
Airport contact: Kurt Sopp	# of Operations: 144,563	# of Employees: 6000	
	increase in required documentation.		
Did you feel the FAA guidance was sufficient? What would you want to see included in the SMS AC?	It is important that the SMS AC is updated to reflect provisions specified in the final SMS rule making. This document was developed as a general guidance document and in order to provide an orientation to SMS. It would also be beneficial to clarify how various SMS initiatives (airport, airline, FAA ATO, FAA ADO) will coincide and become a comprehensive as opposed to a segmented approach to safety.		
May we put your information on the public docket? Please send electronic copies along with your ok to use the information.	No		

**Table 22 – Pittsburgh, PA**

Airport: <b>South Bend, Indiana</b>			Documents delivered for Pilot Study: Gap Analysis, Policy, Manual, Implementation Plan, Follow-On Study Report, SRAs
Team Member: Kenneth Taira			
Airport contact: Bruce MacLaclan, Operations Manager	# of Operations: 24,000	# of Employees: 45	
How many FTEs currently work on SMS?	2 (collateral duties)		
Do you anticipate adding FTEs when implementation is complete?	No		
Do you envision FTEs or consultants managing your SMS after implementation?	Possibly. May enlist consultant for training		
Did you use a consultant in your SMS process? If so, which one? In what areas?	Yes. Pilot and Follow-On Studies: All phases of data collection, drafting documentation; used subcontractor help for hazard identification and legal work (non-punitive reporting)		
What were your challenges in interpreting the SMS process?	No significant challenges encountered. Consultant is experienced in 139 and ICAO. One future challenge is to correlate SMS with 139 - are they integrated, separate, redundant? Airport needed to figure out the "what" of SMS, then the "how". Next step was to sell it to the users. An overall challenge is to get buy-in from people who feel this is redundant to 139 and "get them to the table".		
What types of risks/hazards did you put through the SRM process during the Pilot Study?	4 subjects: 1) Parking configuration / operations during Notre Dame football games; 2) Evaluation of trend identified with tug operations, ramp safety near aircraft; 3) (Performed prior to Pilot Study): Terminal expansion - impact of new configuration on aircraft parking / gate usage; 4) (Performed prior to Pilot Study): Maintenance hangar access: determining if aircraft should be mechanic-taxed or tugged across a decommissioned taxiway. A mock SRA was conducted on UPS ramp operations as a introduction to SRM.		
What did the Gap Analysis Reveal?	Self Inspection: Upward reporting of inspection and correction process - making senior management aware of activity; Airfield Inspections: Capture current self inspection practices (1 inspection per shift vice 1 per day in the ACM) in writing; Commercial aircraft operations ramp: Documenting specific inspection items on self inspection documentation; Safety Manager: Designate a Safety Manager to oversee SMS and ensure communication with senior management; Non-Punitive Reporting System: Establish a system; Training Records: Document procedures for conducting the established practice of auditing FBO fueling personnel training records; Recurring Training: Establish consistent recurrent training timelines and consider establishing 12 month cycle for all training; Condition Reports: Establish and document timelines for filing condition reports; Communication: Evaluate and capture current practices in		

<p><b>Airport: South Bend, Indiana</b></p>			<p>Documents delivered for Pilot Study: Gap Analysis, Policy, Manual, Implementation Plan, Follow-On Study Report, SRAs</p>
<p>Team Member: Kenneth Taira</p>			
<p>Airport contact: Bruce MacLaclan, Operations Manager</p>	<p># of Operations: 24,000</p>	<p># of Employees: 45</p>	
	<p>writing (ACM); Pedestrian and Ground Vehicle Procedures: Evaluate content and effectiveness of training program; Obstructions: Identify ownership of obstructions and develop a notification / tracking system for ensuring obstructions are monitored and addressed; Wildlife: Include training requirements in the WHMP</p>		
<p>What difficulties/ challenges have you experienced during the Pilot Study? Lessons learned?</p>	<p>Challenges: Legality/confidentiality of the non-punitive reporting system; Presenting SMS to an industry structure and culture that has changed greatly (employee/employer loyalty, subcontracting, dedication to aviation; Encouraging communication of safety related activities (e.g., getting air carriers to report incidents/damage to their equipment on the ramp); Encouraging documentation of conversational information (water cooler talk) to collect relevant data; Determining who calls a SRMP and when, how; Concern about multiple SMS for ATO, ARP, AVS, Air Carriers - how will multiple SMSs be integrated / correlated to prevent duplication of effort?; Addressing the issue of LOBs convening competing SRMPs to produce a desired outcome; Non-Punitive Reporting - A subcontractor was hired to research confidentiality and data susceptibility to FOIA. Data storage alternatives were proposed to isolate the data from the airport or entities where it would be subject to FOIA. The Follow-On report Appendix A details these alternatives.</p>		
<p>What benefits have you seen to your airport from the SMS process?</p> <ul style="list-style-type: none"> <li>• Unknown hazards</li> <li>• A more active safety committee,</li> <li>• A tracking system that leads to a more proactive approach</li> <li>• One party identified as being responsible/in charge of safety concerns</li> <li>• Lower long-term costs</li> <li>• Others</li> </ul>	<p>Unknown Hazards: One SRA did identify previously unknown hazards relating to the issue with tug operations on the air carrier ramp. Other SRAs were conducted for system changes; Active Safety Committee: Good participation in SRAs, considering safety-related work is a collateral duty for most of the SRMP members; Tracking System: System is in development; One party identified as responsible/in charge of safety concerns: No real change - there's awareness of the process, reliance on the chain of command. Familiarization will occur through recurrent badge training; Lower long term costs: No change, too early to tell. There's an anticipated cost reduction similar to the workers' comp multiplier. Cost savings under 139 may not be significant because it's already saving costs by preventing accidents; Others: Relationship with tenants improved. The process inherently and actively involves impacted parties/users to provide data that result in better communication / awareness of hazards and risk. It also forces the airport into a leadership role, bringing everyone into a collaborative effort. The approach an airport takes to SMS speaks to the way the airport is managed.</p>		
<p>What were the key findings at your airport, as part of the Pilot</p>	<p>The Pilot Study work validated the airport's current activity relative to safety and provided ideas for formalizing and</p>		

Airport: <b>South Bend, Indiana</b>			Documents delivered for Pilot Study: Gap Analysis, Policy, Manual, Implementation Plan, Follow-On Study Report, SRAs
Team Member: Kenneth Taira			
Airport contact: Bruce MacLaclan, Operations Manager	# of Operations: 24,000	# of Employees: 45	
Study?	tweaking the process to improve it.		
Did you feel the FAA guidance was sufficient? What would you want to see included in the SMS AC?	Yes. Further guidance came from teleconferences, consultants, networking with other airports. With basics laid out by the FAA, the Pilot Study became a "community thing." The guidance got parties started down the road and left enough leeway for interpretation. AC: Include written clarification describing how FAA approaches SMS. Does it intend for SMS to be a standalone document or part of the ACM? If SMS is part of the ACM, and an airport includes information about operations outside of 139, can the ACSI inspect and cite the airport for violations in those areas? Will the airport need to maintain 2 SMSs - 1 within the ACM and another for everything outside of 139? This will be counterproductive. Make sure the AC does not move airports too far toward procedure-based documents (overreliance on checklists). Too much documentation will be a distraction to the SRM process.		
May we put your information on the public docket? Please send electronic copies along with your ok to use the information.	Yes. Dave Fleet will forward information by email.		

**Table 23 – South Bend, IN**

Airport: <b>Southern Illinois University</b>			Documents delivered for Pilot Study: Manual, Implementation Plan
Team Member: Kenneth Taira			
Airport contact: Gary Shafer	# of Operations: 80,000	# of Employees: 15	
How many FTEs currently work on SMS?	One		
Do you anticipate adding FTEs when implementation is complete?	One		
Do you envision FTEs or consultants managing your SMS after implementation?	No		
Did you use a consultant in your SMS process? If so, which one? In what areas?	Yes. Gap Analysis, SMS Manual and implementation		
What were your challenges in interpreting the SMS process?	Concept was difficult to grasp at first. Guidance was vague, nebulous. Airport felt like it was stumbling through the process, with little idea of where the FAA wanted the Pilot Study to go other than the 21 deliverable items to use as guidance. When constructing a foundation, Airport had difficulty defining the difference between SMS and safety program. Airport sought background information by attending AAAE meetings and reviewing ACRP and ICAO material. The Airport had a theory that the FAA was intentionally vague on its instructions in order to spark creativity among airports. The Airport felt the Gap Analysis was challenging because of a lack of guidance. The Airport used ICAO as a reference to perform the Gap Analysis.		
What types of risks/hazards did you put through the SRM process during the Pilot Study?	3 projects: 1) Impact of new buildings on pedestrian/vehicle traffic and parking at the airport campus (Landside); 2) Assessment of blind spots on non-movement areas (Airside); WHM topic (Airside, in progress)		
What did the Gap Analysis Reveal?	Safety must be formalized through: 1) Adjusting documentation where it is lacking; 2) developing committees; 3) setting up data collection (e.g., providing a website to collect confidential safety reports); 4) ensuring visibility of/attention to safety is maximized.		
What difficulties/ challenges have you experienced during the Pilot Study? Lessons learned?	1) How do airports get funding for staffing, training delivery, developing tools? This will test Airport Managers' creativity. 2) How do airports get funding for mitigation that requires construction? 3) Question: Is liability assumed when mitigations are made known but not acted on? This may create a risk of Airport Sponsors minimizing hazards to avoid spending money. Lessons Learned: 1) Ensuring management involvement / buy-in. Leadership is critical. 2) Communication should come early and often to front-end load information from the FAA through the Airport to the tenants (end users).		
What benefits have you seen to your airport from the SMS process?	Unknown Hazards: Some issues may be more efficiently dealt with using longer term, continuing SRAs as opposed to multiple SRAs on individual issues that are all related. SMS is building a culture that, combined with improved data collection, will bring out hazards more efficiently. A more		
	<ul style="list-style-type: none"> <li>• Unknown hazards</li> <li>• A more active safety</li> </ul>		

Airport: <b>Southern Illinois University</b>			Documents delivered for Pilot Study: Manual, Implementation Plan
Team Member: Kenneth Taira			
Airport contact: Gary Shafer	# of Operations: 80,000	# of Employees: 15	
committee, <ul style="list-style-type: none"> <li>• A tracking system that leads to a more proactive approach</li> <li>• One party identified as being responsible/in charge of safety concerns</li> <li>• Lower long-term costs</li> <li>• Others</li> </ul>	active safety committee: Results in more activity - information sharing. People respond to the tone set by the Airport Manager through the Safety Committee, which leads to improved identification of hazards. Formalization of the safety culture through elements like the safety committee establishes the SMS's credibility among users. A tracking system that leads to a more proactive approach: Incident Reporter by OMNI Air Group (data collection software) was cumbersome. SIU developed a web-based data collection site that collects, organizes and tracks data, reducing workload on the person responsible for monitoring the system (currently Airport Manager). Email functionality allows immediate receipt, evaluation and action on safety reports submitted through the website. One party identified as being responsible /in charge of safety concerns: Greater impact using the web based data collection system. The system allows one person to address issues more efficiently. With efficient data collection and notification, one person can address issues efficiently and consistently. Lower long-term costs: Too early to determine - no cost savings noted yet, but enough data to evaluate. Others: SIU's SMS project has been a boon to SIU for professional development, aviation industry and airports. The system increases communication, which has led to increased safety-related activity and awareness.		
What were the key findings at your airport, as part of the Pilot Study?	Performing the SRAs at the airport demonstrated value early on. It helped direct specific attention to safety issues and mitigation. SRAs were valuable in bringing together different perspectives and allowing participants to understand the perspectives of the other parties involved.		
Did you feel the FAA guidance was sufficient? What would you want to see included in the SMS AC?	No. Include examples or samples of SMS Manual or ACM with SMS. The CSPP example in the current AC 150-5200-37 was helpful. Develop the guidance to be helpful to the end user. Cater the guidance to those airports that do not have many resources (like consultants) available.		
May we put your information on the public docket? Please send electronic copies along with your ok to use the information.	Completed and saved to the Q: Drive		

**Table 24 – Southern Illinois University, IL**

Airport: <b>Talladega, AL</b>	# of Operations:	# of Employees:	
Team Member: Travis Fiebelkorn	Zero **Airport	FBO runs the	Documents
	surrendered 139	airport, employees	delivered for Pilot
Airport contact: Ken Gilbert or Paul Esposito	certificate after	paid by the	Study: Manual,
	completing SMS	speedway	Gap Analysis
How many FTEs currently work on SMS?	None		
Do you anticipate adding FTEs when implementation is complete?	If Talladega decided to move forward, the estimate for SMS implementation was 953 hours for implementation and 720 hours each year for management. (refer to the report submitted for further detail)		
Do you envision FTEs or consultants managing your SMS after implementation?	■		
Did you use a consultant in your SMS process? If so, which one? In what areas?	Yes, ESIS, Inc. was used to perform the FAA sponsored Phase II Pilot Study. A gap analysis was performed, as well as a perception survey. A Sample SMS manual was also developed.		
What were your challenges in interpreting the SMS process?	<p>The match between Part 139 and the SMS was difficult to digest as well as trying to determine if Part 139 was a subset of SMS, or vice versa. It appears the FAA with the NPRM has determined that SMS will be Part of Part 139. No guidance as to the applicability or relationship was or is provided.</p> <p>In addition, the ICAO and FAA SMS ACs regarding SMS are not always consistent with industry SMS standards. In particular, as defined by the AC 150/5200-37, SMS expectations are at time clearly communicated (e.g., Responsibility for assigning a Safety Manager) and at other times vague; such as establishing Objectives to achieve SMS or in the performance of Investigations. As a result, our Gap Analysis added Elements to the SMS outline, to reflect some of the industry standards. In particular, we added an element on Incident Investigations under Risk Management and Recognition under Safety Promotion, Encouragement. We also defined Business Integration under Safety Assurance to include Preventative Maintenance and Emergency Preparedness. Associated criteria were added to these elements, again, based on industry standards.</p>		
What types of risks/hazards did you put through the SRM process during the Pilot Study?	As this was a Phase II pilot, no Risk Assessment was performed.		
What did the Gap Analysis Reveal?	<p>As part of the Gap Analysis, a Perception Survey was also performed, to gauge the perception of management commitment and safety program performance on the part of the workforce. The results of the gap analysis are presented below in Table 1, and represent and overall strong perception that safety is important; its importance is communicated and considered a value in terms of Talladega airport operations.</p> <p>There was only one question that did not rank as a strength and that was "Safety Suggestions" (vulnerability). There were no "gaps" identified by the Perception Survey.</p>		

<p>Airport: <b>Talladega, AL</b></p>	<p># of Operations:</p>	<p># of Employees:</p>	
<p>Team Member: Travis Fiebelkorn</p>	<p>Zero **Airport</p>	<p>FBO runs the</p>	<p>Documents</p>
	<p>surrendered 139</p>	<p>airport, employees</p>	<p>delivered for Pilot</p>
<p>Airport contact: Ken Gilbert or</p>	<p>certificate after</p>	<p>paid by the</p>	<p>Study: Manual,</p>
<p>Paul Esposito</p>	<p>completing SMS</p>	<p>speedway</p>	<p>Gap Analysis</p>
	<p>Therefore, based on the Gap Analysis, the findings and scores indicate that there is about a 20-25% overall agreement between what is required by Part 139, and future SMS expectations (75-80% gap). However, one element in particular registered a score of 60% (Inspections and Self-Auditing) and along with Requirements, was the highest of any of the Elements. The remainder of the Elements and Sections all showed "Gaps" as defined by this pilot assessment process.</p> <p>As a result of this comparison, Part 139 and ACM requirements provide some of the documentation expected of an SMS, however, the majority of the implementation strategy and responsibilities are undefined, except for Inspections, Integration of Maintenance and Emergency Preparedness. Some other element of SMS, (i.e., Tracking Systems, Roles and Responsibilities) would only provide a few of the expected documentation. Overall, the documentation expectations of SMS would require the ACM to be enhanced quite a bit.</p> <p>Upon comparing ICAO and AC SMS expectations to other industry SMS standards (ANSI Z10, OSHA's VPP, OHSAS 18000, etc.), there are a number of gaps to the proposed FAA SMS. ESIS recommends that, at a minimum, FAA consider either adding or better integrating or expanding the concepts of:</p> <ul style="list-style-type: none"> <li>• Safety Policy and Objectives: Objective setting based on Leading Trend Data and Performance Indicators.</li> <li>• Safety Policy and Objectives: Safety Committee Expectations</li> <li>• Safety Risk Management: Requirements</li> <li>• Safety Risk Management: Ongoing Risk Reductions (this is the biggest gap between industry standards and the FAA / ICAO SMS) the FAA/ ICAO seem to stop at a one-time treat and mitigate, rather than ongoing risk reductions.</li> <li>• Safety Risk Management: Incident Investigations and Root Cause Analysis.</li> <li>• Safety Risk Management: Emphasize the Risk Management Portion, Especially in Terms of Continuous Improvement and Risk Reduction.</li> <li>• Safety Promotion: Recognition and Encouragement</li> </ul> <p>ESIS recommends that FAA refer to OSHA's VPP (Voluntary Protection Program) and ANSI Z 10 Health and Safety Management Systems) for better clarification of the above integration and expansion suggestions</p>		
<p>What difficulties/ challenges have</p>	<p>Multiple entities controlling life-safety issues during the race</p>		

<p><b>Airport: Talladega, AL</b></p>	<p><b># of Operations:</b></p>	<p><b># of Employees:</b></p>	
<p>Team Member: Travis Fiebelkorn</p>	<p>Zero **Airport</p>	<p>FBO runs the</p>	<p>Documents</p>
	<p>surrendered 139</p>	<p>airport, employees</p>	<p>delivered for Pilot</p>
<p>Airport contact: Ken Gilbert or</p>	<p>certificate after</p>	<p>paid by the</p>	<p>Study: Manual,</p>
<p>Paul Esposito</p>	<p>completing SMS</p>	<p>speedway</p>	<p>Gap Analysis</p>
<p>you experienced during the Pilot Study? Lessons learned?</p>	<p>weekends at the nearby speedway. Also, staff during these periods is subject to change, and specific training for the NASCAR events is on-going... race to race... year to year.</p>		
<p>What benefits have you seen to your airport from the SMS process?</p>	<p>None... The airport staff is simply doing what it deems is necessary to exist for 50 out of 52 weeks each year. The two other weeks it is a well run, well-staffed, well-protected facility with numerous safety programs in place. Once the NASCAR races are over, the airport reverts back to a sleepy, GA-style airport with minimal operations.</p>		
<ul style="list-style-type: none"> <li>• Unknown hazards</li> <li>• A more active safety committee,</li> <li>• A tracking system that leads to a more proactive approach</li> <li>• One party identified as being responsible/in charge of safety concerns</li> <li>• Lower long-term costs</li> <li>• Others</li> </ul>	<p>An SMS can provide an airport with the capacity to anticipate and address safety issues before they lead to a catastrophic incident or accident. SMS provides management with the ability to deal effectively with accidents and near misses so that valuable lessons are applied to improve safety and efficiency. Research has shown that safety and efficiency are positively linked.</p>		
<p>What were the key findings at your airport, as part of the Pilot Study?</p>	<p>This was basically a GA airport with 139 credentials. It is not funded by the City, and the Airport Board uses its funds to match FAA/AIP projects. The FBO runs the airport on a day-to-day basis, and their financial situation at the airport is poor, due to low revenues, etc. All of this contributed to the airport's relinquishing its 139 certification.</p>		
<p>Did you feel the FAA guidance was sufficient? What would you want to see included in the SMS AC?</p>	<p>I cannot answer this. I personally think the FAA/ADO in Jackson had very little input during the preparation of the report, and the FAA in DC was non-responsive to on your GAP analysis submittal. The FAA/ADO is the one that told us to "wrap it up" so the AIP project could be closed out.</p>		
<p>See comments above.</p>			
<p>May we put your information on the public docket? Please send electronic copies along with your ok to use the information.</p>	<p>I have no problem putting the final report on the public docket. However, I need to compile the various segment of the final report into one large PDF file.</p>		

**Table 25 – Talladega, AL**