U.S. Department
of Transportation
**Federal Aviation**
**Administration**

# Advisory Circular

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| **Subject:** Airport Safety Self-Inspection | **Date:** Draft | **AC No:** 150/5200-18D |
| | **Initiated By:** AAS-300 | **Change:** |

1 **Purpose.**

This advisory circular (AC) provides information to airport operators on airport self-inspection programs and identifies the items included in these programs.

2 **Cancellation.**

This AC cancels AC 150/5200-18C, *Airport Safety Self-Inspection,* dated April 23, 2004.

3 **Application.**

This AC provides voluntary guidance for all airport operators in developing self-inspection programs. It also provides the standards for developing and implementing self-inspection programs at airports certificated under Title 14 Code of Federal Regulations (CFR) part 139 (hereinafter referred to as part 139) which are acceptable to the Administrator. Part 139 regulations require an airport operator at a certificated airport to develop a self-inspection program acceptable to the Administrator as a means of compliance with § 139.327, Self-Inspection Program. The standards in this AC may be applicable for projects funded with federal grant monies through the Airport Improvement Program (AIP) and with revenue from the Passenger Facility Charges (PFC) Program. See Grant Assurance No. 34, "Policies, Standards, and Specifications," and PFC Assurance No. 9, "Standards and Specifications." Mandatory terms such as "must" apply only to those who conduct inspections at airports that are obligated by Federal grant funds or PFC agreements or those who seek to demonstrate compliance by use of the specific method described by this AC.

4 **Principal Changes.**

The AC incorporates the following principal changes:

1. Changed the numbering system to reflect the beta testing within the Federal Aviation Administration.

2. Added in Chapter 2, specific role definitions for the airport owner, Airport Certificate Holder, and Airport Manager and or Operations Director.
3. The Recommended Inspection Frequency section moved to chapter 7 “Inspection Requirements by Type.”
4. Knowledge and Equipment for Self-Inspection changed to reflect changes to part 139.
5. Added record keeping requirements to Knowledge and Equipment for Self-Inspection.
6. Changed “Regularly Scheduled Inspection” to “Daily Inspection” for clarity.
7. Added part 139 references to each section.
8. Updated the checklist to reflect changes to part 139.
9. Added photos to show equipment placards and markings.

## 5 Related CFR and Reference Materials.

Appendix A lists related reference materials.

## 6 Feedback on this AC.

If you have suggestions for improving this AC, you may use the Advisory Circular Feedback form at the end of this AC.

John R. Dermody
Director of Airport Safety and Standards

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## CHAPTER 1. BACKGROUND

1.1 A self-inspection program is integral to airport safety. Inspecting features that affect airside operations are critical to ensuring that components of various systems—for example, lighting, marking, and signs—are functioning properly. Additionally, an effective inspection process can identify hazards, e.g. fuel product leaks, exposed ignition sources, that represent safety risks which, when addressed early, can be mitigated successfully and at lower cost.

1.1.1 Through an airport self-inspection program, the airport operator:

1. Monitors airport conditions through a daily inspection schedule
2. Identifies specific conditions that pose a risk to airport safety
3. Takes appropriate corrective actions to address deficiencies on the airport
4. Maintains a self-inspection log (can be electronic) to note deficiencies and the date and time corrective measures were taken, and
5. Identifies trends through recurring deficiencies.

1.2 Through an airport self-inspection program, operators of certificated airports can maintain a level of airport safety by complying with the provisions of part 139. This AC identifies the components and responsibilities of each section of part 139 and provides a basis for developing a comprehensive self-inspection program for the individual airport. Sample checklists to assist airport operators are located in Appendix B.

## CHAPTER 2. RESPONSIBILITIES

2.1 **Airport Owner.**

The airport owner has the primary responsibility and authority for maintaining airport safety. The authority to establish and implement a self-inspection program for the airside can be assigned to the airport certificate holder, airport operator, or qualified representative.

2.2 **Airport Certificate Holder.**

The Airport Certificate Holder has overall responsibility for airside safety but can delegate this responsibility to an Airport Manager, Operations Director, or other entity. This AC uses the terms airport certificate holder and airport operator interchangeably, as they are in the regulation, to denote responsibility.

2.3 **The Airport Manager or Operations Director.**

The Airport Manager or Operations Director authorizes Operations/Maintenance Personnel to perform inspections in the self-inspection program. At certificated airports, operations/maintenance personnel must be thoroughly familiar with part 139; they must be familiar with the airport and properly trained in vehicle/pedestrian operations; and given pertinent sections of the Airport Certification Manual (ACM), which identify their duties and responsibilities. The training must address specifically the following operational areas:

- §139.305, Paved areas
- §139.307, Unpaved areas, if applicable
- §139.309, Safety areas
- § 139.311, Marking, signs, and lighting
- § 139.323, Traffic and wind direction indicators
- § 139.325, Airport emergency plan
- § 139.327, Self-inspection plan
- § 139.329, Pedestrians and ground vehicles
- § 139.335, Public protection
- § 139.337, Wildlife hazard management
- § 139.339, Airport condition reporting
- § 139.341, Identifying, marking, and lighting construction and other unserviceable areas
- § 139.343, Non-complying conditions
- ACM WHMP (Wildlife Hazard Management Plan)

- Types of self-inspections
- Airport self-inspection procedures
- Self-inspection records

**Note 1:** Chapter 7 addresses each of the above part 139 subjects in more detail.

**Note 2:** The terms “operations personnel”, “maintenance personnel” and “inspector(s)” are used interchangeably.

## CHAPTER 3. THE SELF-INSPECTION PROGRAM

3.1 The effective self-inspection program is comprehensive and thorough. However, it depends on alert and well-trained personnel who understand their duties and responsibilities and have the resources to carry them out.

3.2 Inspection Personnel can be most effective in performing inspections when they have clear instructions, checklists, and access to informational resources. ACs in the 150 Series provide the standards for certificated airports. Self-inspection personnel must have access to these resources. Inspection personnel are also responsible for developing and using techniques that preclude complacency generated by routine. For example, inspectors can vary the pattern of the inspection and view the airport from different perspectives. Avoiding a repetitive inspection pattern enables the inspector to be more aware; fixed inspection patterns, while easy to learn, generally, over time, do not provide for an adequate inspection and have the potential for missing deficiencies during the inspection process.

3.2.1 For example, runway inspections are usually conducted in both directions. During the runway inspection, when time allows, the inspector should inspect all stub taxiways up to the runway side of the runway hold position. When inspecting taxiways adjacent to a runway, the inspector should inspect all stub taxiways up to the taxiway side of the runway hold position. These areas are often overlooked. Any practices and procedures that vary the inspection pattern can greatly benefit airport safety.

While inspecting parallel taxiways, self-inspection personnel should check the stub taxiways and holding positions as stub taxiways are sometimes bypassed during the inspection of the movement area. During nighttime inspections, the runway inspections should be conducted in both directions to check runway lighting and signs in both directions. Some airports have a Letter of Agreement (LOA) with the ATCT addressing self-inspection routes depending on the direction of aircraft landing/takeoff operations.

3.3 Inspection of areas that have been assigned to individual air carriers, fixed base operators, or other tenants can be made the responsibility of the user. The transfer of this responsibility is usually accomplished through Letters of Agreement (LOAs) or through lease agreements, which are legally binding. However, oversight of these areas and accountability for them are within the purview of the airport operator, and, at certificated airports, the Federal Aviation Administration (FAA) holds the certificate holder ultimately responsible for operating the airport safely. Advice from airport counsel can guide the certificate holder in writing agreements and LOAs that identify user responsibilities.

**NOTE:** TENANTS ARE GENERALLY ONLY RESPONSIBLE FOR LEASED PORTIONS OF NON-MOVEMENT AREAS WITH RARE EXCEPTIONS SUCH AS AT MILITARY INSTALLATIONS WHERE CERTAIN TAXIWAYS OR ARRESTING GEAR INSTALLATIONS ARE MAINTAINED BY DOD.

## CHAPTER 4. TYPES OF SELF-INSPECTIONS ~~PROGRAM TYPES~~

4.1 There are different types of inspections in an effective self-inspection program; each type is appropriate to specific activities on the airport. They are:

4.1.1 Daily inspection schedule.

The airport must be inspected daily except otherwise required by the Airport Certification Manual. Larger airports normally conduct multiple inspections daily. The Part 139 requirement to inspect daily does not mean that only one self-inspection is required each day. Typically, the first daily inspection is conducted early in the morning before the first air carrier operation. An effective self-inspection program includes a daylight inspection and a separate nighttime inspection to evaluate lighting systems and glass bead visibility. Optimally, self-inspections should occur when aircraft activity is minimal, in order to create the least impact on airport operations. Part of this inspection must occur during the hours of darkness at those airports that serve air carriers during hours of darkness. Airport operators holding an FAA Airport Operating Certificate—Class I, II, III, or IV—must conduct a daily airport inspection, to include a nighttime inspection to be in compliance. The daily airport inspection requirement, including a nighttime inspection, is required regardless of whether or not the airport receives air carrier service except as otherwise required by the ACM. Air carrier service is not a prerequisite for complying with § 139.327 (a) (1).

4.1.2 Continuous surveillance inspection.

Those activities and facilities that airport management has identified and documented in the ACM as requiring continuous surveillance are inspected whenever personnel are in these areas. Hazardous conditions can occur at any time and in a short period can pose significant safety risks.

4.1.3 Special inspection.

Special inspections of activities and facilities must take place after receipt of a complaint or when an unusual condition or unusual event occurs on the airport, such as a significant meteorological event or an accident or incident. Special inspections must also occur at the end of construction activities, at the end of a construction shift, at the end of the day, and at the end of the construction project, to ensure that there are no unsafe conditions related to the construction activity. This special inspection must occur prior to construction personnel leaving the airport, in the event that corrective actions are necessary. Document special inspections on the appropriate portions of the Airport Daily Safety Self-Inspection checklist. Some airports use a separate inspection checklists for special inspections.

4.1.4 Periodic condition inspection.

Periodic condition inspections are conducted to focus on slowly changing conditions that may not be noticed during daily inspections. For example, a periodic condition inspection of markings may be conducted in the Spring to evaluate the condition of airfield markings to determine the priority for repainting markings when weather

condition permit painting work. A periodic condition inspection of markings may also be conducted in the Fall to evaluate the condition of markings to determine if any marginal airfield markings are in need of repainting before cold weather prevents repainting of markings. Periodic condition inspections may be conducted to focus on the condition of pavement lips and safety areas, especially where turf is not yet well established after construction projects. Settling of soil can expose pavement lips and erosion in safety areas are common problems after construction projects. A periodic condition inspection may be conducted during or immediately after heavy rain to check for drainage problems that may occur from turf damming or plugged drains in safety areas. At airports with potential rubber buildup problems, periodic condition inspection are conducted with Continuous Friction Measuring Equipment (CFME) to monitor the pavement for friction problems and obscuration of the runway centerline marking.

## CHAPTER 5. INSPECTION RECORDS

5.1 An effective safety self-inspection program includes procedures for capturing and tracking information about deficiencies and other phenomena from the inspection checklists. In addition, the airport operator must include a work order system so that deficiencies noted on the checklists can be corrected and documented in a timely manner.

5.2 The Inspection Log constitutes a record of conditions noted and can act as proof of follow-up corrective actions taken. Inspection logs can be electronic but the airport operator must be able to print hard copies when necessary. Information from the individual checklists is also an important administrative tool for airport management, providing a daily snapshot of the condition of the airport. Over defined periods, this information can indicate trends and identify problem areas and systems that must be addressed. This helps to direct financial planning and budgetary requirements. Certificated airports must retain checklist records for 12 consecutive calendar months [§139.301 (b) (5)]. Certificate holders are required to prepare and maintain for at least 12 consecutive calendar months, a record of each inspection, showing the conditions found and all corrective actions taken [§139.327 (c)].

5.2.1 Airports can use electronic record keeping programs specifically designed to meet self-inspection requirements. These must be available to the Administrator in an acceptable form during any inspection conducted by the FAA. The log of the regularly scheduled inspection checklists documents that safety inspection responsibilities are being met.

5.2.2 The operator must issue a Notice to Airmen (NOTAM), as appropriate, reporting deficient conditions that could have an immediate and critical impact on the safety of aircraft operations. When corrective actions take place, the operator cancels the NOTAM. Certificated airports can use other notification systems and procedures in addition to the NOTAM system but not in leu of NOTAMS, if acceptable to the Administrator.

# CHAPTER 6. KNOWLEDGE AND EQUIPMENT FOR THE SELF-INSPECTION PROGRAM

## 6.1 Knowledge Requirements.

Airport inspection personnel who perform inspections must have a general knowledge of the ACM and a specific knowledge of the sections of the ACM that pertain to their duties and responsibilities [§139.303 (a)(c)]. The following areas require training at the specific airport at which they perform inspections:

1. Airport familiarization, including runway and taxiway configuration, airport marking, lighting, and sign systems, and the location and types of facilities that affect airside operations
2. Part 139 and the FAA AC standards and as applied specifically to the airport. The airport operator must provide training on these standards and provide access to these references [§139.303 (b)]
3. Procedures for conducting self-inspections and discrepancy reporting procedures as addressed in the Self-Inspection Program section of the ACM.
4. Procedures for access to, and operation in, movement areas and safety areas as specified under §139.329 at the specific airport
5. Airport communication procedures, including radio communication between air traffic control tower and personnel, use of the common traffic advisory frequency (CTAF) (aka UNICOM) as appropriate, and procedures for reporting unsafe airport conditions. During hours with no operational control tower, the operations inspector must also listen for aircraft and other vehicle operators.
6. At certificated airports, applicable sections of the approved ACM, as mentioned above, including the airport's:

a. Marking, Lighting, and Sign Plans

b. Airport Emergency Plan (AEP)

c. Wildlife Hazard Management Plan

d. Snow and Ice Control Plan (as applicable)

e. Construction Safety and Phasing Plan (CSPP) for projects (as applicable)

f. NOTAM requirements, notification, and distribution procedures (AC 150/5200-28 *Notices to Airmen (NOTAMs) for Airport Operators)*

## 6.2 Records.

At certificated airports, the ACM must contain initial and recurrent training requirements for personnel conducting the airport inspections, and the certificate holder must maintain accurate records of the training received by the inspection personnel and the inspections they perform.

6.3 **Equipment.**

6.3.1 The self-inspection personnel performing inspections must have a two-way ground control radio capable of communicating with the Airport Traffic Control Tower on controlled airports and on the CTAF (aka UNICOM) at uncontrolled airports or at controlled airports when the tower is closed. Inspectors must know and use correct radio communication phraseology, procedures, and techniques, as referenced in the Aeronautical Information Manual (AIM). Airport police or others authorized to conduct all or part of the self-inspection must also know and use correct radio communication phraseology, procedures, and techniques as referenced in the AIM.

6.3.2 In addition, vehicles used during the inspection process must be equipped with:

1. A beacon for nighttime and low-visibility inspections; and
2. Either a beacon or orange-and-white checkered flag prominently posted on the vehicle for daytime inspections in order to provide maximum visibility.

6.4 **Checklists.**

Self-inspection personnel must document inspections on checklists that include all areas subject to inspection. A copy of the checklist from the previous inspection may be useful to provide information concerning deficiencies already noted/reported and/or corrective action taken. Uncorrected deficiencies should continue to be documented on inspection checklists until they are resolved. All conditions found must be documented on the inspection checklists, even if corrected during the inspection. All corrective actions must be documented, either on the checklist or on a work order.

# CHAPTER 7. INSPECTION REQUIREMENTS BY TYPE

## 7.1 Daily Inspection.

The daily inspection of the airport's physical facilities concentrates on the areas described below. The inspector uses the airport diagram or an airport map and identifies deficiencies, including necessary details and locations, on it. The term "reporting" means that a comment is made on the checklist and, if applicable, marked on the airport diagram. Photographing the deficiency is an excellent method for documenting the condition in addition to noting the deficiency on the checklist.

### 7.1.1 §139.305, Paved Areas.

The inspection of pavement surface condition is critical to airport safety. Pavement inspection is conducted daily (e.g., in the early morning before flight operations begin). Additional inspections can be conducted as appropriate at the discretion of the airport operator to ensure pavement surfaces are clear. At airports with a history of pavement heaves, more frequent inspections are appropriate during high heat conditions. During the pavement inspection, the inspector:

7.1.1.1 Checks the pavement lips,—the area between full-strength pavement, and shoulders and between paved shoulders and safety areas. This observation has two purposes: first to check for water drainage problems due to turf damming, and, secondly, to assure that pavement lips do not exceed 3 inches. The inspection includes a check for vegetative growth along runway and taxiway edges that may impede drainage from the pavement surface.

7.1.1.2 Determines the presence of any cracks wide enough to cause loss of directional control in an aircraft. The inspector reports and marks location of cracks on the airport diagram for continued monitoring during future inspections. The inspection also includes the identification of holes that could cause directional control problems for an aircraft [Reference § 139.305 (a)(2)].

7.1.1.3 Checks the condition of pavement areas for cracks, scaling, spalling, bumps, low spots, and debris that could cause foreign object damage to aircraft.

7.1.1.4 Checks for low spots that are conducive to ponding during rainstorms and for areas where water may remain on the runway surface and cause hydroplaning.

7.1.1.5 Checks for mud, dirt, sand, loose aggregate, debris, foreign objects, rubber deposits, and other contaminants that must be removed promptly and as completely as possible.

7.1.1.6 Checks markings (see Para. 7.1.4)Refers to the ACs that contain methods and procedures for maintaining paved surfaces at the specific airport that are acceptable to the Administrator.

7.1.2 §139.307, Unpaved Areas.

At airports where applicable, the airport operator must maintain the condition of gravel, turf, or other unpaved runway, taxiway, or loading ramp and parking area on the airport, which is available for air carrier use, in a manner acceptable to the Administrator. Unpaved surfaces in the state of Alaska are predominantly involved in this Section of the regulation. During the inspection of unpaved areas, the inspector:

1. Checks the slope from the edge of the full-strength surface downward to the existing terrain and confirms that it is no steeper that 2:1.
2. Checks that the full-strength surfaces have an adequate crown or grade to assure sufficient drainage to prevent ponding.
3. Checks to ensure that the full-strength surfaces are adequately compacted and sufficiently stable to prevent rutting and loosening or build-up of surface material, which could impair directional control of aircraft or prevent drainage.
4. Checks that there are no holes or depressions that exceed 3 inches in depth or are of a breadth capable of impairing directional control or causing damage to an aircraft.
5. Checks for mud, dirt, sand, loose aggregate, debris, foreign objects, rubber deposits, and other contaminants that must be removed promptly and as completely as possible.
6. Refers to the ACs that contain methods and procedures for the maintenance and configuration of unpaved areas at the specific airport, which are acceptable to the Administrator.

7.1.3 §139.309, Safety Areas.

At certificated airports, the ACM must document the dimensions of the runway and taxiway safety areas. The inspector must know the dimensions of the runway and taxiway safety areas at the airport. During the safety area inspection, the inspector:

1. Inspects each safety area to ensure that it is cleared and graded and has no potentially hazardous ruts, humps, depressions, or other surface variations.
2. Inspects each safety area to ensure drainage by grading or storm sewers to prevent water accumulation.
3. Confirms that each safety area is capable under dry conditions of supporting aircraft rescue and firefighting (ARFF) personnel and equipment, snow removal equipment, and the occasional inadvertent aircraft excursion, without causing major damage to the aircraft.
4. Checks to ensure no object, except those fixed by function (such as runway lights, signs, or navigational aids), is located there. Objects in the safety areas must be constructed on frangibly mounted structures of the lowest practical height. At certificated airports, the frangible point must be no higher than 3 inches above

grade. Refer to Table 6-1 in AC 150/5300-13, *Airport Design*, current edition, for a list of NAVAID facilities authorized to be located in the RSA because they are fixed-by-function.

5. Determines that the base for any object located in safety areas is at grade level. This includes light fixtures, traffic and wind indicators, and NAVAIDs. This is especially important at airports subject to winter thaws. The inspector must check manhole and handhole covers to ensure they are at grade level and can support vehicles and the inadvertent aircraft excursion.
6. Identifies and documents any damage caused by wildlife. Documents evidence of wildlife activity, e.g., burrowing animals, birds, insects, mammals, etc., on the airport in accordance with part 139.337 and the ACM. Confirms wildlife hazard notification is accomplished through NOTAMS and other methods acceptable to the Administrator.
7. Notes equipment and objects, such as construction equipment or material that are temporarily located in a safety area. At certificated airports, this requires knowledge of the construction safety plan, which specifies locations of material and equipment. The inspection must confirm the airport has issued appropriate NOTAMs in accordance with §§139.309, .339, and .341.
8. Checks for any construction activity or vehicle/equipment located in the safety area. Keep in mind that during some construction projects the runway or taxiway may be restricted to small aircraft that do not need a full safety area for operations. Also keep in mind that in rare circumstances where a taxiway is indispensable for aircraft movement, a straight section of taxiway may be opened with trenches/excavations in the safety area, subject to restrictions. Self-inspection personnel should be familiar with the Construction Safety Phasing Plan (CSPP) for projects and identify any safety area issues related to construction activity that is not in accordance with the CSPP.

7.1.4 §139.311, Marking.

Airport markings provide information to pilots during takeoff, landing, and taxiing. Airport marking must be properly maintained and must comply with standards specified in AC 150/5340-1, *Standards for Airport Markings*, current edition. Part 139 regulations provide compliance with these standards is mandatory for operators of certificated airports and compliance may be required for airport operators of airports where Federal funds have been used for runway and taxiway construction/ rehabilitation and the grant assurances remain in effect. The inspector must be familiar with the appropriate marking required at the airport in the approved Marking Plan. During the inspection, the inspector:

1. Confirms that the marking of each runway meets the specifications for takeoff and landing minimums.
2. Confirms that each taxiway has a centerline and taxiway edge markings, as appropriate (AC 150/5340-1 specifies when edge marking is required).

3. Checks holding position marking for visibility and correct layout.
4. Checks ILS critical area/POFZ/APCH markings if installed on the airport.
5. Checks surface painted holding position signs (SPHPS) and enhanced taxiway centerline markings for visibility and correct layout.
6. Refers to the appropriate sections of AC 150/5340-1 for information regarding marking that differentiates movement area from non-movement area and the associated marking for operations in the non-movement area (e.g. vehicle roadways, taxi lanes, parking for fueling vehicles and other ramp marking).
7. Checks markings for correct color, peeling, blistering, chipping, fading, and obscuration because of rubber buildup and notes on the airport maps the location of any marking that is obscured, faded, or deteriorating.
8. During and after construction projects, checks new markings for compliance with marking standards.
9. Checks markings with glass beads during periods of darkness to determine if the reflectivity level is adequate at night. In addition, the inspector confirms that the glass beads are adequately embedded to avoid being ingested by aircraft engines.
10. Reports deviations from standard marking and their location on the airport map. Inspectors must monitor and document non-complying marking. New markings installed during construction projects must be checked for compliance to marking standards.

7.1.5 §139.311, Signs.

Signs provide important information to pilots while taxiing and to vehicle and equipment operators on the airport. Signs must be in accordance with the standards specified in the current versions of AC 150/5340-18, *Standards for Airport Sign Systems*, and AC 150/5345-44, *Specification for Runway and Taxiway Signs*, current editions. Part 139 regulations provide compliance with these standards is mandatory for operators of certificated airports and compliance may be required for airport operators of airports where Federal funds have been used for runway and taxiway construction/rehabilitation and the grant assurances remain in effect. The inspector must know the appropriate sign standards and specifications at the airport and ensure that signs comply with the approved Sign Plan. In addition, at Class I, II, and IV airports, the signs required by §139.311 (b)(1) must be internally illuminated. At Class III airports, the signs required by §139.311 (b)(1)(ii) and (b)(1)(iii) must be internally illuminated. During the inspection, the inspector:

1. Checks signs to ensure they are in accord with the approved Sign Plan and that they identify taxiways and runways correctly. Signs must be easy to read, located properly, and follow the color and retro-reflectivity standards.
2. Checks to ensure that all lighted signs are operational and not obscured by vegetation, dirt, snow, etc.
3. Checks to ensure that signs are properly tethered.

4. Checks signs to ensure they are frangibly mounted (the frangible mount being no greater than 3 inches above the base) and that the concrete bases are level, secure, and properly maintained at grade level.
5. Checks to see that sign panels are not missing, askew, cracked, broken, or otherwise damaged or compromised.
6. Most importantly, confirms that signs have the correct legend and arrow orientation as well as that all dividers are placed correctly and are the correct color.
7. During and after construction projects, checks new signs for compliance with sign standards and, at certificated airports, confirms they are in accordance with the approved Sign Plan.
8. During periods of darkness, checks to ensure that signs are properly illuminated and that mandatory instruction signs are illuminated with the associated runway lighting system. However, at some locations where runways are inactive, (lower priority runway during snow events or inactive runways during low visibility operations below 1200 RVR), holding position signs on taxiways crossing inactive runways may be connected to the taxiway circuit.
9. Checks signs for correct operational intensity settings and that they do not flicker or change intensity when runway light intensity is changed.
10. Check runway exit signs to ensure they are illuminated when the runway lights are illuminated. Runway exit signs are typically connected to the runway circuit, however, if they are connected to the taxiway circuit, there may be a local procedure to turn on the associated taxiway lights whenever the runway lights are turned on to meet this standard.
11. Reports non-standard signs or any sign that is not functioning properly, is faded, or is damaged. At certificated airports, the inspector ensures the airport has issued a NOTAM about any malfunctioning holding position sign or ILS critical area sign, per §139.339. Inspectors must document and monitor any non-standard sign.

7.1.6 §139.311, Lighting.

7.1.6.1 The airport operator is required to provide and maintain lighting systems for air carrier operations when the airport is open at night and during conditions below visual flight rules (VFR) minimums. Lighting is also required in Alaska during periods in which a prominent unlighted object cannot be seen from a distance of 3 statute miles or when the sun is more than six degrees below the horizon. The lighting systems required by §139.311 (c) consist of runway lighting, taxiway lighting, approach lighting (as authorized), an airport beacon, and obstruction lighting. Several ACs provide information and guidance on lighting and contain the lighting standards for certificated airports. During the inspection, the inspector checks the taxiway lighting/reflector system to ensure that they are the proper color, oriented correctly and meet operational tolerance limits specified in AC 150/5340-26, *Maintenance of Airport Visual Aid*

*Facilities*, current edition. Taxiway lighting consists of one of ~~these 4~~ the four following systems.

1. Centerline lights,
2. Centerline reflectors,
3. Edge lights, or
4. Edge reflectors.

7.1.6.2 During the inspection (which can be accomplished over a 24-hour period), the inspector will:

1. Check each runway lighting system to ensure that it meets the specifications for takeoff and landing minimums, as authorized by the Administrator. This can include runway centerline and touchdown zone lights, displaced threshold lights, if installed, lead-on/lead-off lights, Runway End Lights (RENLs), stop bars, LAHSO and Runway Status Lights and the runway threshold/runway end lighting system.
2. Check all runway lights and threshold/end lights, to ensure they are the proper color and oriented correctly, this includes the specified lighting configuration for ILS-capable runways.
3. Check all taxiway lights and runway guard lights, if installed, (both elevated and in-pavement) for meeting operating tolerance limits.
4. Check the approach lighting system for each runway to ensure that it meets the specifications for takeoff and landing minimums, as authorized by the Administrator, unless an entity other than the certificate holder provided and/or maintains the system. However, if the inspector notes and documents a deficiency in a system not owned by the airport, the owner of the system is notified so that corrections or repairs can be made as well as documented that the deficiency has been corrected.
5. Check the operation of the airport beacon and ensure the proper color is being reflected for airport type.
6. Check obstruction lighting and marking within the airport's authority to ensure correct and effective operation.
7. Check apron edge lights, if installed.
8. Check all lights, lighting fixtures, and lighting systems to ensure that they are free of vegetation and obscuration by deposits of foreign material.
9. Check the following for proper shielding, if installed:
    a. Apron lights, vehicle parking area lights, lighting in fuel storage areas, roadways, buildings
    b. Floodlights used in construction areas.

10. If inspector notes a deficiency with an approach lighting system, the deficiency is documented and the owner or entity responsible for maintenance is notified so that corrections can be made. Document all fixtures missing and lights that are not working (e.g., burned out) or appear dim.
11. Check that lights function properly through the manual or radio features and that photocell controls function properly, if installed.
12. Check all light bases to ensure proper alignment, correct height, and grading to prevent erosion and ensure that fixtures are frangibly mounted, the point of which is no more than 3 inches above the base.
13. For Low Visibility Operations/Surface Movement Guidance and Control System (LVO\SMGCS) operations below RVR1200, conduct an initial inspection of stop bar lights, if installed, runway guard lights, clearance bar lights, taxiway centerline lights, and taxiway edge lights installed on the low-visibility routes in accordance with the airport's LVO/SMGCS plan.
    a. For operations below RVR1200 with any LVO/SMGCS lighting systems that are not electronically monitored, periodically inspect every 2 to 4 hours during low visibility operations. The inspections must be conducted according to the airport's LVO/SMGCS plan, which is referenced in the ACM.
    b. For operations below RVR600 with any LVO/SMGCS lighting systems that are not electronically monitored, inspect every 2 hours. The inspections must be conducted according to the airport's LVO/SMGCS plan, which is referenced in the ACM.

7.1.6.3 Light inspections must occur during periods of darkness in order to evaluate lighting systems effectively. This is when they provide the primary visual aid for pilots. While the inspector observes airport lighting owned and maintained by the airport operator as a priority, the inspector must also document and report immediately any lighting discrepancy owned or operated by others to the appropriate, responsible owner, in the interest of safety. In Alaska, lighting systems must be inspected during periods of darkness or during periods in which a prominent unlighted object cannot be seen from a distance of three miles or the sun is more than six degrees below the horizon.

7.1.7 §139.313, Snow and Ice Control.

7.1.7.1 Snow and Ice Control Plans (SICP) are unique to each airport. Therefore, the inspector must be familiar with the contents of the plan for the specific airport. AC 150/5200-30, *Airport Field Condition Assessments and Winter Operations Safety*, current edition, contains guidance and procedures for snow and ice removal. At airports where snow and ice occur throughout the winter season, preparation and tabletop exercises usually begin off-

season. Familiarization with the Snow and Ice Plan can begin with the airport's off-season preparation especially when new techniques, equipment, and authorized materials are involved in the snow removal and ice control processes. Many airports conduct a "Lessons Learned" session or series of sessions after the winter season. These sessions can be helpful to the Inspector as well.

7.1.7.2 During the snow and ice control inspection, the inspector, in accordance with the SICP:

1. Checks runways and taxiways to ensure that snow banks and drifts next to the runways and taxiways provide clearance for aircraft wing tips, engines, and propellers.
2. Checks to ensure that snow is not piled across the runway threshold or across runway/runway intersections.
3. Checks runway and taxiway lights and signs to ensure that they are not obscured by snow or damaged by snow removal operations.
4. Checks for foreign objects that may have been left on the pavement from snow removal operations i.e. chunks of ice or debris from the snow removal equipment.
5. Checks taxiway intersections and access routes to ensure that snow removal operations have provided adequate clearances for ARFF equipment.
6. Checks to ensure that critical areas for the operation of electronic NAVAIDs are clear.
7. Checks for and reports slippery pavement conditions, using RCAM as described in AC 150/5200-30 to determine Runway Condition Codes or a MU value from a friction measurement device. There is no correlation between friction measurement numbers and braking action reports of Good, Fair, Poor, or Nil. These reports are transmitted to the ATCT.
8. Checks for snow and /or ice accumulation that the snow and ice removal operation has missed and for any condition resulting from removal operations that creates a hazard on the airside. The inspector must report such accumulations or conditions as a deficiency requiring corrective action. At certificated airports, the inspector must ensure the operator issued NOTAMs for snow, ice, slush, or water on the movement area or loading ramps and parking areas as specified under § 139.339.

7.1.8 §§ 139.315, .317, .319 Aircraft Rescue and Fire Fighting.

§§ 139.315, .317, and .319 address Index Determination, Equipment and Agents, and Operational Requirements. During the inspection of ARFF capabilities, the inspector:

1. Checks the status of ARFF response, which includes the availability of equipment, fire fighters, and extinguishing agent (s) to meet Index if applicable, and operational readiness. At certificated airports, the inspector ensures that ARFF capabilities comply with the index and provisions of the approved ACM. The inspector must report deficiencies for corrective action.
2. Ensures alarm and emergency notification communication systems are operable and verifies that it makes all of the appropriate notifications.
3. Checks for construction or maintenance activity on the movement area, which could require ARFF or affect response routes, and ensures that notification has been given to, and received by, the appropriate ARFF official.
4. Reports and monitors ARFF vehicle(s), equipment, extinguishing agent(s), and any ARFF personnel capability that is not available or inoperative as well as any change to the airport's critical aircraft that may require a change to ARFF Index. At certificated airports, the airport operator must notify the FAA Regional Airports Division if an ARFF vehicle required for Index is inoperative and cannot be replaced immediately, as specified in §139.319(g). The airport operator must also issue a NOTAM about the unavailability of any rescue and fire fighting capability, as specified under §139.339.

7.1.9 §139.321, Handling and storing of hazardous substances and materials.

This section requires the certificate holder or airport operator who acts a cargo handling agent to establish and maintain procedures for the protection of persons and property on the airport during the handling and storing of any material regulated by the Hazardous Materials Regulations (49 CFR 171through 180). The daily inspection of aircraft fueling operations, if certified, must focus on the requirements of §139.321 as well as the local fire code. This includes fuel storage areas and facilities, mobile fuelers, fuel hydrants, fueling cabinets, load racks, self-fueling and requirements for DPF equipped fuel service vehicles and the procedures and practices of fueling personnel. The inspection must also include security, fire protection, general housekeeping, and any other fuel dispensing facilities and procedures. The certificate holder must schedule the more detailed fueling operation inspection on a quarterly basis (see Quarterly Fueling Operations under Periodic Condition Inspection). The National Fire Protection Association publishes the document cited in AC 150/5230-4 (NFPA 407), which contains information about fueling procedures and practices at fuel storage facilities, fuel dispensing, and bonding.

7.1.9.1 During the daily inspection of aircraft fueling operations, the inspector:

1. Determines that fueling personnel are performing fueling operations in a safe and secure manner, in accordance with NFPA 407 and the local fire code including ramp operations and refilling operations at the fuel storage facility.
2. Checks to ensure that the appropriate signs for the fuel farm are installed, that Emergency Shut-Off placards are installed at both the

fuel farm and on mobile fuelers and any other location where required by NFPA 407 and the ACM.

3. Checks to ensure that the fuel storage facility is properly protected, that access is secured when not occupied by an authorized user.
4. Reports and monitors any unsafe fueling practice(s) and violation(s) of part 139, the ACM, and the local fire code. At certificated airports, the inspector must document and report non-compliance items.
5. Refers to NFPA 407 for a complete understanding and application of the standards and requirements for fueling operations and the handling and storing of hazardous materials and substances.

7.1.10 §139.323, Traffic and wind direction indicators.

The inspection of NAVAIDs concentrates on the visual navigational aids owned by the airport operator. However, the inspector must also observe the condition of any navigational aids owned or operated by others, including those owned by the FAA, and report any observed problems immediately to the NAVAID owner. During the inspection of NAVAIDs, the inspector:

1. Determines that a segmented circle, if installed, should be clear of obstructing vegetation that could impair the visibility of the circle elements.
2. Determines that the airport rotating beacon is visible and working properly.
3. Checks any wind cones to ensure they are situated correctly, swing freely, do not have faded or frayed cone fabric, and, if lighted, that all lights are operating.
4. Determines whether the Runway End Lights (RENLs, formerly known as Runway End Identifier Lights) are flashing in proper sequence and mounted on frangible couplings.
5. Checks Visual Glide Slope Indicators (VASIs, PLASIs, or PAPIs) to ensure that the lights are working and mounted on frangible couplings.
6. Determines that the Approach Lighting Systems (ALS) are functioning properly.
7. Checks all installations for proper alignment.
8. Reports any NAVAID that is malfunctioning, inoperable or misaligned, damaged, or missing, to the owner or entity responsible for maintenance.
9. Refers to the appropriate ACs on airport NAVAIDS and their maintenance.

7.1.11 §139.325, Emergency Plan.

Operations personnel must be familiar with activities for which they are responsible in the Airport Emergency Plan, e.g., communications, gate access, coordination procedures, and their role after an event on the airport [§139.325 (g)(3)(4)]. Inspection of facilities involved in the Emergency Plan, e.g., gates and access points for mutual aid, are integral elements of the daily checklist.

7.1.12 §139.331, Obstructions.

7.1.12.1 The operations personnel must perform a visual check of obstructions shown on the airport diagram or map and determine that they are properly marked and lighted. If an object is found and thought to create an obstruction, the inspector marks its approximate position on the airport diagram or map and reports this to the airport operator so that its status may be determined or if proper notification to the FAA, such as is required through part 77 or Airport Layout Plan review, has been provided.

7.1.12.2 During the inspection of obstructions, the inspector must also determine if vegetation or trees have grown to a height that necessitates additional further action. The inspection must also include, as appropriate:

1. A check on the airport for any construction equipment that may be penetrating protected airspace for flight operations. These obstructions can include piles of material in safety areas, cranes, heavy equipment, and pick-up trucks. If the construction safety plan allows materials and equipment in the safety areas, the inspector must check to ensure that there is no obstruction or derogation of navigation signals or negative effect on aircraft landing and takeoff operations.
2. A check off-airport for construction in the vicinity that could impact operations at the airport (e.g., cranes, radio towers). The inspector monitors off-airport construction and includes a comment on the checklist to alert others to be aware of potential penetrations of the airspace around the airport; this is coordinated with the ATCT, if appropriate.
3. Reporting and monitoring of any obstruction light that is missing, inoperative, or damaged and of any object that appears to be an obstruction and is not properly marked or lighted to the entity responsible for maintenance.
4. Reference to the ACs appropriate to obstructions and the methods for marking and lighting them and addressing them as potential hazards.

7.1.13 §139.333, Protection of NAVAIDs.

This section requires the certificate holder to ensure that the operation of an electronic or visual NAVAID and air traffic control facilities on the airport are not compromised. This requirement includes the protection of NAVAIDs from vandalism and theft, and if the NAVAIDS are owned by an entity other than the certificate holder, assistance in protecting them. The inspector must check NAVAIDs to confirm there is no derogation of signal and no impediment to a visual aid.

7.1.14 §139.335, Public protection.

7.1.14.1 During the inspection, the inspector checks gates, fencing, locks, and other safeguards that prevent inadvertent entry by unauthorized persons and

vehicles onto airport property, especially onto movement area. In addition, protection from jet blast by the use of blast fencing requires inspection to ensure that the fencing is in place and is intact. The inspector reports and monitors any damaged or missing safeguard.

7.1.14.2 In accordance with the airport's security plan, the inspector must report any unauthorized persons or vehicles in the movement area. Airports regulated by the Transportation Security Administration may have additional requirements for reporting and responding to unauthorized persons and vehicles or suspicious activity.

7.1.15 §139.337, Wildlife hazard management.

7.1.15.1 Because of damage to aircraft and the potential loss of life associated with wildlife strikes, operations personnel must be vigilant in checking for evidence of insect, bird, and animal activity on the airport. During inspections of runways and taxiways and their associated safety areas, the inspector must identify and locate on the airport diagram or map any activity that indicates the presence of wildlife. If the inspector observes wildlife of a size, or in numbers, capable of causing an event described in §139.337 (b)(1-3), then the inspector must inform the airport operator and document evidence of wildlife activity, e.g., loafing, burrowing, nesting, perching, feeding, or using the airport as a throughway or flyway. This evidence should be documented in a wildlife log; in accordance with federal, state and local wildlife permit requirements as described in a Wildlife Hazard Management Plan. The inspector must also be aware of the proximity of wildlife attractants, such as landfills, parks, golf courses, construction, ponds and/or other water sources, etc., as potential sources of wildlife visits to the airport.

7.1.15.2 Evidence of wildlife activity found during the daily self-inspection must be properly documented and also reported to the appropriate authority on the airport, e.g., the wildlife biologist. All dead wildlife found and all wildlife aircraft strikes must be reported to the Regional Office Airports Division and on the FAA Form 5200-7, *Bird/Other Wildlife Strike Report.* This form may be obtained from the FAA website, http://www.faa.gov. Additionally, the inspector must check fencing and gates for wildlife accessibility to the airport and ensure that wildlife control equipment is available and operational.

7.1.16 §139.339, Airport condition reporting.

During periods of time when a condition on the airport requires notification, the inspector must monitor for changes that will require action on the part of the airport certificate holder (e.g., that snow plowing operations are being conducted in accordance with the SICP). Each certificate holder must prepare and keep, for at least 12 consecutive calendar months, a record of each dissemination of airport condition to air carriers (§139.339 (d)).

7.1.17 §139.341, Construction and other unserviceable areas.

Operations personnel must be familiar with the construction safety procedures and guidance provided in AC 150/5370-2, *Operational Safety on Airports During Construction*, current edition. At certificated airports, the inspector must also be familiar with the construction safety procedures contained in the ACM and in the specific approved Construction Safety Phasing Plan (CSPP). During the construction inspection, the inspector must:

1. Check all construction adjacent to movement areas to ensure these areas are identified with conspicuous marking and lighting.
2. Determine that stockpiled material and construction materials are properly stored and not left in safety areas or movement area unless properly secured. Any material remaining on the airside must be secure from being moved by wind, jet blast, or prop wash.
3. Determine that construction equipment (such as bulldozers, cranes, etc.) are marked and lighted and parked clear of the safety areas.
4. Ensure construction barricades are properly positioned to define the limits of construction and hazardous areas and, check to ensure lights are working properly and are positioned correctly.
5. Check to ensure that debris and foreign objects are continuously being picked up around construction areas.
6. Check for open trenches in the safety areas or adjacent to movement areas and that barricades, as required, are in place to prevent mishaps.
7. Check operation of lighting in areas adjacent to construction before the construction crews depart for the day. In particular, ensure that mandatory instruction signs remain lighted with the associated runway lights.
8. Check NOTAMs daily during construction projects to ensure they accurately reflect the conditions on the airport.
9. Verify that closed taxiways or runways are properly marked and lighted to include lighted X's.
10. Report and monitor any dangerous condition created by construction activity, including damage to signs, lights, markings, and NAVAIDs, or equipment and supplies left in movement areas and safety areas.

7.2 **Continuous Surveillance Inspection.**

Continuous surveillance inspections are conducted any time inspection personnel are in an area designated as subject to continuous inspection in the ACM. This inspection also monitors conditions from previous inspections. It consists of a general observation of activities for compliance with part 139 and airport rules and regulations, procedures, etc., as well as to find deficiencies in the physical facilities, which are readily apparent. Appendix B contains a sample Continuous Inspection Checklist. Continuous

surveillance of airport physical facilities and activities can involve any of the activities of the daily inspection but must cover at least the areas described below:

7.2.1 §139.329, Pedestrians and ground vehicles.

The inspector:

1. Determines if vehicle drivers are following the airport regulations for procedures on the airside and monitors their communications. This includes the operations of all ground vehicles, maintenance vehicles, mowing equipment, and other vehicles and equipment that may be in the safety areas. Attention to these activities is critical during construction, winter operations, special events, and unusual conditions.
2. Reports and monitors any vehicle operator who is not complying with part 139 and the airport rules and regulations.
3. Reports any ground vehicle incident or accident observed and any ground vehicle signs and markings that are damaged, missing, or obscured.

7.2.2 §139.321, Handling and storing of hazardous substances and materials.

The inspector must:

1. Observe that proper bonding is being used, deadman controls are not blocked, no smoking prohibitions are in effect (this can include a random check of vehicles to ensure that smoking trays and lighters have been removed), and aircraft are not being fueled inside hangars.
2. Check for proper parking of mobile fuelers to ensure these vehicles are at least 10 feet apart and 50 feet from buildings.
3. Check for fuel leaks or spills in the fuel storage area, in hydrants, and around mobile fuelers.
4. Determine that the fuel farm is secure and free of flammable materials, including litter and vegetation.
5. Report and monitors previously reported unsafe fueling conditions/fueling operations discussed above and other violations of the local fire code and the airport’s specific fuel fire safety procedures.

7.2.3 §139.313, Snow and Ice Control.

During the continuous surveillance inspection of snow and ice removal operations, the inspector must:

1. Check snow and ice-covered pavements and reports and monitors all surfaces where snow and ice may affect the safety of aircraft operations.
2. Monitor snow and ice removal NOTAMs to ensure they remain current and issues timely corrections, as necessary. If the airport uses other means to notify tenants of snow and ice removal operations, e.g., faxed or electronic messages, the inspector monitors this information for accuracy.

7.2.4 §139.341 Identifying, marking, and lighting construction and other unserviceable areas.

Operations personnel must monitor construction projects continuously to ensure airport safety, since many construction projects include workers who are not familiar with aviation operations. The inspector must:

1. Check construction projects to ensure that the contractor is following the construction safety plan.
2. Report any of the following conditions:

a. Unauthorized use of runways, taxiways, and aprons by construction personnel and equipment.

b. Conditions that can result in runway incursions. This includes ensuring that construction areas are properly barricaded and that cones, markings, lights, etc., are properly positioned to provide warnings to pilots and vehicle operators.

c. Construction equipment that is being operated in the ILS/MLS critical area(s), unless coordinated with the ATCT.

d. Open, unlocked, and/or unattended perimeter gates; construction vehicles and personnel not following access and escort procedures.

e. Construction vehicles not properly marked or missing appropriate flags and/or beacons.

f. Foreign object debris on haul roads adjacent to movement areas, which can be tracked onto taxiways, aprons, and ramp areas.

g. Confusing or missing signs, marking, or lighting that could potentially confuse or mislead pilots or vehicle operators.

7.2.5 §139.335, Public Protection.

Operations personnel must follow instructions regarding gate closures when leaving and entering the airside, to prevent illegal “piggybacking.” They must also be more aware of activities during special airport events and construction projects. Safeguards to protect the public and to protect the airport require extra vigilance, because they are imposed at a level above the normal routine to accommodate an activity that is not part of the airport’s normal routine. The inspector must:

1. Check for unauthorized personnel, vehicles, and animals, particularly in areas reserved for aircraft passengers, when the general public is present or has access to the air carrier ramp and other portions of the movement area, e.g., remote aircraft parking locations.
2. Check for inoperable or blocked gates, particularly those that would impede access by aircraft rescue and firefighting equipment or mutual aid.
3. Check for open or unlocked gates and missing or damaged signs posted to prevent unauthorized access to the airfield.
4. Check for damaged or missing jet blast fences.

7.2.6 §139.337, Wildlife Hazard Management.

The continuous inspection is especially important with respect to the identification of wildlife hazards, and the inspector must check for and report the following conditions:

1. Any animal, bird, or condition on or adjacent to the runways, taxiways, aprons, and ramps, which serves as evidence of wildlife activity. The inspector must report any wildlife activity to the appropriate office (e.g., wildlife biologist, airport operator) for follow-up action to determine if there is a potential wildlife hazard problem.
2. Potential hazards created by existing or proposed landfills, golf courses, parks, or natural conditions and noted on the wildlife log.
3. Wildlife strikes and carcasses found on the airfield. The inspector reports these on FAA Form 5200-7, Bird/Other Wildlife Strike Report, which is available on the FAA website at www.faa.gov.

7.2.7 §139.305, .307, 309, Foreign Object Debris (FOD).

The inspector must continuously check for and remove any debris in movement areas, non-movement areas, aircraft parking areas, and loading ramps.

## 7.3 Periodic Condition Inspection.

Periodic condition inspections consist of specific checks of physical facilities on a regularly scheduled basis. Usually these inspections occur on a weekly or quarterly basis. Checks can require use of equipment (e.g., Walker Bar to measure VASI glide slope angles, a transit to survey approach slopes, or continuous friction measurement equipment). It can also involve checking specific features of physical facilities. Periodic inspection of airport physical facilities and activities must include at least the areas described in this section and those included in the ACM. A basic checklist is included in Appendix B.

7.3.1 §139.305, Pavement areas.

The inspector must check pavement surfaces, including grooved pavement that facilitates drainage, for rubber buildup, polishing, loose aggregate, or other items that can affect friction. The inspector must report rubber build-up that must be removed in the interest of maintaining the pavement integrity of the touchdown zone area.

7.3.2 §139.31,1 Marking, signs and lighting.

The inspector must check marking for conspicuity during daylight and hours of darkness. Marking with glass beads must be check for effectiveness and for age, when beads can become loose and act as debris and a hazard to aircraft engines. The inspector notes pavement marking to ensure they are correct and visible and that marking on concrete or faded asphalt is outlined with a black border when conspicuity is at issue.

7.3.2.1 The inspector must check signs for accuracy, position, and to determine the integrity of the base and the frangible mount. The inspector also checks sign faces for peeling, color fading, cracks, and other deterioration. The inspector reports any deficiency for correction.

7.3.2.2 The inspector must check runway and taxiway lights for intensity and color and the integrity of the cans, the fixtures, and associated bases to ensure that electrical connections are secure and not compromised either by winter operations of mowing activities.

7.3.3 §139.321, Three month Fueling inspections.

Operations personnel at certificated airports are required to ensure that fire safety standards, contained in NFPA 407 are being observed. These inspections should be conducted every three consecutive months. During the inspections of the fueling facilities, the inspector also ensures that the local fire code is being observed as well. The fire safety standards for fueling operations must be listed in the ACM, and the three month inspections must confirm that fueling operations comply with the appropriate section of the ACM. Sample inspection checklists for fuel storage areas and mobile fuelers are included in Appendix B. Certificated airports must maintain records of the three month inspections for 12 consecutive calendar months. At fuel storage areas ("fuel farms") and loading/unloading stations, the inspector must:

1. Check fuel storage areas for adequate fencing and security to prevent unauthorized access or tampering.
2. Check for "No Smoking" placards that are clearly visible from all sides.
3. Check fuel storage areas for materials such as trash or vegetation that could contribute to the spread of fire and for equipment malfunctions, leaks, or activities that could be ignition sources.
4. Check fueling equipment to ensure that it is in good operating condition and free of fuel leaks.
5. Check piping for reasonable protection from damage by vehicles, if piping is above ground.
6. Check fuel storage areas for at least two accessible and serviceable fire extinguishers.
7. Check hoses to ensure correct procedures are being used and that abrasion of the hoses is avoided. Where the open hose discharge capacity of the equipment is more than 200 gallons per minute, at least one wheeled extinguisher with at least 125 lbs. of agent is also required.
8. Check for explosion-proof equipment, switches, and wiring that is reasonably protected from heat, abrasion, or impact, which could cause an ignition source.
9. Check for piping, filters, tanks, and pumps being electrically bonded together and interconnected to an adequate grounding rod.
10. Check for a serviceable bond/ground wire with clip at each loading/unloading facility for grounding tankers and mobile fuelers.
11. Check loading stations for deadman control features.
12. Ensure that there is boldly marked emergency cutoff placarding and that the emergency shutoff is capable of stopping all fuel flow with one physical movement.

The emergency cutoff must be located outside the probable fuel spill area near the route that normally is used to leave the spill area or to reach the fire extinguishers.

13. Check for clearly visible coding and/or labeling of fuel products.

7.3.4 Mobile fuelers.

During the three month inspection, the inspector inspects all mobile fuelers or a random sample of mobile fuelers at large facilities each quarter. The inspector must track any samples used so that all mobile fuelers in a fleet are inspected in the course of a year. The inspector must:

1. Ensure they meet fire safety standards and ensure that they are in good operating condition and free of fuel leaks.
2. Check mobile fuelers for parking at least 50 feet from a building and at least 10 feet from each other. At airports with a mobile fueler maintenance building, the inspector must ensure it is compliance with directives issued by the local fire marshal.
3. Check for flammability decals on all sides (Lettering should be at least 3 inches high), check for hazardous materials placards on all sides (Hazmat number for Jet A mobile fuelers is #1863 and for 100LL mobile fuelers #1203), check the cab for a "No Smoking" sign, and confirm that ash trays, cigarette lighters, and any other smoking equipment have been removed.
4. Check for two fire extinguishers, accessible from each side of the mobile fueler. Fire extinguishers must be charged, sealed, and tagged from the last fire extinguisher inspection.
5. Check dry chemical extinguishers to ensure they are only B-C rated. (ABC rated multi-purpose dry chemical extinguishers are not to be used on mobile fuelers, as they are highly corrosive to aircraft and can cause significant damage to aircraft engines.)
6. Check emergency fuel cutoff valves to ensure markings are large and legible and the valves are operable. Emergency fuel cutoff must be accessible from both sides.
7. Check electrical equipment, switches, wiring, and tail light lens covers for explosion proof construction and reasonable protection from heat, abrasion, or impact, which could be an ignition source. Crazed lens covers indicate age and deterioration and must be replaced.
8. Check for serviceable bonding wires and clamps.
9. Check nozzles for deadman control feature.
10. Check the vehicle exhaust system for exhaust leaks and for adequate shielding if it extends under the fuel tank portion of the vehicle.
11. As appropriate, check hydrant fueling stations for product leaks and proper maintenance.

7.3.5 Hydrant Fuelers.

As appropriate, the inspector must check hydrant fueling stations for product leaks and proper maintenance.

## 7.4 Traffic and Wind Direction Indicators and the Protection of NAVAIDs, §139.323 and §139.333 Navigational Aids (NAVAIDs).

The inspector must check for alignment and monitor for calibration NAVAIDs on and owned by the airport, where applicable. For equipment not owned by the airport, the inspector must contact the owner and report any malfunction or problem.

7.4.1 § 139.323, Navigational Aids (NAVAIDs).

The inspector must check the aiming of Runway End Lights (RENLs, formerly known as Runway End Identifier Lights) and Visual Glide Slope Indicators owned by the airport.

7.4.2 § 139.333, Navigational Aids (NAVAIDs).

7.4.2.1 **Lighting.**

The inspector must check lighting and lighting controls and:

1. Determine whether power generator and circuit resistance tests are being conducted, as scheduled.
2. Ensure lights with adjustable optical systems are checked for proper aiming, as scheduled.

## 7.5 § 139.331, Obstructions.

7.5.1 The inspector must check to ensure there is adequate protection from overhead power lines adjacent to aircraft parking areas.

7.5.2 The inspector must continually monitor trees, vegetation, and structures near the airport that could affect approach surfaces to the runways, encroach on safety areas, or penetrate part 77 surfaces.

## 7.6 § 139.317 and § 139.319 Aircraft Rescue and Fire Fighting.

ARFF, while a special discipline in its own right, must be inspected to ensure for readiness in terms of the airport's Index and requirements under the regulation. The inspector must:

1. Periodically determine if ARFF personnel and equipment are capable of meeting response times, as required by part 139 and in accordance with the provision of the ACM.

2. Ensure that recurrent training and hot-fire drills are being conducted as required by part 139.319(i)(2) and as described in the ACM. The documentation of training must meet the requirements of § 319.301(b)(2).
3. Check to ensure that equipment, equipment changes, and additions of equipment are included in the ACM as required by part 139.

## 7.7 Special Condition Inspections.

Special condition inspections occur after a complaint is made or an unusual condition, weather, or other event occurs. See chapter 4 above in this AC. A special inspection must be conducted after an accident or incident and must be conducted prior to the end of construction activity, so that the responsible construction personnel can take corrective action can be taken by. Depending on circumstances, special condition inspections may include the inspection of any of the specific facilities or activities under the other three inspection types. A special condition inspection of airport physical facilities and activities must include at least the areas described in this section, which are also included in Appendix B.

### 7.7.1 §139.305, Pavement Areas.

After a rain or thunderstorm, the inspector checks the pavement areas for ponding and edge damming.

### 7.7.2 §139.311, Markings and Signs.

The inspector must:

1. Determine if markings are visible at night especially when the pavement is wet following heavy rain.
2. After construction or maintenance operations, ensure that new pavement markings are correct (e.g., precision vs. non-precision runway marking).

### 7.7.3 §139.309, Safety Areas.

The inspector must:

1. Check the storm sewer system, verify that inlets are not clogged and drainage channels are free of debris, and mark the location on the airport diagram or map of any standing water. This includes checking that all inlet covers are in place and sewer covers are at grade level.
2. Check construction and maintenance activities to ensure that no hazardous conditions have been created (equipment left in safety areas, unacceptable pavement lips created by ground alteration work, ruts from construction equipment or from mowing equipment, etc.), before reopening a runway or taxiway when the construction or maintenance activity has been performed in the adjacent safety area(s).
3. When an aircraft has left the pavement and entered a safety area, check to ensure that no ruts or holes have been made by the aircraft tires or by personnel and

equipment during the recovery operation and if present, ensure that corrections are made as soon as practicable.

4. Inspect engineered materials arresting system (EMAS), if installed, for damage and for deterioration.
5. Physically drive or walk the safety areas to check for deficiencies.

7.7.4 §139.313, Snow and Ice.

Several special inspections may be needed during a winter storm until the airport is back to a normal operation. The inspector must:

1. After snow and ice removal operations, check to ensure that no foreign objects remain on the areas where snow removal operations have occurred. If a friction measurement device is used, issue the appropriate numbers obtained from the equipment. Operations personnel are not authorized to correlate friction measurement numbers with braking action reports. If a friction measurement device is not available, issue braking action reports to Air Traffic.
2. Conduct a special sign inspection after snow and ice storms for signs that are obscured by snow or ice or that may have been damaged by plows or by snow thrown by blowers.

## 7.8 **Construction.**

7.8.1 §139.341, Construction.

The inspector must:

1. Ensure that construction areas are barricaded and lighted properly.
2. Check construction equipment to ensure that they are parked within the pre-arranged areas.
3. Conduct night inspections to ensure barricades, warning lighting, and reflectors are adequate to keep aircraft away from the construction area.
4. Check the location of construction material and stockpiles to ensure that they are outside of safety areas and do not block any signs.
5. Check any movement areas adjacent to construction areas or movement areas traversed by construction vehicles to ensure there is no FOD present.
6. Check movement areas around construction sites for potentially confusing marking, lighting, and signs that could cause pilot confusion or result in a runway incursion.

7.8.2 §139.339, Condition Reporting.

The inspector must ensure that notification of airport conditions is disseminated to airport users.

7.8.2.1 The inspector ensures that appropriate NOTAMs are issued for unsafe airport conditions that are identified during an inspection but cannot be

corrected immediately. After issuing NOTAMs, follow-up is required to ensure that the NOTAMs have been processed and published.

7.8.2.2 The inspector must check that NOTAMs issued are also canceled at the appropriate time.

## APPENDIX A. REFERENCE AND RELATED READING MATERIAL

A.1 This AC contains safety practices for all airports. The current versions of the documents listed below provide further detail.

A.2 **Related Reading Material.**

- 14 CFR part 139, Certification of Airports February 10, 2004 (As amended May 3, 2004 and June 4, 2004)
- 14 CFR part 77, Objects Affecting Navigable Airspace
- NFPA 407, Standards for Aircraft Fuel Servicing

A.3 **FAA Advisory Circulars.**

FAA ACs are available on the FAA website at http://www.faa.gov/regulations_policies/advisory_circulars/.

- AC 150/5200-33, *Hazardous Wildlife Attractants on or Near Airports*
- AC 150/5210-22, *Airport Certification Manual (ACM).* This reference is pertinent for certificated airports only.
- AC 150/5370-10, *Standards for Specifying Construction of Airports*

- **Airport Emergencies**
  - AC 150/5200-31, *Airport Emergency Plan*
  - AC 150/5210-13, *Airport Water Rescue Plans, and Equipment*
- **Aircraft Rescue and Fire Fighting (ARFF)**
  - AC 150/5200-12, *First Responders' Responsibility for Protecting Evidence at the Scene of an Aircraft Accident/Incident*
  - AC 150/5210-6, *Aircraft Fire and Rescue Facilities and Extinguishing Agents*
  - AC 150/5210-7, *Aircraft Rescue and Firefighting Communications*
  - AC 150/5210-13, *Airport Water Rescue Plans and Equipment*
  - AC 150/5210 14, *Aircraft Rescue Fire Fighting Equipment, Tools and Clothing*
  - AC 150/5210 15, *Aircraft Rescue and Firefighting Station Building Design*
  - AC 150/5210-17, *Programs for Training of Aircraft Rescue and Firefighting Personnel*
  - AC 150/5210-19, *Driver's Enhanced Vision System (DEVS)*
  - AC 150/5210-23, *ARFF Vehicle and High Reach Extendable Turret (HRET) Operation Training and Qualifications*
  - AC 150/5220-4, *Water Supply Systems for Aircraft Fire and Rescue Protection*

- AC 150/5220-10, *Guide Specification for Aircraft Rescue and Fire Fighting Vehicles*
- AC 150/5220-17, *Design Standards for an Aircraft Rescue and Fire Fighting (ARFF) Training Facility*

- **Ground Vehicles**
  - AC 90-67, *Light Signals from the Control Tower for Ground Vehicles, Equipment, and Personnel*
  - AC 150/5210-5, *Painting, Marking and Lighting of Vehicles Used on an Airport*
  - AC 150/5210-20, *Ground Vehicle Operations on Airports*
- **Hazardous Materials**
  - AC 20-43, *Aircraft Fuel Control*
  - AC 150/5230-4, *Aircraft Fuel Storage, Handling, and Dispensing on Airports*
- **Marking, Signs, and Lighting**
  - AC 150/5210-5, *Painting, Marking, and Lighting of Vehicles Used on an Airport*
  - AC 150/5340-1, *Standards for Airport Markings*
  - AC 150-5340-5, *Segmented Circle Airport Marker System*
  - AC 150/5340-18, *Standards for Airport Sign Systems*
  - AC 150/5340-26, *Maintenance of Airport Visual Aid Facilities*
  - AC 150/5345-28, *Precision Approach Path Indicator (PAPI) Systems*
  - AC 150/5345-43, *Specification for Obstruction Lighting Equipment*
  - AC 150/5345-44, *Specification for Taxiway and Runway Signs*

**Note:** ACs in the 150/5345 series provide additional detailed information about lighting.

- **Paved Areas**
  - AC 150/5210-24, *Airport Foreign Object Debris FOD Management*
  - AC 150/5320-6, *Airport Pavement Design and Evaluation*
  - AC 150/5380-6, *Guidelines and Procedures for Maintenance of Airport Pavements*
- **Safety Areas**
  - AC 150/5220-22, *Engineered Material Arresting Systems (EMAS) for Aircraft Overruns*
  - AC 150/5300-13, *Airport Design*
  - AC 150/5370-2, *Operational Safety on Airports During Construction*

- **Self-Inspection Program**
  - AC 150/5210-18, *Systems for Interactive Training of Airport Personnel*
- **Snow and Ice Control**
  - AC 150/5200-28, *Notices to Airmen (NOTAMs) for Airport Operators*
  - AC 150/5200-30, *Airport Winter Safety and Operations*
  - AC 150/5220-20, *Airport Snow and Ice Control Equipment*
- **Traffic and Wind Direction Indicators**
  - AC 150/5340-5, *Segmented Circle Airport Marker System*
  - AC 150/5345-27, *Specification for Wind Cone Assemblies*

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## APPENDIX B. SUGGESTED AIRPORT SAFETY SELF-INSPECTION CHECKLISTS

B.1 An airport safety self-inspection checklist should cover the condition of the facilities and equipment on the airport for it to be a part of a good safety inspection program. The checklist should be useful for the airport and its operation. An ~~sketch~~ airfield map or airport diagram of the airport is highly recommended on the back of the checklist; it can help readily identify the location of problems found during the daily inspection.

B.2 The suggested checklists consist of a listing of facilities and equipment and a series of conditions that are inspected.

B.3 The blank squares indicate the conditions the inspector will evaluate for each facility. A check (√) in one of these squares indicates the condition of the facility and equipment is satisfactory. On the other hand, an "x" in one of these squares indicates the condition of the facility and equipment is unsatisfactory.

B.4 When a condition is unsatisfactory, the inspector:

1. Enters an "x" for each applicable square;
2. Provides a note in the Remark/Action Taken section;
3. The location of the condition should be identified in the airport ~~sketch~~ map or diagram; and
4. Initiates appropriate follow-up action, including NOTAMs. The inspector should document corrective action on either the self-inspection checklists or on a separate work order system.

**Note:** These checklists are ideal for electronic conversion to PDAs and laptop computers and are available online as appendices in this AC (http://www.faa.gov/airports/resources/advisory_circulars/).

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## AIRPORT DAILY SAFETY SELF-INSPECTION CHECKLIST

**DATE**: _____ **DAY**: _____ √ **Satisfactory**
**X Unsatisfactory**

**Day Inspector/Time:** _____ **Night Inspector/Time:** _____

| FACILITIES | CONDITIONS | D | N | REMARKS | RESOLVED BY (Date/Initials) |
|---|---|---|---|---|---|
| §139.305 Paved areas | Pavement lips over 3" | | | | |
| | Hole – 5" diam. 3" deep | | | | |
| | Cracks/spalling/heaves | | | | |
| | FOD: gravel/debris/sand | | | | |
| | Rubber deposits | | | | |
| | Ponding/edge dams | | | | |
| | Drainage | | | | |
| | Vegetative growth | | | | |
| | Surface variations | | | | |
| | | | | | |
| §139.307 Unpaved areas | Slope from edge | | | | |
| | Full strength compaction | | | | |
| | Holes, depressions | | | | |
| | FOD, loose aggregate | | | | |
| | | | | | |
| §139.309 Safety areas | Ruts/humps/erosion | | | | |
| | Drainage/construction | | | | |
| | Support equipment/aircraft | | | | |
| | Frangible bases, grading | | | | |
| | Unauthorized objects | | | | |
| | Wildlife damage/evidence | | | | |
| | Construction equipment/material | | | | |
| | | | | | |
| §139.311 Marking | Clearly visible/standard | | | | |
| | Runway markings Correct? Color? | | | | |
| | Taxiway markings Correct? Color? | | | | |
| | Holding position markings | | | | |
| | Glass beads | | | | |
| | Movement/non-movement area separation markings | | | | |
| | | | | | |

| FACILITIES | CONDITIONS | D | N | REMARKS | RESOLVED BY (Date/Initials) |
|---|---|---|---|---|---|
| §139.311 Signs | Standard/meet sign plan location/position | | | | |
| | Obscured/operable | | | | |
| | Damaged/retroreflective | | | | |
| | Faded, color | | | | |
| | Tethers intact | | | | |
| §139.311 Lighting | Obscured/dirty/operable | | | | |
| | Consistent intensity | | | | |
| | Damaged/missing | | | | |
| | Faulty aim/adjustment | | | | |
| | Runway lighting x | | | | |
| | Precision runway lighting | | | | |
| | Taxiway lighting | | | | |
| | Pilot control lighting | | | | |
| | Appropriate shielding | | | | |
| | | | | | |
| 139.313 Snow & ice control | Surface conditions | | | | |
| | Snowbank clearances | | | | |
| | Lights & signs obscured | | | | |
| | NAVAIDs free and clear | | | | |
| | Emergency ARFF access | | | | |
| | Braking conditions | | | | |
| | | | | | |
| §139.315; .317; .319 Aircraft rescue and fire fighting | Equipment/crew availability | | | | |
| | Communications/alarms | | | | |
| | Response routes affected | | | | |
| | | | | | |
| §139.321 Handling and storing of hazardous substances and materials (Fueling Operations) | Fencing/gates/signs | | | | |
| | Fuel marking/labeling | | | | |
| | Fire extinguishers | | | | |
| | Frayed wires | | | | |
| | Fuel leaks/vegetation | | | | |
| | Abraded hoses | | | | |
| | Condition of mobile fuelers | | | | |
| | | | | | |
| §139.331 Obstructions | Obstruction lights operable | | | | |
| | Cranes/trees | | | | |
| | Vegetation | | | | |
| | | | | | |

| FACILITIES | CONDITIONS | D | N | REMARKS | RESOLVED BY (Date/Initials) |
|---|---|---|---|---|---|
| §139.333 Protection of NAVAIDs | Rotating beacon operable | | | | |
| | Wind indicators: Number? Lighted at night? | | | | |
| | RENLs/VGSI systems | | | | |
| | Electronic components operational | | | | |
| | | | | | |
| §139.335 Public protection | Fencing/gates/signs | | | | |
| | Jet blast problems | | | | |
| | | | | | |
| §139.337 Wildlife hazard management | Wildlife present/location | | | | |
| | Complying with WHMP | | | | |
| | Dead birds/other evidence | | | | |
| | | | | | |
| §139.341 Identifying, marking, and lighting construction and other unserviceable areas | Barricades/lights | | | | |
| | Equipment parking | | | | |
| | Material stockpiles | | | | |
| | Confusing signs/markings | | | | |
| | Index capability | | | | |
| | | | | | |

**Comments/Remarks**: _____

**Airfield map on reverse**

## AIRPORT DAILY SAFETY SELF-INSPECTION CHECKLIST

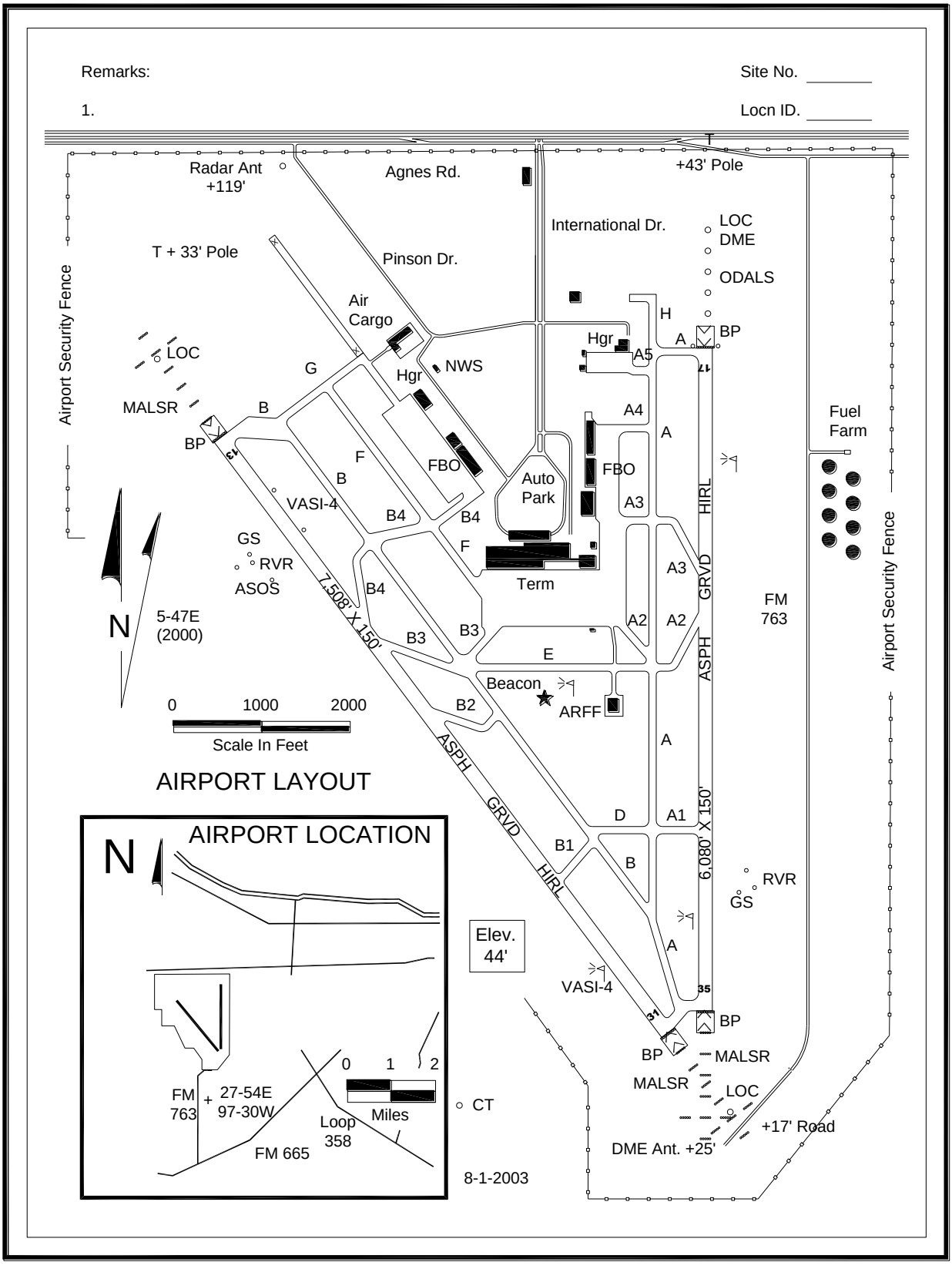
**DATE**:_____ **DAY**:_____ ✔ Satisfactory ✕ Unsatisfactory

**Day Inspector/Time:** _____ **Night Inspector/Time:** _____

| FACILITIES | CONDITIONS | D | N | REMARKS | RESOLVED BY (Initial & date) |
|---|---|---|---|---|---|
| **Pavement Areas** | Pavement lip over 3" | | | | |
| | Hole - 5" diam. 3" deep | | | | |
| | Cracks/spalling/heaves | | | | |
| | FOD: gravel/debris/sand | | | | |
| | Ponding/edge dams | | | | |
| **Safety Areas** | Ruts/humps/erosion | | | | |
| | Drainage/construction | | | | |
| | Support equipment/aircraft | | | | |
| | Frangible bases | | | | |
| | Unauthorized objects | | | | |
| **Markings** | Clearly visible/standard | | | | |
| | Runway markings | | | | |
| | Taxiway markings | | | | |
| | Holding position markings | | | | |
| | SPHPS/ETCL markings | | | | |
| | Glass beads | | | | |
| **Signs** | Standard/IAW Sign Plan | | | | |
| | Obscured/inoperable | | | | |
| | Damaged/retroreflective | | | | |
| **Lighting** | Obscured/dirty/inoperable | | | | |
| | Damaged/missing/aiming | | | | |
| | Lighting systems inoperable | | | | |
| | IAW FAA standards | | | | |
| | Pilot Control Lighting | | | | |
| **NAVAIDS** | Rotating beacon inoperable | | | | |
| | Wind indicators | | | | |
| | VASI/PAPI/REIL systems | | | | |
| | FAA ILS system/ALS/VGSI | | | | |
| **Obstructions** | Obstruction lights operable | | | | |
| | New cranes not reported | | | | |
| **Snow & Ice** | Surface conditions | | | | |
| | Snowbank clearance | | | | |
| | Signs obscured | | | | |
| | NAVAID interference | | | | |
| | NOTAMs current | | | | |
| **Public Protection** | Fencing/gates/signs | | | | |
| | Jet blast problems | | | | |
| **Wildlife Hazards** | Wildlife present/location | | | | |
| | Complying with WHMP | | | | |

Airfield Map/Airport Diagram on Reverse

## Sample Airfield Map/Airport Diagram



## CONTINUOUS SURVEILLANCE INSPECTION CHECKLIST

**DATE:** _____ **DAY:** _____ √ **Satisfactory**
**TIME:** _____ **INSPECTOR:** _____ **X Unsatisfactory**

| FACILITIES | CONDITIONS | √ | REMARKS/ACTIONS TAKEN |
|---|---|---|---|
| **§139.313 Snow & ice control** | **Surface conditions** | | |
| | **Snow banks** | | |
| | **NOTAMS** | | |
| **§139.321 Handling and storage of hazardous substances and materials (Fueling Operations)** | **Fire/explosion hazards, spills** | | |
| | **Signing/no smoking** | | |
| | **Fueling equipment:** | | |
| | • **hydrants** | | |
| | • **mobile fuelers** | | |
| | • **fuel farm** | | |
| | **Use of bonding & deadman** | | |
| **§139.335 Public protection** | **Unauthorized persons** | | |
| | **Unauthorized vehicles** | | |
| | **Gates secure and locked** | | |
| | | | |
| **§139.337 Wildlife hazard management** | **Birds/animals** | | |
| | **Evidence (describe)** | | |
| | | | |
| **§139.341 Identifying, marking, and lighting construction and other unserviceable areas** | **Safety plan** | | |
| | **Runway incursions** | | |
| | **Runway & taxiway use** | | |
| | **FOD** | | |
| | | | |
| **Miscellaneous:** **§139.329 Pedestrians and ground vehicles** **§139.335 Public protection** **§139.305; .307; .311** | **Pedestrians in movement areas** | | |
| | **Passenger Load/Unload procedures** | | |
| | **Debris in movement area/safety area** | | |
| | | | |

**Additional Remarks:** _____

_____

_____

_____

_____

_____

**Airfield map on reverse**

# PERIODIC CONDITION INSPECTION CHECKLIST

**DATE:** _____ **DAY:** _____ √ **Satisfactory**
**TIME:** _____ **INSPECTOR:** _____ **X Unsatisfactory**

| FACILITIES | CONDITIONS | √ | REMARKS/ACTIONS TAKEN |
|---|---|---|---|
| §139.305 Paved areas | Rubber deposits – Friction deterioration | | |
| | Pavement Polishing/Rutting | | |
| | Pavement Lips/Turf damming | | |
| §139.311 Marking and signs | Visible/night conspicuity/glass beads | | |
| | Condition of markings - Runways | | |
| | Condition of markings - Taxiways | | |
| §139.311 Lighting | Standby Power Generator Check | | |
| | Circuit Resistance Test | | |
| | Aim/Adjustment of lighting fixtures | | |
| | Condition of lenses – Cleaning needed | | |
| §139.319 Aircraft rescue and fire fighting: Operational requirements | Response Times | | |
| | Live Fire Drills | | |
| | Training | | |
| | ARFF truck maintenance | | |
| §139.321 Handling and storing of hazardous substances and materials<br><br>(Fueling Operations) | Hydraulic fluid; deicing materials – proper handling | | |
| | Exhaust leaks | | |
| | Fuel storage area | | |
| | Fire extinguishers – Fuel storage area | | |
| | Access secured | | |
| | Hoses – no abraded | | |
| | Fuel labeling | | |
| | Emergency fuel shutoff | | |
| | Mobile fuelers | | |
| | Fire Extinguishers – Fuel trucks | | |
| | Fuel Marking/Labeling | | |
| | Frayed Wiring | | |
| | Abraded hoses | | |
| | Proper Fuel Storage Procedures | | |
| | Fire extinguishers – Apron | | |
| §139.333 Protection of NAVAIDS | RENLs/VGSI Aiming | | |
| | Electronic equipment | | |
| | | | |
| §139.331 Obstructions | Surveyed Trees/Structures | | |
| | Overhead Power Lines | | |
| | Construction cranes | | |
| Additional Remarks: | | | |

**Airfield map on reverse**

# SPECIAL INSPECTION CHECKLIST

**DATE**:_____ **TIME:**_____ **INSPECTOR:**_____

**TYPE INSPECTION: Accident Weather Maintenance Snow Wildlife**

**REASON FOR INSPECTION:** _____

_____

**Check Conditions Applicable to the Special Inspection**

| FACILITIES | CONDITIONS | ✓ X | REMARKS | RESOLVED BY (Initial & date) |
|---|---|---|---|---|
| **Pavement Areas** | FOD/débris/Ponding | | | |
| | Cracks/heaves/blowups | | | |
| | Surface conditions | | | |
| | Snowbanks/windrows | | | |
| **Safety Areas** | Ruts/surface variations | | | |
| | Drainage/construction | | | |
| | Débris | | | |
| | Unauthorized objects | | | |
| **Markings** | Clearly visible | | | |
| | IAW FAA standards | | | |
| | Hold Positions | | | |
| | Glass beads | | | |
| **Signs** | Obscured/inoperable | | | |
| | Damaged/Missing | | | |
| | IAW Sign & Marking Plan | | | |
| | IAW FAA standards/spec. | | | |
| **Lighting** | Inoperable/damaged/missing | | | |
| | Obscured | | | |
| | IAW FAA standards | | | |
| | Faulty aim/adjustment | | | |
| | Lighting systems operational | | | |
| | Pilot Control Lighting | | | |
| **NAVAIDS** | Rotating beacon | | | |
| | Wind indicators/Obst lights | | | |
| | VASI/PAPI/REIL systems | | | |
| | FAA ILS & approach lights | | | |
| **Wildlife Hazards** | Wildlife present/location | | | |
| | Complying with WHMP | | | |
| **Fencing** | Damaged/Erosion problem | | | |
| **NOTAMS** | Issued as appropriate/current | | | |
| | | | | |

**Airfield Map on Reverse**

# CONSTRUCTION IN PROGRESS INSPECTION CHECKLIST

| Airport Name: | Inspection Date: | Construction Project: |
|---|---|---|
| Inspector: | Inspection Time: | S=Satisfactory U=Unsatisfactory |

| Area: Runway | S | U | N/A | REMARKS |
|---|---|---|---|---|
| 1. **Closed runway** - Yellow X or lighted X properly located and functional | | | | |
| 2. **Temporary displaced threshold** marking/lighting, marking removal is correct | | | | |
| 3. **Partial runway closure** marking/lighting, marking removal is correct | | | | |
| 4. **Runway Distance Remaining signs** relocated or covered in appropriate direction for partial runway closure | | | | |
| 5. **Runway Caution Zone lighting** adjusted for partial runway closure | | | | |
| 6. **Closed Runway Exit** – Lead-off line obliterated for high speed exit and other long term exit closure, Yellow X adjacent to runway, barricades at hold position, runway exit signs covered, taxiway lights off or covered | | | | |
| 7. **Barricades** – At hold position, easily collapsible, orange/white reflective, less than 18" high, 4' spacing or continuously linked, secured, red lights spacing 10' or less | | | | |
| 8. **Runway Object Free Area** – No parked equipment in ROFA and no stockpiled material unless necessary and FAA approved | | | | |
| 9. **Crossing Taxiways for Closed Runway** – Hold signs illuminated for night operations | | | | |
| 10. **No construction activity in RSA** of active runway, unless aircraft restriction in effect for smaller RSA | | | | |
| 11. **Part time runway closure** – RSA meets Part 139 requirements before opening – declared distance | | | | |
| 12. Construction related **NOTAMS** issued and current | | | | |

| Area: Closed Taxiways | S | U | N/A | REMARKS |
|---|---|---|---|---|
| 1. **Taxiway centerlines obliterated** to closed areas for long term closures | | | | |
| 2. **Barricades** are easily collapsible, have orange/white diagonal reflective stripes and are secured | | | | |
| • **Barricades** are located outside TSA and are less than 18" high, not counting red lights/flags | | | | |
| • **Barricade** spacing for aircraft 30 ft – minimum 3 barricades for closed taxiway where Const. not present | | | | |
| • **Barricade** spacing 4' for vehicles/equipment or continuously linked to exclude pedestrians | | | | |
| • **Barricade red lights** spacing 10' or less and maintained operable | | | | |
| 3. **Taxiway direction signs** for closed taxiways do not need to be covered as they provide info to pilots | | | | |
| 4. **Outbound runway destination signs** are covered for closed runways where appropriate | | | | |
| 5. **Orange Construction Signs** – IAW standards | | | | |
| 6. **No construction activity in TSA** of active taxiway, unless aircraft restriction in effect for smaller TSA | | | | |
| 7. **Straight Taxiway Open with excavations in TSA** Restrictions in place/no equipment or objects in TSA | | | | |
| 8. **Taxiway object free area** – Clear of equipment if necessary to protect aircraft wing tip clearance | | | | |
| 9. **Taxiway lights** are disconnected or covered in closed areas | | | | |
| 10. **Construction crossing points** on active taxiways are controlled by flag persons, have FOD control | | | | |
| 11. Construction related **NOTAMS** issued and current | | | | |

# POST CONSTRUCTION INSPECTION CHECKLIST

| Airport Name: | Inspection Date: | Construction Project: |
|---|---|---|
| Inspector: | Inspection Time: | S=Satisfactory U=Unsatisfactory |

| Area: | S | U | N/A | REMARKS |
|---|---|---|---|---|
| 1. **Paved areas swept and free of FOD** | | | | |
| 2. **No pavement lips** over 3" | | | | |
| 3. **Pavement is sufficiently drained** to prevent ponding that could affect directional control of aircraft or obscure markings | | | | |
| 4. **No Potentially hazardous surface variations** present in the safety areas/ graded | | | | |
| 5. **No Objects in the safety areas** except those that are required and are frangibly mounted | | | | |
| 6. **Safety areas are adequately drained** to prevent water accumulations | | | | |
| 7. **No exposed concrete bases** located in the safety areas (potentially hazardous surface variation) | | | | |
| 8. **Old markings** which are no longer needed are removed IAW Marking AC standards | | | | |
| 9. **Required markings and glass beads** are provided and are IAW Marking AC standards | | | | |
| 10. **Required signs** are provided and are IAW Sign AC standards/Sign & Marking Plan | | | | |
| 11l. **Required SPHPS** are provided and are IAW Marking AC standards | | | | |
| 12. **Required lighting** is provided and is IAW lighting AC standards | | | | |
| 13. **Supplemental wind cone** is provided at the takeoff end of runways and do not have logos | | | | |
| 14. | | | | |
| 15. | | | | |

| Other | S | U | N/A | REMARKS |
|---|---|---|---|---|
| 1. **ACM/Sign & Marking Plan** updated if needed | | | | |
| 2. **5010 data** updated if needed | | | | |
| 3. **Airport Diagram Change** submitted to NFDC website if needed | | | | |
| 4. | | | | |
| 5. | | | | |

| Remarks |
|---|
| |
| |
| |
| |
| |
| |

**Advisory Circular Feedback**

If you find an error in this AC, have recommendations for improving it, or have suggestions for new items/subjects to be added, you may let us know by (1) mailing this form to Manager, Airport Safety and Operations Division, Federal Aviation Administration ATTN: AAS-300, 800 Independence Avenue SW, Washington DC 20591 or (2) faxing it to the attention of the Office of Airport Safety and Standards at (202) 267-5257.

Subject: AC 150/5200-18D Date: _____

*Please check all appropriate line items:*

☐ An error (procedural or typographical) has been noted in paragraph _____ on page _____.

☐ Recommend paragraph _____ on page _____ be changed as follows:

_____
_____
_____

☐ In a future change to this AC, please cover the following subject:
*(Briefly describe what you want added.)*

_____
_____
_____

☐ Other comments:

_____
_____
_____

☐ I would like to discuss the above. Please contact me at (phone number, email address).

_____

Submitted by: _____ Date: _____