



Austin-Bergstrom International Airport

Federal Aviation Administration Safety Management System (SMS) Pilot Program

GAP Analysis Findings

May 27, 2008

Austin-Bergstrom International Airport (ABIA) Gap Analysis Report

The FAA has identified select airports across the United States to participate in the Safety Management System Pilot Program (“SMS”) in an effort to develop a nationwide standard and requisite regulation. The FAA has required all airports participating in the SMS Pilot Study complete a Gap Analysis as part of the SMS developmental process. FAA guidance on the Gap Analysis directs the Gap Analysis to identify procedures, policies, documentation and actions airports are to implement as part of its SMS program extending beyond current Part 139 requirements identified in the airport’s Airport Certification Manual (ACM).

Airports today must balance many shared challenges including safety, security, financial, and human resources. Those challenges, individually and collectively, generate simultaneous high priorities that demand airport management teams balance in an effective manner. The development and implementation of a Safety Management System in today’s airports must be tailored to the operational needs and resources available at that airport. The development of a SMS Program must utilize available resources and workload while meeting the intent of SMS and Safety Risk Management (SRM) principles.

The Austin-Bergstrom International Airport (ABIA), located in Austin, Texas, was one of the airports selected by the FAA to participate in the SMS Pilot Program. ABIA (Department of Aviation, “DOA”) is a department within the City of Austin and thereby interacts as a functionary of city government with the DOA maintained under an Executive Director. Both the Executive Director and Aviation Director expressed their commitment to safety improvements, which was their impetus for the application to the SMS Pilot Program. ABIA has an outstanding safety record and a resolve to improve their safety and quality management process. They welcome the Gap Analysis and the continued development and implementation of their SMS Program and Manual.

The purpose of the GAP Analysis is to document existing gaps or deficiencies in the airport’s procedures, policies, documentation and actions existing between current operations outlined in the ACM as compared to the principles identified in the SMS. There are twenty-one (21) basic elements incorporated in to the SMS Manual and Program in the SMS Pilot Study Participants Guide.

The FAA published a requirement that the SMS Manual and program should “...identify which elements of the airport operator’s existing practices and guidance materials currently meet SMS requirements, which elements do not, and how these latter practices and documents will be revised in the future for consistency with the SMS Plan”. Three classifications have been selected to identify to what degree existing SMS elements meet requirements. The three classifications are defined as follows:

1. “Existing” (E) – currently in existence and in use.
2. “In Progress” (IP) – either in process of being developed, or in process of being implemented.
3. “GAP” (G) – there is no existing policy or procedure currently in place.

A few elements have a multi-classification due to differing areas of responsibilities and procedures and are so noted. Discrepancies not pertinent to the GAP Analysis will be discussed under separate cover as specific recommendation to ABIA airport.

In order to conduct the analysis, there must be identified benchmarks and best practices learned from interviews, surveys, and analysis, which will then be compared to the four elements of SMS:

- Safety Policy and Objectives
- Safety Risk Management
- Safety Assurance
- Safety Promotion

The Gap Analysis performed at ABIA compares ABIA’s current status relative to the 21 elements of the SMS Manual and Program in the SMS Pilot Study Participants Guide. A complete analysis was performed by comparing both the ACM and Part 139 to the 21 tenants of SMS identified by the FAA. Presented is a checklist in worksheet format along with a narrative summary of how ABIA’s procedures relate to the 21 elements.

The ACM was reviewed by subject and compared to Part 139 and SMS requirements. Then, Part 139 was reviewed and compared by line item to existing conditions and requirements. The organization and layout of the worksheets were designed to facilitate and crosscheck the assessments for the Gap Analysis and to provide a basis for the foundation and development of the SMS Manual. Methods utilized for determining status and existing conditions were interviews, document reviews, and observations at ABIA.

SMS GAP ANALYSIS SUMMARY - ABIA

The following is a summary of the GAP Analysis performed at the Austin Bergstrom International Airport. This summary correlates to the 21 elements of the Federal Aviation Administration's (FAA) Safety Management System (SMS) Manual and Program, as identified in the FAA SMS Pilot Study Participants Guide, dated April 6, 2007. Those findings are as follows;

1) Written safety policy statement and communication plan

Status – GAP

Currently, there is no written safety policy or communication plan. Management is in the process of reviewing a draft policy to reflect the best practices of SMS with emphasis on a safety policy for the Aviation division. A communication plan will be developed later, as part of the SMS Safety Assurance Section, which will reflect the organizational goals, objectives and operation.

2) Identification and description of the airport safety goals

Status – GAP

Safety goals are presently referenced only in Airport Public Information publications. There is no stated airport safety policy which reflects ABIA's safety goals identified and described in a written format although ABIA exhibits a strong commitment to airport safety. As the over-all policy statement is formulated and implemented, it is recommended that safety goals be expressed from both an operational viewpoint and enveloped into the safety culture in a formalized document.

3) A plan for employee SMS indoctrination and training

Status – GAP

There currently is no employee SMS indoctrination and training program. SMS training program curriculum required under SMS will be developed in the SMS training section of the Safety Program Manual.

4) Documented process to identify training requirements for systems safety

Status – In Progress

ABIA currently has a training program which meets the requirement of Part 139 and City of Austin policies and regulations. Additional recommendations were made to assist with record keeping in movement area recurrent training. Training specific to SMS will be further integrated in to new and existing programs.

5) A plan to validate training effectiveness and the process to gain training feedback, including usable metrics

Status – In Progress

Airport Operations has limited measures currently in place to validate training effectiveness through its record keeping functions. Additional measures for effectiveness are recommended to be integrated into the SMS Manual as SMS is developed and implemented.

6) A defined process to communicate safety policies and objectives throughout the organization

Status – Existing

The Department of Aviation has developed current practices for promoting safety awareness at all levels. Regular safety meetings are held resulting in detailed debriefs posted on paper and electronically, as required. Safety bulletin boards are posted in all main workplaces with newly installed safety/hazard reporting boxes where employees can report safety concerns observed, even on an anonymous basis. As the Non-Punitive Safety Reporting System is developed, further enhancements will be integrated into existing safety communication methods and practices.

7) A plan and description of employee Non-Punitive Reporting Systems, existing and planned.

Status – GAP

There is currently no formalized Safety Reporting System in place. Several divisions within the Department of Aviation currently utilize an informal, but successful safety reporting policy. As SMS is developed and implemented, the Department of Aviation will need to formalize and expand their current system to address the requirements of the SMS program. ABIA's primary emphasis and focus continues to be safety reporting rather than how the non-punitive aspects of the system will affect or protect their employees.

8) An organizational chart identifying the names and safety responsibilities of all key personnel such as the following: Top Management, Safety Manager, Department Heads/Managers, Established Safety Committees and Chairs.

Status – Existing

Multiple organizational charts exist with unclear titles and responsibilities which may not accurately reflect current organizational structure. ABIA has not chosen to specifically identify a single position or person titled "Safety Manager". The Operations Division currently does have an Operations Supervisor with many safety responsibilities, some of which include operations safety, training, and the coordination of joint monthly Safety Committee meetings. ABIA's safety management concept and procedures has developed beyond a traditional process of chain of command reporting into an active process of incident command response. This allows for immediate response and implementation of safety procedures and decision making abilities by many personnel levels within the organization. ABIA is in the process of developing an organizational chart that will clearly identify their organizational lines of authority and responsibility, while simultaneously supporting 139 requirements.

9) Description of the safety risk management process, including application of "The Five Phases of SRM (Safety Risk Management)" as outlined in AC 150/5200-37, Introduction to Safety Management Systems for Airport Operators.

Status – GAP

The Department of Aviation currently does not have existing policies and procedures for the implementation of SRM and the Five Phases of SRM. As part of the pilot program one will be developed and integrated into SMS.

10) Guidance on the use of SRM and trend analysis.

Status – GAP

Currently there is no guidance on the use of SRM, nor data being collected to allow for development of trends or trend analysis. The ability to ascertain both short and long term trend analysis of risk management will depend on the level of involvement of management in the SRM process.

11) Defined process for documenting the results of SRM, including a description of how documents will be stored, i.e., electronic or paper.

Status – GAP

As there is no SRM currently in effect, there is not a clearly defined process for documenting the results of SRM, nor procedures identified for proper management of records related to SRM.

12) Descriptions of how top management will follow up on SRM to ensure safety mitigation strategies are appropriate.

Status – GAP

Because there is no SRM in place there is no method currently established to ensure safety mitigation strategies. The Department of Aviation will need to develop policies and procedures for the implementation of SRM and the five phases of the SMS program as the manual evolves. The Covey Strategic Management Process, which has been successfully implemented at ABIA, would provide an excellent vehicle for the development and implementation of SRM. By aligning SRM with “The Four Disciplines of Execution”, a framework already in place, SMS can be painlessly incorporated into current operations. These four disciplines involve: goals, metrics, actions and accountability processes

13) A description of the airport quality management and/or risk management program (if applicable) and its integration into the airport SMS.

Status – GAP

There is currently no airport quality management and/or risk management program. As part of the SMS development process, the Department of Aviation will create a Risk Management program as part of the SMS manual.

14) Description of a plan to integrate apron safety management into the airport SMS.

Status – Gap

No apron safety management program currently exists. As part of the developing SMS program, the recommendation has been made that ABIA include an apron safety program into the implementation of SMS and Manual.

15) A detailed method to document self-auditing processes and their findings.

Status – Gap

Currently, there is no method or process in the Operations department for self-auditing in place. Although, no formalized self auditing process exists, ABIA has resources (personnel, reporting systems, databases) in other parts of the Aviation Department that currently performs audits in program areas such as Finance, Human Resources and Information Resources. Currently, ABIA utilizes the Airport Security

Operations Compliance System (ASOCS), for day to day airport conditions in accordance with Part 139. The ASOCS program may contain performance measure features which can have the capability to sort metrics and evaluate data to implement measures and procedures for satisfying SMS requirements. The development of the ABIA SMS Assurance Program could utilize the existing staff for this requirement. Management has identified their interest and commitment to develop a self auditing process which will comply and exceed Part 139.327. This program will be reviewed, modified, and developed to support the SMS program.

16) A detailed method to document self-inspection reviews, analysis, and findings.

Status – Existing

The documentation methods under Part 139 and the City of Austin are acceptable. The development and implementation of SMS will enhance the existing reviews, analysis, findings and documentation. As SMS develops, their current self inspection program can be further modified to satisfy SMS requirements.

17) A description or plan to integrate the tailored SMS program plan into the overall operation of the airport.

Status – GAP

There is no plan currently in existence to integrate an SMS program into airport operations. The implementation and integration of SMS will involve management/staff decisions, with airport divisions assigned accountability and responsibility for various safety actions.

18) Documented plan for training and education, safety communication, competency, and continuous improvement process.

Status – In Progress

Currently, The Department of Aviation has documented training and education as defined under Part 139. Additional enhancements will need to be developed and implemented to meet the requirement of the SMS program and integrated into the manual. Additional enhancements may include formalized procedures and consistent processes throughout the organization in safety communication and safety risk. These safety communication requirements may be best implemented through ABIA's Covey Strategic Planning Program, currently in use. At ABIA, each division has the directive to develop Wildly Important Goals (WIG's) to address issues and processes which are measured by actual results.

19) Procedures to promote safety awareness and participation in non-punitive reporting systems

Status – Gap

Currently, there are no formalized procedures to promote safety awareness or allow participation in a non-punitive reporting system. However, ABIA does promote safety awareness in general training. ABIA has developed an open door safety policy throughout the organization that has not been formalized into a non-punitive reporting system. As the non-punitive reporting procedures are developed and implemented into SMS, employees at all levels will be directed and encouraged to be proactive participants in the safety culture.

20) Process to document and review lessons learned from within the organization.

Status – GAP

There is no formal process to document and disseminate lessons learned from within the organization. As SMS further develops, a formal process will be developed by management who will lead the way in the promotion of a safety culture and promote the individual's safety responsibilities within the organization.

21) Schedule for implementation and anticipated associated costs.

Status – In Progress

The Department of Aviation and the SMS consultant group has developed an initial program schedule to be reviewed monthly as the project proceeds. Implementation costs will be provided separately from the SMS Manual.

The Following SMS GAP Analysis Summary Table presents the GAP Analysis findings in a table format. The worksheet lists the 21 elements followed by three columns denoting the current status of each element. The “E” column identifies those elements that are existing, the “I” column identifies those elements that are “In Progress”, and the “G” column identifies those elements do not currently exist and are considered GAP. The COMMENTS column explains the status of each element.

SMS GAP ANALYSIS SUMMARY TABLE					
	SMS PROGRAM ELEMENTS	E	I	G	COMMENTS
1	Written Safety Policy & Communication Plan			X	To be developed
2	Identification & description of Airport Safety Goals			X	Exists in Airport Public Information Publications only
3	Plan for employee SMS Indoctrination and Training			X	SMS - To be developed
4	Documented process to Ident Training req for systems safety		X		139 Training documented - SMS sys to be developed
5	Plan to validate training effectiveness & feedback process		X		Air Ops has training validation - enhance with SMS development
6	Process to communicate safety policies & objectives	X			Airside 139 Safety awareness items adequate
7	Non-Punitive Safety reporting, existing and proposed			X	SMS - To be developed
8	Org Chart with names & safety responsibilities of key personnel	X			Does not reflect current organizational structure
9	Description SRM Process & Five Phases of SRM			X	SMS - To be developed
10	Guidance on Safety Risk Management Use & Trend Analysis			X	SMS - To be developed
11	Documentation SRM results - Process & Storage			X	SMS - To be developed
12	SRM follow up ensuring appropriate mitigation strategies			X	SMS - To be developed
13	Plan for SMS Integration to Operations and SMS			X	SMS - To be developed
14	Plan to integrate Apron Safety into airport SMS			X	SMS - To be developed
15	Documentation Self Auditing & Findings			X	Self inspect 139 - Self audit needs development modification
16	Documentation of Self Inspection Program	X			Documentation under 139.327 - Requires SRM enhancement
17	Integration Plan for SMS Program into airport operations			X	SMS - To be developed
18	Doc plan trng, comm, competency & improvement process		X		Some elements exist - will be further developed with SMS
19	Promote Safety Awareness & Non-Punitive reporting partic			X	Needs incorporation - Will be enhanced with non-punitive reporting
20	Document & Review Lessons Learned			X	SMS - To be developed
21	SMS Implementation Schedule & Anticipated Costs		X		Schedule and Budget to be determined

ABIA GAP Analysis

FAR Part 139 Worksheet

The FAR Part 139 worksheet is designed to compare the requirements of Part 139 with the Airport Certification Manual.

This worksheet is not designed to carry out a Part 139 Certification Audit.

The information derived from the worksheet will be used to ascertain what components of Part 139 and the ACM can be included as part of the SMS Program and Manual.

STATUS LEGEND	
E	Existing
I	In Progress
G	GAP

RESPONSIBILITY LEGEND			
ABIA	Austin-Bergstrom Intl Airport	DOM	Department of Maintenance
AIRCAR	Air Carrier	ED	Executive Director
AO	Airport Operations	FAA	Federal Aviation Authority
AOM	Airport Operations Manager	FMM	Field Maintenance Manager
ARFFC	ARFF Chief	FBO	Fixed Base Operator
BMM	Building Maintenance Manager	SO	Safety Office
COA	City of Austin	TEN	Tenant
DOA	Department of Aviation		

Austin Bergstrom International Airport - Part 139 Worksheet

	AIRPORT CERTIFICATION MANUAL (ACM)	E	I	G	Resp	COMMENTS
	Part 139.200-300					
1	139.201 General requirements					
2	(a)Adopts & complies with an ACM that:				COA	Preface
4		X			ED-DOA	ACM 1-1
5	(1)Has been approved by the Adiministrator (ADMIN)	X			ED-DOA	ACM 1-1
6	(2)Contents approved by ADMIN	X			ED-DOA	ACM 1-1
7	(3)Cert holders responsibility to operate by ACM - signed	X			ED-DOA	ACM 1-1
8	(4)Easy to revise and organize				COA	Preface
9	(b)Cert holder must:	X			AOM	ACM 1-1
11	(1) Keep ACM current at all times	X			AOM	ACM 1-1
	(2) Complete & current copy on airport					
12		X			AOM	ACM 1-1
13	(3) Provide portions ACM to those responsible for implementing	X			AOM	ACM 1-1
14	(c)Regional Airports Div Mgr compliance & current copy					
16	139.301 Records					
18	(a)Furnish on request by ADMIN, all records required by 139	X			ABIA	ACM 2-1
20	(b) Maintain records as follows:	X			ABIA	ACM 2-1
21		X			ABIA	Maintained at Airport Operations ACM 2-1
23	(1)Pers Training - 24 Consecutive Calendar Months (CCM)	X			SO-COA	Maintained at ARFF Station
25	(2)Emergency Personnel, A/C rescue & FF, EMS 24 CCM	X			ABIA	Maintained at Office of each FBO - copy AO
27	(3)Airport fueling agent inspection - 12 CCM	X			ABIA	Maintained at Airport Operations ACM 2-1
29	(4)Fueling personnel trng - 12 CCM	X			ABIA	Maintained at Airport Operations ACM 2-1
31	(5)Self inspection - 12 CCM	X			ABIA	Maintained at Airport Operations ACM 2-1
33	(6)Movement & Safety area training - 24 CM	X			ABIA	Maintained at Airport Operations ACM 2-1
35	(7)Accident & Incident air carrier grnd vehicle 12 CCM	X			ABIA	Maintained at Airport Operations ACM 2-1
37	(8)Airport condition dissemination - 12 CCM	X			ABIA	ACM 2-1
42	(9)Make/maintain any records req by ADMIN Daily log	X			AOM	Maintained at Airport Operations ACM 2-1

Austin Bergstrom International Airport - Part 139 Worksheet

	AIRPORT CERTIFICATION MANUAL (ACM)	E	I	G	Resp	COMMENTS
43	139.303 Personnel					
44	(a) Provide sufficient/qualified personnel	X			DOA	ACM 3-1
47	(b) Equip Personnel. with sufficient resources to comply	X			DOA	ACM 3-1
50	(c) Train to ACM prior to initial duty & every 12 CCM	X			DOA	ACM 3-1
52		X			DOA	ACM 3-1
53	(1) Airport familiarization	X			DOA	ACM 3-1
54	(2) Process to access movement area .329	X			DOA	ACM 3-1
55	(3) Airport Communication / twr and operations	X			DOA	ACM 3-1
56	(4) Duties required under ACM & FAR 139	X			DOA	ACM 3-1
57	(5) Airfield inspections & additional req	X			DOA	ACM 3-1
58	(6) Instruction on Airport Emergency Plan (b) Make record of all training & maintain 24 CCM	X			ED-DOA	ACM 3-1
61	(e) Comply with the following training reqmts	X			ED-DOA	ACM 3-1
63	139.319	X			ARFFC	ACM 10-1
64	(1) Aircraft rescue and firefighting	X			TEN	ACM 11-1
65	(2) Hndig and storage of HAZMAT	X			AO	ACM 14-1
66	(3) Self Inspection Program	X			ED-DOA	ACM 15-1
67	(4) Pedestrians and Ground Vehicles	X			DO&DOM	Procedure letter 11/17/06
68	(5) Wildlife Hazard management	X			AO	ACM 14-1
69	(f) Airport condition reporting (f) Use of independent organization to comply with ACM					NA
70						NA
71	(1) ...if authorized by the Administrator					NA
72	(2) Description of responsibilities and duties					NA
73	(3) Prepare records to satisfaction of Administrator					
74	139.305 Paved Areas					
75	(a) Maintain and Repair pavement areas	X			FMM	ACM 4-1
78		X			FMM	ACM 4-1
79	(1) Pavement edge exceedences	X			FMM	ACM 4-1
80	(2) Holes	X			FMM	ACM 4-1
81	(3) Free of cracks & deterioration	X			FMM	ACM 4-1
82	(4) Loose impediment clean up	X			FMM	ACM 4-1
83	(5) Chemical solvent clean up removal	X			FMM	ACM 4-1
84	(6) Pavement drainage (b) Exceptions to snow and ice	X			AO/FM/BM	AMC 4-2
85	(c) Use of Advisory Circulars					Advisory - Review A/C's for best practices
86						

Austin Bergstrom International Airport - Part 139 Worksheet

	AIRPORT CERTIFICATION MANUAL (ACM)	E	I	G	Resp	COMMENTS
87	139.307 Unpaved Areas					
88	(a) Maintain and Repair of unpaved movement areas	X				ACM 4-1 - No unpaved movement areas
89						
90	139.309 Safety Areas					
91	(a) Provide runway & taxiway safety areas of at least	X			FMM	ACM 5-2
94		X			FMM	ACM 5-2
95	(1) ...that existed on specific dates	X			FMM	ACM 5-2
96	(2) Authorized at the time of construction	X			FMM	ACM 5-2
99	(b) Maintenance of Safety areas					Advisory - Review A/C's for best practices
99	(c) Use of Advisory circulars					Advisory - Review A/C's for best practices
100						
101	139.311 Marking Signs and Lighting					
102	(a) Provide and Maintain marking systems	X			FMM	ACM 6-1
104	Markings		X		FMM	Markings not addressed in daily inspection
105		X			FMM	ACM 6-1
106	(1) Rwy markings for takeoff and landings	X			FMM	ACM 6-1
107	(2) Taxiway center line	X			FMM	ACM 6-1
108	(3) Taxiway edge markings as appropriate	X			FMM	ACM 6-1
109	(4) Holding position markings	X			FMM	ACM 6-1
	(5) ILS critical area markings					
110	(b) Signage	X			BMM	
111			X			Signage not addressed in daily inspection
112		X			BMM	ACM 6-1
113	(1) ...for air carrier operations	X			BMM	ACM 6-1
114	(i) taxiing routes on movement areas	X			BMM	ACM 6-1
115	(ii) holding lines	X			BMM	ACM 6-1
116	(iii) ILS critical area signs	X			BMM	ACM 6-1
117	(2) Internally lit signs Class I, II, and IV apts	X			BMM	ACM 6-1
118	(3) Internally lit signs Class III apts	X			BMM	ACM 6-1
118	(c) Lighting	X			BMM	ACM 6-1
120		X			BMM	ACM 6-1
121	(1) Rwy lighting for takeoff and landings	X			BMM	ACM 6-1
122	(2) Taxiway lighting systems	X			BMM	ACM 6-1
123	(3) Airport beacon	X			FAA	ACM 6-3
124	(4) Approach lighting	X			BMM	Part of daily inspection 16-1
125	(5) Obstruction markings and lighting	X			FMM/BMM	ACM 6-2
125	(b) Maintenance of Markings and Lighting					
128	(e) Lighting interference		X			Not mentioned
129	(f) Use of Advisory Circulars					Advisory - Review A/C's for best practices
130						

Austin Bergstrom International Airport - Part 139 Worksheet

	AIRPORT CERTIFICATION MANUAL (ACM)	E	I	G	Resp	COMMENTS
131	139.313 Snow and Ice Control					
132	(a) ...if located in a snow and ice area		X		AO/FM/BM	Paragraphs conflicting information ACM 7-1
135	(b) ...control plan must include instructions & procedures for:		X		AO/FM/BM	No instructions/Training mentioned ACM 7-1- 7-3
136	(1) Prompt removal as practical		X		AO/FM/BM	No instructions/Training mentioned ACM 7-1- 7-3
137	(2) Positioning of removed snow		X		AO/FM/BM	No instructions/Training mentioned ACM 7-1- 7-3
138	(3) Material to adhere to snow and ice		X		AO/FM/BM	No instructions/Training mentioned ACM 7-1- 7-3
139	(4) Timely commencement of control operations		X		AO/FM/BM	No instructions/Training mentioned ACM 7-1- 7-3
140	(5) Prompt notification to air carriers	X			AO	Airport Operations
141	(c) Use of Advisory Circulars					Advisory - Review A/C's for best practices
144						
145	139.315 Acft rescue & firefi Indx determination					
146	(a) Index is required for....	X			COA - ABIA	
149	(1) length of air carrier aircraft and	X			COA - ABIA	
150	(2) Average daily departures of carrier acft	X			COA - ABIA	
151	(b) Aircraft lengths are grouped as follows	X			COA - ABIA	
152	(1-5) see actual regulation	X			COA - ABIA	
153	(c) Index determination	X			COA - ABIA	ARFF Index D
154	(d) Minimum designagted index must be Index A	X			COA - ABIA	
155	(e) Exceptions and yet comply					NA
156						
157	139.317 Aircraft rescue Equip. and agents				ARFFC	
160	(a) Index A					NA
161	(b) Index B					NA
162	(c) Index C					NA
163	(d) Index D	X			ED-DOA	Established ACM 8-1
164	(e) Index E					NA
165	(f) Foam discharge capacity	X			ARFFC	ACM 9-3
166	(g) Agent discharge capacity	X			ARFFC	ACM 9-3
167	(h) Extinguishing agent substitutions	X			ARFFC	ACM 9-3
168	(i) AFFF quantity requirements	X			ARFFC	ACM 9-3
169	(j) Methods and procedures	X			ARFFC	
174						

Austin Bergstrom International Airport - Part 139 Worksheet

	AIRPORT CERTIFICATION MANUAL (ACM)	E	I	G	Resp	COMMENTS
175	139.319 Acft rescue & firefighting Ops req's	X			ARFFC	
178	(a) Capabilities	X			ARFFC	ACM 8-1
179	(b) Increase in Indexes	X			ARFFC	ACM 8-1
180	(c) Reduction rescue and firefighting	X			COA	ACM 8-1
181	(d) Procedures for reduction in capability	X			AOM	ACM 9-1
182		X			AOM	ACM 9-1
184	(e) (1-3) see reg Vehicle communication	X			ARFFC	ACM 9-1
185		X			ARFFC	ACM 9-1
186	(f) (1-4) see reg Vehicle marking and lighting	X			ARFFC	ACM 9-1
187		X			ARFFC	ACM 9-1
188	(1) flashing or rotating lights	X			ARFFC	ACM 9-1
189	(2) Markings of contrasting colors	X			ARFFC	ACM 9-1
190	(g) Vehicle readiness	X			ARFFC	ACM 9-1
192	(h) (1-3) see reg Response requirements	X			ARFFC	ACM 10-1
194		X			ARFFC	ACM 10-1
195	(1) insure the following	X			ARFFC	ACM 10-1
196		X			ARFFC	ACM 10-1
197	(i) respond to every air carrier emergency	X			ARFFC	ACM 10-1
198	(2) Administrator requests	X			ARFFC	ACM 10-1
199	(i) within 3 minutes. Midpoint of furthest runway	X			ARFFC	ACM 10-1
200	(ii) Personnel. Cert must ensure:	X			ARFFC	ACM 10-1 10-2
202	(ii) within 4 min - all other vehicles	X			ARFFC	ACM 10-1 10-2
203	(1) Equipped protective clothing & equip as per ADMIN	X			ARFFC	ACM 10-1 10-2
204	(2) Prop trained-prior to init duty & every 12 CCM	X			ARFFC	ACM 10-1 10-2
205	(3) Partic in live-drill b4 init duty & every 12 CCM	X			ARFFC	ACM 10-1 10-2
206	(4) Least one trained & current EMS avail air ops	X			ARFFC	ACM 10-1 10-2
207	(5) Record all training for each for 24 CCM aft compln	X			ARFFC	ACM 10-1 10-2
208	(6) Sufficient personnel during air ops	X			ARFFC	ACM 10-1 10-2
209	(7) Proc for alerting rescue & FF auth by ADMIN	X			ARFFC	ACM 10-1 10-2
210	(8) N/A per Emer Resp Guidebook in vehicles	X			ARFFC	ACM 11-1
212	(j) Hazardous materials guidance.	X				Don't have emergency access roads at ABIA
213	(l) Emergency access roads					Advisory - Review A/C's for best practices
215	(l) Advisory Circular use					

Austin Bergstrom International Airport - Part 139 Worksheet

	AIRPORT CERTIFICATION MANUAL (ACM)	E	I	G	Resp	COMMENTS
219	139.321 Handling and storing of HAZMAT	X			AO & ARFFC	ACM 11-1
220	(a) Protection of persons and property	X			AIRCAR/FBO	ACM 11-1
222		X			AIRCAR/FBO	ACM 11-1
223	(1) designated persons to receive training	X			AIRCAR/FBO	ACM 11-1
224	(2) Shipper assurance	X			DOA	DOA for compliance - exempt from training req
226	(b) Standards for fire & explosive protection	X			DOA	Procedure letters 11/17/06
227	(1-7) see reg. Spill Response Plan?	X			DOA	Excellent Spill Response Plan
229	(c) Fueling agent requirements	X			TEN	ACM 11-3
232	(d) Inspect physical facilities	X			ARFFC	ARFF inspect once every 3 mths-Records Maintain 12 CCM
235	(e) Training	X			TEN	Maintenanceain records 12 CCM
238	Fueling Agent Supervisor	X			TEN	ACM 11-3 11-4
239	(1) Fueling personnel	X			TEN	Trained & recurrent every 24 CCM
240	(2) Tenent training confirmation	X			TEN	Written confirmation to Cert holder trng req - every 12CCM
243	(g) noncompliance methods	X			ADO&M	Asst Dir of Ops & Maint report non-compliance to FAA
245	(h) Use of advisory circulars					Advisory - Review A/C's for best practices
246						
247	139.323 Traffic and wind direction indicators				AO-BMM	
250	(a) wind cones	X			AO-BMM	ACM 12-1
251	(b) traffic pattern indicator around wind cone	X			AO-BMM	ACM 12-1
252	(c) Use of Advisory Circular					Advisory - Review A/C's for best practices
254						
255						

Austin Bergstrom International Airport - Part 139 Worksheet

	AIRPORT CERTIFICATION MANUAL (ACM)	E	I	G	Resp	COMMENTS
256	139. 325 Airport emergency plan					
257	(a) Develop and maintain a plan	X			ED-DOA	Preface AEP
260	(1) procedures for prompt response	X			ED-DOA	AEP 2-1, 3-1
261	(2) sufficient guidance detail	X			ED-DOA	AEP 2-1, 3-1
262	(3) instructions for the largest aircraft	X			ED-DOA	AEP 2-1, 3-1
263	(b) Instructions for response	X			ED-DOA	AEP 2-1, 3-1
265	(1) Aircraft Incidents & Accidents	X			ED-DOA	Accident Response Plan
266	(2) Bomb incidents	X			ED-DOA	AEP 13-1 & Proc letter 11/17/2006I,
267	(3) Structural fires	X			ED-DOA	AEP 14-1
268	(4) Fires at fuel farms or fuel storage areas	X			ED-DOA	AEP 19-1
269	(5) Natural disaster	X			ED-DOA	AEP 12-1 & ABIA Foul Weather Emergency Plan
270	(6) HAZMAT incidents	X			ED-DOA	AEP 15-1
271	(7) Sabotage, hijack etc	X			ED-DOA	AEP 16-1
272	(8) Power failure for movement lighting	X			ED-DOA	AEP 17-1
273	(9) Water rescue situations	X			ED-DOA	AEP 18-1
275	(c) plan must address	X			ED-DOA	AEP 1-1
276	(1) medical services	X			ED-DOA	AEP 8-1
277	(2) local hospital info.	X			ED-DOA	AEP 9-6
278	(3) local ambulance and rescue companies	X			ED-DOA	AEP 9-6
279	(4) transportation of injured	X			ED-DOA	AEP 9-6
280	(5) list of hangar facilities		X		ED-DOA	Not Found
281	(6) crowd control	X			ED-DOA	AEP 5-1& 20-1
282	(7) Proc. For removing disabled acft.	X			ED-DOA	Procedure letter 2/8/08
283	(b) Other requirements	X			ED-DOA	Interagency Aircraft Accident Response Plan
284	(1) Accident survivors	X			ED-DOA	AEP 9-6
285	(2) Removal of disabled aircraft	X			ED-DOA COA	Procedure letter 2/8/08
286	(3) Emergency alarm or notification system	X			ED-DOA COA	AEP 2-1, 3-1
287	(4) Coordination Airport & Control Tower functions	X			ED-DOA COA	AEP Proc letter 12/15/2004
289	(e) plan for notifying other participants	X			ED-DOA COA	Interagency Aircraft Accident Response Plan
291	(f) water and marshland recoveries	X			ED-DOA COA	Interagency Aircraft Accident Response Plan
293	(g) each certificate holder must....	X			ED-DOA COA	AEP 6-1
295	(1) coordinate with law enforcement	X			ED-DOA COA	AEP 6-1
296	(2) provide for participation	X			ED-DOA COA	AEP 6-1
297	(3) all familiar W assignments & trained	X			ED-DOA COA	AEP 6-1
298	(4) plan review every 12 months	X			ED-DOA COA	AEP 6-1
299	(h) full scale exercises	X			ED-DOA COA	Every 36 CALENDAR MONTHS
300	(i) Security rules and regulations		X		ED-DOA COA	Not Found
302	(j) Use of Advisory Circulars					Advisory - Review A/C's for best practices

Austin Bergstrom International Airport - Part 139 Worksheet

	AIRPORT CERTIFICATION MANUAL (ACM)	E	I	G	Resp	COMMENTS
307	139.327 Self-inspection program	X			AO & FMM	
308	(a) Must inspect airport	X			AO	ACM 14-1
310		X			AO	ACM 14-1
311	(1) daily	X			AO	ACM 14-1
312	(2) when required	X			AO	ACM 14-1
313	(3) after an accident (b) provide the following	X			AO & FMM	ACM 14-4
315		X			AO & FMM	ACM 14-4
316	(1) equip. for conducting inspections	X			AO & FMM	ACM 14-4
317	(2) equipment for dissemination of info.	X			AO	ACM 14-4
318	(3) Procedures to insure qualified personnel Airport Familiarization	X			AO	ACM 14-1
319		X			AO	ACM 14-1
320	(i)	X			AO	ACM 14-1
321	(ii) Airport Emergency Plan	X			AO	ACM 14-1
322	(iii) NOTAM Procedures Discrepancy reporting procedures	X			AO	ACM 14-1
323	(iv) Proc for pedestrians & ground vehicles	X			AO	ACM 14 1-3
324	(v) reporting system to correct unsafe conditions (c) Each certificate holder must	X			AO	ACM 14-1
326		X			AO	ACM 14-2
327	(1) record of inspections every 12 months	X			AO	ACM 14 4-5
328	(2) Give training records to individuals (d) Use of Advisory Circulars					Advisory - Review A/C's for best practices
329						
330	139.329 Pedestrians and ground vehicles	X			AO	Procedures letter 2/28/08
331	(a) Limit access to movement areas	X			ED-DOA	ACM 15-2
333	(b) Implement procedures for safe access	X			AO	ACM 15-1 15-2
335	(c) Insure tower control of peds and vehicles	X			AO	ACM 15-1 15-2
337	(d) Control without an open control tower					NA
338	(e) consequences of non-compliance	X			AO	Public Safety 15-4
341	(f) Maintain the following records	X			AO/SO/COA	TRAIN system
344		X			AO/SO/COA	TRAIN system
345	(1) description of date of training	X			AO	Procedure letter 2/17/08
	(2) description of dates of any accidents					
351	139.331 Obstructions	X			AO COA	ACM 15-1
354	Removed, marked or lighted	X			AO	Maintenance-Austin Energy
355						

Austin Bergstrom International Airport - Part 139 Worksheet

	AIRPORT CERTIFICATION MANUAL (ACM)	E	I	G	Resp	COMMENTS
356	139.333 Protection of NAVAIDS	X			DOA-FAA	ACM 17-1
359	(a) Prevent NAVAID obstructions	X			DOA-FAA	ACM 17-1
360	(b) Protect NAVAIDS from theft	X			DOA-FAA	ACM 17-1
361	(c) Prevent disruption of signals	X			AO/DOA/FAA	ACM 17-2
362						
363	139.335 Public Protection	X			DOA	ACM 18-1
364	(a) Cert Holder must provide	X			DOA	ACM 18-1
367		X			DOA	ACM 18-1
368	(1) Safeguards to prevent inadvertent entry into movement area	X			DOA	ACM 18-1
369	(2) Protect people & property from aircraft blast	X			DOA	ACM 18-1
371	(b) Fencing FAA & TSA to facilitate a-1	X			DOA	ACM 18-1
371						
372	139.337 Wildlife Hazard Management	X			AO	ACM 19-1
373	(a) Immediate action alleviate wildlife hazards	X			AO	Procedure letter 11/17/2006
375	(b) Ensure wildlife hazard assessment follows events	X			DOM	ACM 19-1 & Procedure letter 11/17/06
377		X			DOM	ACM 19-1 & Procedure letter 11/17/06
378	(1) Air carrier has multiple wildlife strikes	X			DOM	ACM 19-1 & Procedure letter 11/17/06
379	(2) Air carrier sustains damage from wildlife	X			DOM	ACM 19-1 & Procedure letter 11/17/06
380	(3) Air carrier engine ingestion of wildlife	X			DOM	ACM 19-1 & Procedure letter 11/17/06
381	(4) Significant wildlife activity or flight pattern		X		DOM	Not mentioned
382	(5) Paragraph assess by wildlife damage management biologist	X			DOM	ACM 19-1 & Procedure letter 11/17/06
383	(1) Analysis of event	X			DOM	ACM 19-1 & Procedure letter 11/17/06
384	(2) Identify wildlife & Numbers	X			DOM	ACM 19-1 & Procedure letter 11/17/06
385	(3) Identify Airport features attracting wildlife	X			DOM	ACM 19-1 & Procedure letter 11/17/06
386	(4) Describe wildlife hazards	X			DOM	ACM 19-1 & Procedure letter 11/17/06
387	(5) Recommended actions to reduce wildlife hazards	X			DO	ACM 19-1
389	(6) Assessment form must be sent to ADMIN to consider	X			DOM	ACM 19-1 & Procedure letter 11/17/06
390	(1) The wildlife hazard assessment	X			DOM	ACM 19-1 & Procedure letter 11/17/06
391	(2) Recommended actions from assessment	X			DOM	ACM 19-1 & Procedure letter 11/17/06
392	(3) Aero activity at Airport	X			DOM	ACM 19-1 & Procedure letter 11/17/06
393	(4) Views of Certificate Holder	X			DOM	ACM 19-1 & Procedure letter 11/17/06
394	(5) Views of Airport users	X			DOM	ACM 19-1 & Procedure letter 11/17/06
395	(6) Other known factors	X			DO	ACM 19-1
397	(e) When ADMIN determines plan needed - cert holder form plan	X			DO	ACM 19-1 & Procedure letter 11/17/06
398	(1) Provide measures to alleviate hazard to air carriers	X			DO	ACM 19-1 & Procedure letter 11/17/06
399	(2) Plan submitted & approved by ADMIN	X			DO	ACM 19-1 & Procedure letter 11/17/06
399	(3) Becomes part of ACM	X			DO	ACM 19-1 & Procedure letter 11/17/06

Austin Bergstrom International Airport - Part 139 Worksheet

AIRPORT CERTIFICATION MANUAL (ACM)		E	I	G	Resp	COMMENTS
400	(f)Plan must include the following:	X			DO	ACM 19-1 & Procedure letter 11/17/06
402		X			DO	ACM 19-1 & Procedure letter 11/17/06
403	(1)Implementing authority	X			DO	ACM 19-1 & Procedure letter 11/17/06
404	(2)Prioritizing following actions	X			DO	ACM 19-1 & Procedure letter 11/17/06
405		X			DO	ACM 19-1 & Procedure letter 11/17/06
406	(i)wildlife population mgmnt	X			DO	ACM 19-1 & Procedure letter 11/17/06
407	(ii)Habitat modification	X			DO	ACM 19-1 & Procedure letter 11/17/06
408	(iii)Procedures changes wildlife control permits	X			DO	ACM 19-1 & Procedure letter 11/17/06
409	(4)Ident resources to implement plan	X			DO	ACM 19-1 & Procedure letter 11/17/06
410	(5)Procedures to be followed during air carr op	X			DO	ACM 19-1 & Procedure letter 11/17/06
411		X			DO	ACM 19-1 & Procedure letter 11/17/06
412	(i)Designers for implementing	X			DO	ACM 19-1 & Procedure letter 11/17/06
413	(ii)Prov phys inspc of wildlife areas b4 ops begin	X			DO	ACM 19-1 & Procedure letter 11/17/06
414	(iii)wildlife hazard control measures	X			DO	ACM 19-1 & Procedure letter 11/17/06
415	(iv)Effective coord between wildlife control & tower	X			DO	ACM 19-1 & Procedure letter 11/17/06
416		X			DO	ACM 19-1 & Procedure letter 11/17/06
417	(i)Plan's effectiveness	X			DO	ACM 19-1 & Procedure letter 11/17/06
418	(ii)Recyl wildlife hazard assessment from biologist					Advisory - Review A/C's for best practices
419	(g)FAA A/C contain proc acceptable to ADMIN					
420	139.339 Airport Condition Reporting	X			DOA	ACM 20-1
421	(a)Prov for coll & dissemination of Airport condition info to airlines	X			AO	ACM 20-1
423	(b)NOTAM use and systems apprvd by ADMIN	X			AO	ACM 20-1 & Figure 20-1 By fax to tenant air carriers
425	(c)Prov info Airport cond that may affect safe conditions	X			AO	ACM 20-1
427		X			AO	ACM 20-1
428	(1)Construction	X			AO	ACM 20-1
429	(2)Surface irregularities	X			AO	ACM 20-1
430	(3)Snow, ice, etc	X			AO	ACM 20-1
431	(4)Snow piles	X			AO	ACM 20-1
432	(5)Objects contrary to 139.313	X			AO	ACM 20-1
433	(6)Malfunction lights, signs, ILS crit area signc	X			AO	ACM 20-1
434	(7)Unresolved wildlife hazards 139.337	X			AO	ACM 20-1
435	(8)Nonavail rescue firefighting capability 139.319	X			AO	ACM 20-1
436	(9)Other adverse conditions	X			AO	ACM 20-1
437	Records	X			AO	Notification to air carriers records retained for 12 CCM
438	(e)FAA A/C's for NOTAM usage & dissem					Advisory - Review A/C's for best practices

Austin Bergstrom International Airport - Part 139 Worksheet

	AIRPORT CERTIFICATION MANUAL (ACM)	E	I	G	Resp	COMMENTS
439	139.341 Ident, mark, light construction & unserv areas	X			AO	ACM 21-1 21-2
440	(a) Each certificate holder must	X			AO	ACM 21-1 21-2
442		X			AO	ACM 21-1 21-2
443	(1) Mark & Light if need be as auth by ADMIN	X			AO	ACM 21-1 21-2
444		X			AO	ACM 21-1 21-2
445	(1) Each constr & unserv area	X			AO	ACM 21-1 21-2
446	(ii) Constr equip & roadways	X			AO	ACM 21-1 21-2
447	(iii) A discont area to NAVAIDS cables, etc.	X			AO	ACM 21-1 21-2
448	(b) FAA A/C's methods & proc ident constr					Advisory - Review A/C's for best practices
449	139.343 Any unsafe, cert must withhold service	X			DOA	ACM 22-1

ABIA GAP Analysis

SMS SPM Analysis Worksheet

This Jacobs Carter Burgess SMS Worksheet is designed to be a user friendly examination of airport operations in a sequence that follows the organization of the Airport Certification Manual.

The resulting information will be used to ascertain practices and procedures in place, to identify those elements of Part 139, which will be part of the SMS implementation.

Comparing this worksheet with the Part 139 worksheet will serve as a crosscheck for the accuracy and completeness of the compiled data.

STATUS LEGEND	
E	Existing
I	In Progress
G	GAP

RESPONSIBILITY LEGEND			
ABIA	Austin-Bergstrom Intl Airport	DOM	Department of Maintenance
AIRCAR	Air Carrier	ED	Executive Director
AO	Airport Operations	FAA	Federal Aviation Authority
AOM	Airport Operations Manager	FMM	Field Maintenance Manager
ARFFC	ARFF Chief	FBO	Fixed Base Operator
BMM	Building Maintenance Manager	SO	Safety Office
COA	City of Austin	TEN	Tenant
DOA	Department of Aviation		

AUSTIN-BERGSTROM INTERNATIONAL AIRPORT - GAP ANALYSIS

	SMS SPM ANALYSIS WORKSHEET	E	I	G	Resp	COMMENTS
1	Safety Policy & Objectives					
2	Safety Policy in place?			X	ED & AD	In development
3	Safety organization appropriate to airport?			X		Safety Manager and responsibilities not developed for SMS
4	ABIA Monthly Safety Meetings?	X			AO	
5	Safety policy approved by senior management?		X	X		In development
6	Policy reviewed by senior management?			X		In development
7	Understand Responsibilities & Accountabilities?			X		Job titles & Responsibilities not clear
8	ACM 3-1 Lines of Succession Airport Operations		X		ED & AD	Delineated as per ACM - needs updated titles & responsibilities
9	Planning & Goals?		X			Airport Public Information Publications
10	Safety Goals					
11	Top Management driven?		X			To be developed
12	Top Management commitment safety improvement?	X			ED & AD	SMS Pilot Program
13	Top Management commitment implement SMS?	X			ED & AD	SMS Pilot Program
14	Top Management commit to Non-Punitive Reporting?		X			To be developed
15	Top Management commit to Provide Resources?	X			ED	To comply with 139
16	Top Management commit make Safety highest priority?		X			Needs to be stated in Safety policy
17	Top Management Approval for Implementation?	X			ED & AD	Final approval
18	Top Management Promote Policy & Review Process	X	X		ED & AD	Needs to be expanded and enhanced through SMS
19	Aviation Department Safety Committee?		X		AOM	To be formed
20	Safety Reporting					
21	Non-Punitive Safety reporting?			X		To be developed
22	Safety Risks/Deficiencies?			X		To be developed
23	Events/Occurrences?	X			AOM	Comply with 139
24	Safety Resources - Top Management					
25	Finances committed to Safety Policy?	X			ED & AD	
26	Finances committed to Human Resources?	X			ED	
27	Manager appointed to Manage SMS Ops?		X		AO	Operations Supervisor
28	Emergency Response Procedures					
29	Approved & Documented?	X			ED & AD	Department of Aviation (DOA) & COA
30	Reviewal Process?	X			AD	Review of Plan every 12 months with all parties
31	Procedural Dissemination Process?	X			AOM	Distribution Lists & Safety meetings
32	Prescribed drills/exercises?	X			AD	Full scale every 3 years
33	Airport Emergency Plan Training?	X			AD	Trng Curriculum 11/27/2007
34	Validation?	X				FAA validates in annual inspection

AUSTIN-BERGSTROM INTERNATIONAL AIRPORT - GAP ANALYSIS

SMS SPM ANALYSIS WORKSHEET		E	I	G	Resp	COMMENTS
35	ABIA Interagency Aircraft Accident Response Plan					Component of City of Austin Emer Ops Plan - Augments ACM
36	Responsibilities?	X			COA & ED	Periodically reviewed by all agencies
37	Training?	X			AO	Classroom initial & annual recurrent training
38	Regulations, Exemptions, Standards					
39	Awareness responsibility Procedures?	X			AOM	
40	Compliance responsibility?	X			AD	
41	Periodic Reviews?	X				FAA validates in annual inspection
42						
43	Manuals/Documentation/Records					
44	Airport Certification Manual (ACM)?	X			AOM	
45		X			AOM	
46	ACM Currency Procedures & Responsibility ?	X			AOM	
47	Responsibility to communicate changes?	X			AOM	
48	Top Management Awareness & Review?	X			ED & AD	
49	Implementation responsibility?	X			AOM	
50	Doc Mandatory 139 Required - Daily Log?	X			AOM	
51	Document & Records control, dissemination & ACM revision currency? disposition?	X				FAA validates in annual inspection
52	Accident/Incident Records?					
53	.301 Procedures for recordkeeping?	X			AD & AOM	139.329 f 2 - maintain for 12 CCM
54	Airport Conditions Report					
55	.301 Procedures for recordkeeping?	X			AOM	
56	Procedures being followed?	X			AOM & SO	12 CCM
57	Validation?	X				FAA validates in annual inspection
58	Other Required Records					
59	Procedures for recordkeeping?	X			ABIA	ACM 139
60	Trend analysis & monitoring reports?					Analysis & reports not evident in doc reviews - To be developed
61						
62	Safety Risk Management		X			
63	Description SRM Process?			X		To be developed SMS SPM
64	Determine Risks/Hazards - SRM					
65	Internal Reporting System?			X		To be developed SMS SPM
66	Report Responsibility?			X		To be developed SMS SPM
67	Identification					
68	Quality & Risk Management?			X		To be developed SMS SPM
69	Internal communications of reports?			X		To be developed SMS SPM
70	SRM - Probability/Severity Identification?			X		To be developed SMS SPM

AUSTIN-BERGSTROM INTERNATIONAL AIRPORT - GAP ANALYSIS

	SMS SPM ANALYSIS WORKSHEET	E	I	G	Resp	COMMENTS
71	Analyze					
72	Action Responsibility?			X		To be developed SMS SPM
73	Probability Analysis Plan?			X		To be developed SMS SPM
74	Assess					
75	Action Responsibility?			X		To be developed SMS SPM
76	Action Plan/Process?			X		To be developed SMS SPM
77	Evaluate acceptable Risk?			X		To be developed SMS SPM
78	Mitigation strategies - SRM					
79	Action Responsibility?			X		To be developed SMS SPM
80	Management follow-up & Review?			X		To be developed SMS SPM
81	SRM - Monitor process & progress?			X		To be developed SMS SPM
82	SRM - Corrective & Preventive Action Plan?			X		To be developed SMS SPM
83	SRM - Tracking & Trend Analysis?			X		To be developed SMS SPM
84	Documentation SRM results?			X		To be developed SMS SPM
85						
86	<u>SRM - Airport Functions & Responsibilities</u>					
87	Airport Condition Reporting .301b8					
88		X			AOM	Course 139-8
89	Procedures?	X			AOM	
90	Airport Condition Reports/NOTAMS 139.339	X			AOM	12 CCM
91	Daily log?	X			AOM	Mandatory 139 req, division inspection & significant events
92	Paved Areas .305					
93	Maintenance Repair Pavement, Ramps, Etc?	X			FMM	
94	Procedures?	X				Daily Inspection as part of self inspection
95	Completion Inspection?	X			AO	
96	Training	X			AOM & SO	COA TRAIN sys - 24 CCM
97	Safety Areas .309					
98	Training? Maintenance Safety Areas?	X			FMM	
99	Procedures/Responsibilities?	X			FMM	ACM 5-2
100	Completion Inspection?	X			AOM	
101	Training	X			AOM	
102	Markings, Signs, Lighting .311					
103	139.311 Maintain Pavement Markings?	X				ACM 14-1
104	Procedures?	X			FMM	Daily ACM 6-2
105	Completion Inspection?	X			AO	At completion
106	Training?	X				Course 139-4

AUSTIN-BERGSTROM INTERNATIONAL AIRPORT - GAP ANALYSIS

	SMS SPM ANALYSIS WORKSHEET	E	I	G	Resp	COMMENTS
107	POFZ Markings	X				
108	Procedures?					Maintenance addressed, but inspection procedures not identified
109	Maintain Signage System?	X				
110	Procedures?		X			Maintenance addressed, but inspection procedures not identified
111	Training?	X				Course 139-4
112	Maintain Airfield Lighting?	X			BMM	Lead Electrician on duty
113	Procedures?		X			ACM - no mention taxi edge or runway hold position lighting sys
114	Completion Inspection?	X			AO	Proc letter 2/14/08 & 3/15/08
115	Runway Holding Position Lights?			X		Not in accordance with AC 120-57
116	Procedures?	X				ACM 6-3
117	Completion Inspection?	X				ACM 6-3
118	Airfield Lighting training	X				Course 139-5
119	Maintain Airport Beacon?	X				ACM 6-2 e
120	Procedures?			X		Not addressed in ACM
121	Completion Inspection?			X		Not addressed in ACM
122	Maintain Approach Lighting Systems?	X				FAA ACM 6-2
123	Procedures?	X				FAA ACM 6-2
124	Completion Inspection?	X				FAA
125	Inspection marking and/or light obstructions?	X			AO	Part of Daily Inspection 16-1
126	Procedures?	X			FM/BM	Field/Building Maintenance
127	Completion Inspection?	X			AO	Airport Operations
128						
129	Snow & Ice Control .313 Responsibility?				AOM	ACM 7-1
130	Prompt snow /ice removal?			X	FFM	Conflicting info Para's A & B
131	Procedures?	X				ACM 7-2 Airport Operations, Field Maint, Building Maint
132	Completion Inspection?	X				ACM 7-2
133	Positioning snow/ice off surfaces?			X		Not addressed in ACM
134	Procedures?			X		Not addressed in ACM
135	Completion Inspection?	X				ACM 7-2
136	Authorized anti snow/ice materials?			X		FAA - need more specificity as to materials
137	Procedures?			X		Not addressed in ACM
138	Completion Inspection?			X		Not addressed in ACM

AUSTIN-BERGSTROM INTERNATIONAL AIRPORT - GAP ANALYSIS

	SMS SPM ANALYSIS WORKSHEET	E	I	G	Resp	COMMENTS
139	Timely snow/ice control?	X			AO/FM/BM	ACM 7-1, 7-2
140	Procedures?	X				ACM 7-2
141	Notifications non snow/ice removal areas?	X			AOM	NOTAMS to Tenants & San Angelo ATSS
142	Completion Inspection?	X			AOM	Monitoring & information on snow conditions
143	Maintaining & Updating snow/ice removal plan?			X		Not addressed in ACM
144	Training snow/ice removal process?			X		Not addressed in ACM
145	Procedures?			X		Not addressed in ACM
146	A/C Rescue & Firefighting .315 .317 .319					
147	ARFF Availability during Airport Operations	X			ARFFC	24/7 - 3 Shifts ACM 8-1, ARFF Index D .317 Specificity
148	Procedures?	X			ARFFC	
149	ARFF Response & Recall Req?	X			ARFFC	ACM Letter Agreement - AEP?
150	Procedures?	X			ARFFC	Monthly review & Drill Tested 0800 daily
151	Emergency Radio Contacts	X			ARFFC	ACM Letter Agreement - AEP?
152	Procedures?	X			ARFFC	
153	Emergency vehicles properly marked?	X			ARFFC	ACM 9-1
154	Emer Vehicles Maintained & Ready?	X			ARFFC	ACM 9-1
155	Procedures?	X			ARFFC	Daily inspections
156	ARFF Index for airport being met?	X			ARFFC	ACM 8-1, Index D
157	ARFF Equipment & Agents?	X			ARFFC	ACM 9-3
158	Vehicle turret discharge capacity req?	X			ARFFC	ACM 9-3
159	Adequate agent/water available being met?	X			ARFFC	
160	Emergency Response Requirements?	X			ARFFC	3 Minutes to midpoint ACM 10-1
161	Immediate Replacement inop Emer Vehicles?	X			DOA	ACM 8 -1
162	Procedures?	X			ARFFC	ACM 8-1
163	Reports?	X			ED & AD	Regional Airports Division Manager
164	Sufficient trained ARFF to meet req 139?	X			ARFFC	ACM 10-1
165	Ensuring rapid response to Emergencies	X			ARFFC	
166	Emergency personnel equipped protective gear?	X			ARFFC	AC 150/5210-17 & ACM 10-1 & OSHA
167	PPE, Hardhats, Eye protection, Face protection.	X			ARFFC	Safety Office
168	Rescue & ARFF properly trained for duties?	X			ARFFC	ACM 10 - 1 Monthly testing
169	Procedures?	X			ARFFC	Recurrent trng every 12 months Records 24 CCM
170	Personnel live drill before initial duty?	X			ARFFC	Texas A&M and/or Salt Lake City ACM 10 - 1
171	Procedures?	X			ARFFC	ACM 10 - 1
172						

AUSTIN-BERGSTROM INTERNATIONAL AIRPORT - GAP ANALYSIS

	SMS SPM ANALYSIS WORKSHEET	E	I	G	Resp	COMMENTS
173	Emergency Medical Service Personnel	X			ARFFC	Records 24 months
174	Procedures?	X			ARFFC	Recurrent training every 12 months
175	Training	X			ARFFC	COA TRAIN sys - Records 24 CCM
176	Emergency Medical Service available during Air Ops?	X			ARFFC	ACM 10-2
177	Alert System & Maintenance Emer Pers?	X			ARFFC	Tested 0800 daily
178	Procedures?	X			ARFFC	AEP & IAARP
179	.303 & .327 Emergency Check Lists for Vehicles	X	X		ARFFC	Grid map needs improvement
180	Inspection?	X			ARFFC	At start of each shift
181	Fire or Bomb Threat Evacuation (Terminal)	X			AD	Procedure Letter
182	N. American Emergency Response Guide in vehicles?	X			ARFFC	
183	Emergency Roads maintained all weather operations?	X				No Emergency Roads
184	Severe Weather Operations/Notifications	X			AOM	
185						
186	HAZMAT - Handling & Storage .321				AOM/ARFF	Airport Operations & ARFF Monitor
187	Does Airport act as Cargo Handling agent?					No
188		X			TEN	
189	Procedures?	X			TEN	
190	Applicable Cargo handling?	X			TEN	Tenant handling
191	Procedures?	X			TEN	
192	Material Safety Data Sheets - MSDS	X			TEN	Req by OSHA - Tenants - Spill kits
193	Special HAZMAT Storage Areas?	X			AIRCAR/FBO	Designate areas
194	Proper Cargo Identification? Procedures?	X			AIRCAR/FBO	Prescribe rules & procedures
195	HAZMAT Advisory Signage?	X			TEN	139.321 (a)(3)
196	Procedures?	X			TEN	
197	Storage Areas Properly Maintained?	X			TEN	
198	Procedures?	X			TEN	DOT EPA TCEQ TDH
199	HAZMAT Manual Readily Available?	X			TEN	MSDS, OSHA
200	Procedures?	X			TEN	
201	Responsibility, Revisions, Validation?	X			TEN	
202	Spill Response?	X			TEN	DOA & Dir Facilities Services? & EC
203	Procedures?	X			TEN	Spill Response Plan F-11 - Spill Responders - ARFF secondary
204	Training?	X			TEN	Spill Responder training & Spill Response Plan training F-15
205	Notifications?	X			TEN	EPA, FAA, TCEQ, COA, DOA

AUSTIN-BERGSTROM INTERNATIONAL AIRPORT - GAP ANALYSIS

	SMS SPM ANALYSIS WORKSHEET	E	I	G	Resp	COMMENTS
206	HAZMAT Training?	X			TEN	Spill Responder Training
207	Procedures?	X			TEN	First Responder Awareness Trng
208	HAZMAT Contamination Suits - Required?					No - HAZMAT Teams from city
209	Baggage Alerts	X			ED & AD	Procedure Letter
210	Fueling - Aircraft & Vehicles					
211	Fuel Handling - Fire & Explosion?	X			DOA	
212	What are standards?	X			DOA	
213	Procedures?	X			TEN	
214	Compliance with Fueling Standards?	X			TEN	Tenants/Contractors
215	Procedures?	X			TEN	Tenants/Contractors
216	Immediate Action fueling Standards breached?	X			TEN	Tenants/Contractors
217	HAZMAT & SWPPP Procedures?	X			TEN/AOM	DOA Environmental Compliance Specialist - Kane C.
218	Fueling truck inspections?	X				ARFF quarterly checks
219	Fueling Training					
220	Airport Fueling Agent Inspector	X			ARFFC	ARFF every 3 months
221	Procedure?	X			ARFFC	ARFF Records for 12 CCM
222	Records	X			ARFFC	
223	Airport Fueling Personnel Training?	X			TEN	Certification report to Airport Operations every 12 months
224	Records	X			TEN	Records at each FBO
225	Procedure?	X			TEN	Supervisor - Recurrent every 24 CCM
226	Fuel farm Inspections?	X			ARFFC	
227	Procedures?	X			ARFFC	
228	Validation?	X			ARFFC	
229	Emergency Fuel Shutoffs?	X			TEN	Contractor fueler Manager
230	Inspection?	X			TEN	
231	Portable Fire Fighting Agents?	X			TEN	
232	Procedures?	X			TEN	
233	Inspection?	X			TEN	
234						
235	Airport Emergency Plan .325	X				DOA & FAA - Scope & Objectives excellent
236	Prompt Response?	X			ED/AD	ARFF
237	Procedures?	X			ED/AD	ATC Initiates
238	Responsibility & Dissemination?	X			ED/AD	Review AEP every 12 months with all parties
239	Validation?	X			ED/AD	Full scale Emergency Exercise once three years

AUSTIN-BERGSTROM INTERNATIONAL AIRPORT - GAP ANALYSIS

	SMS SPM ANALYSIS WORKSHEET	E	I	G	Resp	COMMENTS
240	AEP Plan & Guidance?	X			ED/AD	ACM 9-2 Outdated
241	Procedures Documented & Implemented?	X			DOA/COA	Review of Plan every 12 m with all parties
242	Procedures review?	X			AD	Full scale every 3 years
243	Validation & Review?	X			AD	Distribution Lists
244	Training?		X			No Training provisions mentioned in AEP
245	Removal disabled aircraft?	X			AOM	
246	Procedures?	X			AOM	Procedures Letter 2/08/2008
247	AEP Notifications in Emergencies?	X			COD/ED	ATC notifies ARFF
248	Procedures?	X				Alert 1, 2, 3 121.9 128.35 Twr
249	AEP Coord with Agencies/Organizations?	X			COA/ED	Incident Command Post - Unified Command
250	Validation?	X				Daily 0800 Test
251	Communications?	X				Ring-down system & Pagers
252	Aircraft bomb threat?	X				Procedure letter 2/09/08 & AEP 3-1
253	Procedures?	X			AOM	AEP
254	Security Breach?	X				Procedures Letter
255	ABIA Interagency Aircraft Accident Response Plan	X			COA/ED	Separate from AEP - dated 12/07/2007
256	Self-Inspection Program .327					Daily airfield, General, Special Need Inspections
257	Airport Daily Inspections?	X			AOM	
258	Procedures?	X			FMM/BMM	ACM 14-1, -2
259	Deficiencies?	X				ACM 14-1 -- Airport Inspection Log & Airfield Discrepancy Report
260	Validation?	X			AOM	
261	139.327 Training?	X				Course 139-7
262	Special Needs Inspections?	X			AO&FMM	Unusual conditions, accident, meteorological events
263	Hazardous deficiencies?	X				Possible NOTAM & ATIS
264	Post Accident/Incident/Event Inspections?	X			AOM & FMM	
265	Procedures?	X			AOM & FMM	
266	Documentation?	X				To be maintained 5 years
267	Equipment to perform inspections adequate?	X			AOM	Two way radios & Amber rotating beacons
268						
269						
270	Inspectors Qualified & Trained?	X				139.303 Recurrent 12 CCM months
271	Procedures?	X			AOM	ACM 14-5 Records kept 24 CCM
272	Validation?	X				FAA Cert Inspection
273	Prompt corrections unsafe conditions found?	X				ACM 14-3 - Notams - Add to ATIS
274	Procedures?	X			AO & FMM	

AUSTIN-BERGSTROM INTERNATIONAL AIRPORT - GAP ANALYSIS

	SMS SPM ANALYSIS WORKSHEET	E	I	G	Resp	COMMENTS
275		X				ACM 14-1, 2 & Acc Prevention Plan
276	Procedures?	X			AOM	Airport Operations Mgr - 12 CCM
277	Responsibility?	X			AD	Reviewed by management
278	Pedestrians & Ground Vehicles .329					
279	Self-Inspection Records? Limit access to movement & safety areas?	X			ED	Training - Airfield Driver Safety Training Prgm - Airport Operations
280	Procedures?	X				ACM 15-1
281	Validation?	X				Records 24 cm - FAA Certificate Insp
282	Training on non-compliance?	X			AOM	ACM 15-4
283	Procedures?	X				Notify Airport Public Safety or Air Operations
284	Prevention of unauthorized entry?	X			ED	ACM 15-1
285	Procedures?	X				ACM 15-1, 2 Entry awareness
286	Wildlife Hazard Management .337					ACM 19-1 & Procedures Letter
287	Wildlife Hazard Assesment	X			DOA	DOA when req - ACM 19-1 & 139.337c
288	Adequate resources for wildlife plan?	X				A draft plan has been identified, if required
289	Wildlife permits?	X				USDA - Manage herd
290	Wildlife hazard communications?	X				.337 f 5 iv
291	Database?	X				Procedure letter - 11/17/2006
292	Designated & Trained Wildlife Personnel?			X		Procedure letter - 11/17/2006 - No Airport Wildlife Coordinator
293	Airport Condition Reporting .339	X				ACM 20-1
294	Dissemination to Air Carriers?	X				ACM 20-1
295	Procedures?	X			AO	Request NOTAM from San Angelo FAA ACM 14
296	Records?	X				12 CCM airport conditions report to air carriers
297	Construction & Other Unservicable Areas .341			X		Object Free Areas are not Safety Areas - 21-1 - more restrictive
298	Construct safeguards regarding NAVAIDS?			X		ACM 21-2 - Not complete - .314
299	NOTAM Issue Procedures	X			FMM	Procedure Letter ACM 21-1
300	Marking, identifying, lighting construction areas?				FMM	
301	Procedures?	X				ACM 21-1 21-2
302	Marking & Identifying equipment & roadways?				FMM	
303	Procedures?	X				ACM 21-1 21-2
304	Marking & Lighting NAVAIDS				FMM	
305	Procedures?					ACM 21-1 21-2
306						

AUSTIN-BERGSTROM INTERNATIONAL AIRPORT - GAP ANALYSIS

	SMS SPM ANALYSIS WORKSHEET	E	I	G	Resp	COMMENTS
307	Non-Complying Conditions .343					ACM 22-1
308	Limiting Air Carriers to safe portions airport					ACM 22-1
309	Procedures?	X			DOA	DOA monitor airport
310						
311	Safety Assurance					
312	Performance Indicators					
313	Accident, Incident, event Reviews?	X			AD	Vehicle Collision Review Committee
314	Planned reviews?		X			DOA Employees - Vehicle Collision Review Comm
315	Investigation Procedures & Responsibilities?		X			Varies - appears to be ad hoc - not formalized
316	Self-Auditing					
317	Procedure to ensure all events investigated?			X		No procedure plan
318	Internal audits			X		No internal audits
319	Responsibility?	X				Audited Readiness Assurance for Ops Work Grp
320	Safety Oversight Risk Strategies					
321	Investigation Procedures & Responsibilities?		X			Will be developed SMS
322	Training competency?	X				
323	Planned/unplanned changes procedures?		X			Will be developed SMS
324	Planned/unplanned changes equipment?		X			Will be developed SMS
325	Planned/Unplanned changes Personnel?		X			Will be developed SMS
326	Planned/Unplanned changes fixtures?		X			Will be developed SMS
327	Feedback Reporting					
328	Non-Punitive inputs & reports?			X		Will be developed SMS
329	Analysis reviewing procedures?			X		Will be developed SMS
330	External Safety reporting procedures?			X		Will be developed SMS
331	Communicate Findings & Status reporting?			X		Will be developed SMS
332	Communicate findings internally?		X			No process outlined
333	Promote Safety Integration					
334	Recommendations?	X				
335	External/Independent Audits/Assessments?		X			Will be developed SMS
336	Evaluations of corrective actions?		X			Will be developed SMS
337	Training Review?		X			Will be developed SMS
338	Documentation & Record Keeping?		X			Will be developed SMS
339	Documentation Review Lessons Learned Process?			X		Will be developed SMS
340						

AUSTIN-BERGSTROM INTERNATIONAL AIRPORT - GAP ANALYSIS

SMS SPM ANALYSIS WORKSHEET		E	I	G	Resp	COMMENTS
341	Safety Promotion					
342	Training & Education					
343	Plan for employee SMS Indoctrination Training?		X		AOM	In development
344	Means for measuring Safety training?			X		None noted
345	Safety training for indoctrination & recurrent training?	X			AOM	Airport Operations - FAR 139-1
346	Process to identify training requirements?	X				Will be enhanced with SMS development
347	Job specific training?	X			AOM	
348	Human Factors integrated into training?			X		None noted
349	Computer Based Instruction (CBI)?		X			Partial - hands on
350	Standardization checks on instructors?			X		None noted
351	Validation training effectiveness?			X		No evidence of means to measure
352						
353	139.301 Record Retention					
354	Airport Personnel Training 139.303 & 139.327 24 CCM	X			AOM	
355	Emergency Personnel Training 139.319 24 CCM			X		Not noted
356	Airport Fueling Agent Insp 139.321 12 CCM	X			AOM	
357	Fueling Agent Personnel 139.321 12 CCM	X			AOM	
358	Self Inspection 139.327 12 CCM	X			AOM	
359	Movement Area Training 139.329 24 CM	X			AOM	Airport Operations Excel program
360	Safety Area Training 139.329 24 CM	X			AOM	
361	Accident & Incident Reports 139.329 12 CCM	X			AOM & SO	COA TRAIN Sys
362	A/P Condition Reports/NOTAMS 139.339 12 CCM	X			AOM	
363	Recordkeeping Procedures & Recurrent Training	X			AOM & SO	COA TRAIN Sys
364	Emergency Preparedness Response Training					
365	Emergency response training for specific pers?			X		None noted other than marshalling points
366		X			ARFFC	
367	Procedures for recordkeeping? Training records on file 24 months?			X		Not noted
368	AEP Training?			X		No trng mentioned ACM AEP or A/C Acc Response-Have 139-2
369	Emergency Medical Service Personnel					
370		X			ARFFC	ARFF Station
371	Procedures for recordkeeping?	X			ARFFC	ARFF Station
372	Fueling Training					
373	gaining records on file 24 months?				ARFFC	ARFF every 3 months
374	Procedure?	X				ACM 11-3
375	Procedure being followed?	X				Inspection reports ARFF for 12CCM
376	Validated?	X			ARFFC	

Fueling Agent Inspection?

AUSTIN-BERGSTROM INTERNATIONAL AIRPORT - GAP ANALYSIS

	SMS SPM ANALYSIS WORKSHEET	E	I	G	Resp	COMMENTS
377	Fueling Personnel Training Records?	X			AOM	Paper File - written cert every 12 months from Tenants
378	Procedure being followed?	X				Supvr - Recurrent Trng every 24 CCM
379	Movement Area & Safety Area Training?					
380		X			AOM	Prior Initial Duty then at least every 12 CCM - FAR 139-3 course
381	HAZMAT Storage					
382	Procedures?	X			TEN	Tenants train DOA standards
383						
384	Wildlife Hazard Management					
385	Wildlife Coordinator?			X		No Wildlife Coordinator designated
386	Procedures?	X				Plan drafted, not activated
387	Training?	X				Course 139-10
388						
389	Non-Punitive Safety Reporting			X		To be developed SMS
390						
391	Safety Communications					
392	Communications allowing Safety functioning	X			AD/AOM	Daily log, Safety Committee meeting minutes, bulletin boards
393	Electronic?		X			Developing
394	Written?	X			AOM	Operations Daily Log
395	Meetings?	X			AOM	Monthly Safety Meetings
396	Bulletins, NOTAMS, Security?	X			AOM	Daily Log, bulletin boards

Austin-Bergstrom International Airport

Federal Aviation Administration Safety Management System (SMS) Pilot Program

SMS Team Members

Jacobs Carter Burgess, Fort Worth, Texas	
Richard Compton	Project Manager
Rick Paddock	Policy & Objectives
Alisa Rich	Environmental Risk
Joe Oyler	Risk Management & Safety Promotion
Bruce Bickhaus	Risk Management & Safety Promotion
Deborah Reiswebber	Human Factors & Organizational Development
Victor Nartz	Quality Assurance
Leslie Sagar	Quality Control / Quality Assurance

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