

**BILLINGS LOGAN INTERNATIONAL
AIRPORT
OPERATIONS DIVISION**

**14 CFR, PART 139
RECORD KEEPING
AND
TRAINING PROGRAM**

BILLINGS LOGAN INTERNATIONAL AIRPORT OPERATIONS DIVISION 14 CFR, PART 139 TRAINING SYLLABUS

PREFACE:

- This manual is designed to comply with the requirements of 14 CFR Part 139 sections 139.303 through 139.339 as it pertains to Airport Operations training.
- This manual will be the primary means for personnel to prepare for their individual knowledge / skill evaluations for the specified areas. It should be recognized that additional lecture or practical training will be necessary to meet the requirements of this manual.
- It should not be assumed that training will be limited to only the contents of this manual. Throughout any training cycle subjects of immediate and long-term importance to Operations personnel will be included in the training requirements.
- The performance requirements have, for the most part, been derived from the following professional training manuals and publications:
- **FAA Advisory Circulars**
- **Billings Logan International Airport Certification Manual**
- **14 CFR Part 139 Final Rule**
- **Airport Facility Directory**
- **Airport Layout Plan**
- Training and testing will be conducted monthly on the subjects scheduled for that month. Generally training and testing will be conducted during the latter part of the appropriate month.

TRAINING MANUAL USAGE:

- This manual will allow for all Operations personnel to self-study for many aspects of the training program. In order to receive the most benefit, as well as prepare for the monthly practical and written evaluations, the following explanations are provided.

Background

- At BIL we are a Class I Airport and cross-utilize 18 ARFF/Airfield Maintenance employees.
- The 14 CFR, Part 139 rewrite requires us to train all personnel who access movement/safety areas and perform duties outlined in our ACM.
- The regulation stipulates that the training must occur prior to performing airport ops. duties and at least once every 12 consecutive months.
- We developed our Ops. training manual and recordkeeping system identical to how our ARFF Training Program was designed.
- In our Ops. syllabus we list the subjects in the new rule that we were not currently training on under the ARFF requirements.

- * **Self Inspection Program**
- * **Pedestrian and Ground Vehicles**
- * **Airport Condition Reporting**
- * **Wildlife Hazard Management**

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TITLE PAGE:

- The title page contains the following information:
- **SUBJECT:** The subject or content as defined by 14 CFR Part 139
- **STANDARDS FOR PERFORMANCE:** What the Operations personnel should know and be able to demonstrate in knowledge, skills and abilities after training.
- **REFERENCES:** Training books, videos and other materials that will be used to support the subject matter. Any portion of the specified reference may be used on the monthly evaluation or testing.
- **EQUIPMENT / MATERIALS:** A list of equipment or materials or combination of such will be required to perform the practical aspects of the chapter.
- **AIRPORT SPECIFIC TRAINING ITEMS:** These are training and informational items that are specific to the Billings Logan International Airport.
- **PRACTICAL EXERCISE REQUIREMENTS:** Each employee must be able to demonstrate, identify and describe the components of each specific training topic. This may include tours and practical skill demonstration. A check sheet will be developed in accordance with the reference material used to develop the outline for the training topic.
- **WRITTEN TEST:** Each employee must complete a written exam over the material for that particular months training topic. The exam will be based on the subject matter presented during the training session or derived from the reference material used to develop the outline for the training topic.
- Each employee is given an Airport Operations Training Manual.
- We keep a file on each employee
 - 1 for ARFF
 - 1 for Airport Operations
- These files contain paperwork signed by the employee and supervisor documenting that the training took place and that he/she attended.
- The files also contain a written test on each subject matter that was covered.
- Additionally, we video tape each training session.
- The FAA Inspector can easily review any/all of this documentation to verify that our employees received the appropriate training.

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- Evaluations in either a written or practical form will be conducted at periods within the training period. The schedule for written and practical testing will be posted on the board. Deviations from this schedule will only be allowed upon the supervisors' approval.
- All tests and evaluations must be completed before the last day of that particular month. Operations personnel will be required to score at least 75% on all written exams/evaluations. Operations personnel will be granted one retake of the test prior to or before any corrective action will be taken. Should the employee fail to meet the minimum score of 75% on the retake, he or she will be removed from performing their duties until such time as the employee successfully passes the exam/evaluation and will be subjected to Corrective action through the current City of Billings and Teamsters Local 190 agreement.
- **The intent behind this manual is to place a portion of the burden of the Operations training on the shoulders of the employee. The Operations Supervisors will continue to provide the majority of training with this manual to complement this training.**
- We hold 2 - 4 hour mandatory Ops. training sessions with the employee group every other month (in addition to monthly ARFF training)
- We post the training session well in advance and **highly recommend** individuals to review the material since there is always a test at the end.
- Inevitably, someone misses the training due to sick leave, vacation, etc. When they arrive for their next scheduled shift we have the employee watch the training video and take the test.
- We take this training very seriously and require a passing grade of 75%. If the employee does not pass we will spend additional time with the person and they are allowed one retake of the test.
- Ultimately, we have the ability to discipline an employee for not passing and/or remove them from performing certain job duties.

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Airport Condition Reporting

As a Reminder

- **INSPECTION RECORDS**
must be maintained for the previous
12 consecutive calendar months
- **TRAINING**
must occur initially and every 12
consecutive calendar months
- **PERSONNEL RECORDS**
must be maintained for the previous
24 consecutive calendar months

TRAINING LESSON PLAN

SUBJECT: 14 CFR Part 139.339 Airport Condition Reporting STANDARDS FOR PERFORMANCE:

- ARFF/AFM personnel should have a thorough knowledge of the airports condition reporting program certified under 14 CFR Part 139. The condition reporting program is a key component of an airport operator's airport certification program and required under Part 139.327. An effective condition reporting program enables an airport operator to operate in compliance to Part 139 standards on a day-today basis. Airport used for public use is expected to make known as soon a practical any condition on or in the vicinity of the airport, existing or anticipated which would prevent or restrict or present a hazard to departing or arriving aircraft. It is important that the airport operator have an effective condition reporting system/program to alert users of the airport to conditions that could be hazardous. At the end of the training session, ARFF/AFM personnel will be able to do the following:
 - **Describe how to compose a NOTAM** for submission to Flight Service
 - **Describe the steps required to submit a NOTAM to Flight Service for approval and dissemination**
 - Describe methods used to **disseminate NOTAM** forms at the local level
 - Describe the steps required to ensure verification of receipt of NOTAM form by local tenants
 - Describe how to correctly complete and maintain the NOTAM log

- **Describe how to compose a NOTAM that involves special conditions.**
- **Identify proper contractions to be used in composing NOTAMS**

REFERENCES:

- Order 7110.10, Flight Services
- Order 7210.3, Facility Operation and Administration
- Order 7350.6, Location Identifiers
- Order 7930.2, Notices to Airmen
- Airman's Informational Manual
- Airport Facility Directory
- FAA Advisory Circular 150/5200 – 28B, **Notices to Airmen for Airport Operators**
- FAA Advisory Circular 150/5200 – 30, **Airport Winter Safety and Operations**
- FAA Advisory Circular 150/5370 – 2, **Operational Safety on Airports During Construction**
- Billings Logan International Airport Certification Manual
- 14 CFR Part 139 Final Rule

TRAINING LESSON PLAN

SUBJECT: 14 CFR Part 139.339 Airport Condition Reporting STANDARDS FOR PERFORMANCE:

AIRPORT SPECIFIC TRAINING ITEMS:

■ NOTAMS – (D)

- **Commissioning or decommissioning of landing areas** or portions thereof
- Airport closure, total or for certain types of aircraft.
- **Conditions that restrict or preclude the use of any portion of a runway**
- Runway braking action when fair, poor or nil.
- Snow, ice, slush or standing water conditions
- Runway friction value when .40 or below
- Runway friction measuring equipment out of service
- Arresting barrier out of service
- Change of runway identification
- Rubber accumulation on the runways
- ARFF response restrictions or non-availability
- Commissioning, decommissioning or outages of lighting aids
- Commissioning, decommissioning or outages of navigational aids

■ NOTAMS (L)

- Runway information that does not restrict or preclude the use of the runway
- **Conditions pertaining to taxiways**
- Personnel and Equipment on or adjacent to the runway or taxiway
- Taxiway edge lights

■ Types of NOTAMS

- Friction Measurement
- Braking Action
- **Winter Conditions**
- Depth of Snow
- Plowed Runways
- Runway sanding or deicing
- Snowbanks
- Runway light obstructions
- Runway thresholds
- Obstruction lights

■ Special NOTAMS

- Airshows
- Snow and Plowing
- Construction

■ **WRITTEN TEST/EXAM:**

- All ARFF/AFM personnel will complete a written and practical test/exam over the material covered for the given topic.

TRAINING LESSON PLAN

SUBJECT: 14 CFR Part 139.327 Self Inspection Program

STANDARDS FOR PERFORMANCE:

- ARFF/AFM personnel should have a thorough knowledge of the airports self inspection program certified under 14 CFR Part 139. The self-inspection program is a key component of an airport operator's airport certification program and required under Part 139.327. An effective self inspection program enables an airport operator to operate in compliance to Part 139 standards on a day-today basis. While some hazardous airport conditions develop virtually instantaneously, others are gradual. It is important that the airport operator have an airport safety self-inspection program that monitors specific airport conditions in order to identify unsatisfactory conditions for prompt corrective actions. At the end of the training session, ARFF/AFM personnel will be able to do the following:
 - Describe inspection patterns used to complete self inspections.
 - **Identify the location and types of airport facilities**
 - Identify airport rules and regulations that pertain to self inspection programs
 - **Demonstrate proper radio procedures** to be utilized when communicating with ATC.
 - Describe components of the airport safety plan during construction
 - Identify the designated times to complete airport safety self inspections
 - **Describe when to conduct special condition self inspections** for the following conditions:
 - **Snow and ice** conditions
 - **Construction**
 - ARFF
 - Public protection
 - Wildlife hazard management inspections

- **Describe inspection methods used to find deficiencies in the following areas:**
 - **Pavement areas**
 - **Safety areas**
 - Markings
 - **Signs**
 - **Lighting**
 - Navigational aids
 - Obstructions
 - Fueling operations
- Describe methods used to notify tenants and users when hazards exist

REFERENCES:

- FAA Advisory Circular 150/5200 – 18C, Airport Safety Self Inspection
- FAA Advisory Circular 150/5200 – 28B, Notices to Airmen for Airport Operators
- FAA Advisory Circular 150/5200 – 33, Hazardous Wildlife Attractants on/or near Airports
- FAA Advisory Circular 150/5200 – 30, Airport Winter Safety and Operations
- FAA Advisory Circular 150/5210 – 5, Painting, Marking and Lighting of Vehicles Uses on an Airport
- FAA Advisory Circular 150/5210 – 20, Ground Vehicle Operations on Airports
- FAA Advisory Circular 150/5230 – 4, Aircraft Fuel Storage, Handling and Dispensing on Airports
- FAA Advisory Circular 150/5300 – 14, Airport Design
- FAA Advisory Circular 150/5340 – 1, Standards for Airport Markings
- FAA Advisory Circular 150/5340 – 18, Standards for Airport Sign Systems

TRAINING LESSON PLAN

SUBJECT: 14 CFR Part 139.327 Self Inspection Program

STANDARDS FOR PERFORMANCE:

AIRPORT SPECIFIC TRAINING ITEMS:

■ Lighting

- Blue lights are used to outline taxiways and are usually located along the edges.
- White lights are used to outline the edges of runways, with lights spaced about 200' apart.
- Green lights are used to identify the approach end of runways and taxiway centerlines.
- Red lights are used to mark obstructions such as structures, parked aircraft, unserviceable areas, construction work, and runway ends.
- Amber lights are used to identify locations of hold bars, signifying departure end of runway.

■ Markings

- White is used for runway identifier numbers/ letters, landing zone bars, and centerline stripes.
- Yellow is used for hold bars and taxiways markings.

■ Buildings

- Terminal
- Fixed Base Operators
- General Aviation Hangers
- Corporate hangars
- Operations Center

■ Ramps

- West ramps (cargo)
- Ops. Center ramp
- East ramp
- Public ramp

■ Runways

- 10L - 28R
- 7 - 25
- 10R - 28L

Taxiways

- Alpha
- Bravo
- Charlie
- Delta
- Echo
- Foxtrot
- Golf
- Hotel
- Juliet

■ NAVAIDS

- RENL - Runway end lights
- **PAPI** - Precision approach path indicator
- **RVR** - Runway visual range
- **ILS** - Instrument landing system
- AWOS - Automated weather observing/reporting station
- ASOS - Automated Surface Observation System
- LLWAS - Low Level Windshear Alerting System
- DASR - Digital Airport Surveillance Radar
- MALSR - Medium Intensity Approach Lighting System with Runway Alignment Indicator Light
- **Box signs - Location, Directional, Hold Position**
- Other - Glide Slope, Obstruction Lights, etc.

■ WRITTEN TEST/EXAM:

All ARFF/AFM personnel will complete a written and practical test/exam over the material covered for the given topic.

Billings Logan International Airport Operations Division RECORD of TRAINING

Date: 3/22/07

Time from: 2pm to 5pm

Attendance #: _____

Class Hours: 3 hours

Subject/Course Description: Self-Inspection Training

Reference Materials: PowerPoint Presentation/slides, FAA video on Airport Safety Self Inspection (Back to Basics), Discussion on airfield inspection forms and deficiencies, review of BIL Airport Layout Plan, test, etc

1 _____

2 _____

3 _____

4 _____

5 _____

6 _____

7 _____

8 _____

9 _____

10 _____

11 _____

12 _____

By signing I certify that I have attended the initial/recurrent Aircraft Rescue Firefighting and/or Airport Operations training in accordance with 14 CFR Part 139.303 (a-e) and 139.319 (i).

I certify that the above named individual attended initial/recurrent Aircraft Rescue Firefighting and/or Airport Operations training at the Billings Logan International Airport in accordance with 14 CFR Part 139.303 (a-e) and 139.319 (i).

(Training Officer Signature)

(Date)

Billings Logan International Airport
Operations Division
RECORD of TRAINING

Date: _____ **Time from:** _____ **to** _____ **Class Hours:** _____

Subject/Course Description: Self-Inspection Training

Employee Name: _____

(Print)

(Employee Signature)

(Date)

By signing I certify that I have attended the initial/recurrent Aircraft Rescue Firefighting and/or Airport Operations training in accordance with 14 CFR Part 139.303 (a-e) and 139.319.

I certify that the above named individual attended initial/recurrent Aircraft Rescue Firefighting and/or Airport Operations training at the Billings Logan International Airport in accordance with 14 CFR Part 139.303 (a-e) and 139.319 (i).

(Training Officer Signature)

(Date)

Billings Logan International Airport Operations Division RECORD of PRACTICAL TRAINING

Date: _____ **Time - From:** _____ **to** _____ **Class Hours:** _____

Subject Description: 14 CFR Part 139.327 (a - d) Self Inspection Program

Employee Name _____ (Print) _____ (Employee Signature)

By signing I certify that I have the knowledge and skills necessary to maintain proficiency in 14 CFR Part 139.327 (a-d) demonstrating

Describe inspection patterns used

Demonstrate using an airport vehicle

Identify the location and types of taxiways

Identify airport rules and regulations

Identify the equipment needed to conduct inspections

Demonstrate proper radio procedures

Describe components of the airport

Identify the designated times to conduct inspections

Describe when to conduct special inspections

- Snow and ice conditions
- Construction
- ARFF
- Public Protection
- Wildlife hazard management

Describe inspection methods used

- Pavement areas
- Safety areas
- Markings
- Signs

***Additional training required**

I certify that the above named individual completed the performance standards/criteria in accordance with 14 CFR Part 139.327 (a-d) demonstrating knowledge and skills necessary to maintain proficiency in Airport Safety Self Inspection.

(Training Officer Signature)

(Date)

BILLINGS LOGAN INTERNATIONAL AIRPORT OPERATIONS DIVISION

14 CFR, PART 139 RECORD KEEPING AND TRAINING PROGRAM

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