

Advisory Circular

AC 139-AIPCR-01/17

AERODROME INSPECTION PROGRAMME AND CONDITION REPORTING

April 2017

Advisory Circulars (AC) are intended to provide recommendations and guidance, illustrate a means-but not necessarily the only means of complying with regulatory requirements, or to explain certain regulatory requirements by providing interpretative and explanatory materials.

CAAP will generally accept that when the provisions of an Advisory Circular have been met, compliance with the relevant regulatory obligations has been satisfied.

Where an AC is referred to in a "Note" within regulatory documentation, the AC remains as guidance material.

ACs should always be read in conjunction with the referenced regulations.

REFERENCES

- a) Civil Aviation Regulations governing Aerodromes (CAR-Aerodromes)
- b) Manual of Standards (MOS) for Aerodrome
- c) ICAO Annex 14: Volume I Aerodrome Design and Operations (7th Edition July 2016)
- d) ICAO Airport Services Manual (Doc 9137)
 - Part 8 Airport Operational Services
 - Part 9 Airport Maintenance Practices
- e) FAA AC 150/5200-18C Airport Safety Self-Inspection

BACKGROUND

While some hazardous airport conditions develop virtually instantaneously, others are gradual. It is important that the aerodrome operator have an inspection programme that monitors specific airport conditions in order to identify unsatisfactory conditions for prompt corrective actions. A number of airport operators have some form of an inspection programme in place. The programme vary in scope and effectiveness from verbal instructions and unscheduled and unrecorded inspections to very comprehensive inspection programs with multiple daily schedules and widely distributed responsibilities.

PURPOSE

This advisory circular provides guidance material on aerodrome inspection programme and aerodrome condition reporting requirements, to assist aerodrome operators to meet CAR Aerodromes Part 2.2: Certified Aerodromes. It also suggests components, responsibilities, and items for regularly scheduled, continuous surveillance, periodic condition and special inspections, and checklists for use during any of these airport safety self-inspections. This guidance can be modified as necessary to meet local situations. The information and guidance in this publication serve as a basis by which airports operators may develop their own aerodrome inspection programme.

This material is intended for applicants and holders of:

- a) an aerodrome operator certificate; and
- b) a qualifying aerodrome operator certificate.

It is also recommended to operators of non-certificated aerodromes.

STATUS OF THIS AC

Advisory Circulars (ACs) are numbered to reflect the regulatory basis, the abbreviated title of the circular, the serial number of the circular issued for that regulation and year of issue (and the revision status for the AC as appropriate). In this case, the regulatory bases are CAR-Aerodromes and MOS for Aerodromes represented by number 139 (consistent with previously issued ACs related to aerodromes). The abbreviated title AIPCR with the serial number 01 as the first guidance material to be issued on aerodrome inspection and condition reporting is also indicated. Consequently, the status of this AC is AC 139-AIPCR-01/17.

CAPTAIN JIM C SYDIONGCO Director General

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1. AERODROME INSPECTION OVERVIEW

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1.1 Responsibility

1.1.1 Aerodrome Inspection

Aerodrome inspection is a primary responsibility of the aerodrome certificate holder. Primary attention should be given to such operational items as pavement areas, safety areas, markings and signs, lighting, aircraft rescue and firefighting, fueling operations, navigational aids, ground vehicles, obstructions, public protection, wildlife strike hazard management, and construction. The responsibility for inspection of all or some of the aerodrome areas may be assigned to other tenants, but with aerodrome management retaining overall inspection supervision. Management cannot delegate responsibility for operating the aerodrome safely.

1.1.2 Recommended Inspection Frequency

- (a) The frequency of inspections should be determined by identifying areas critical to the ongoing safety of aircraft operations, taking into account the following factors:
 - (1) frequency of operations;
 - (2) duration of operations;
 - (3) types of aircraft served;
 - (4) the aerodrome environment;
 - (5) complexity of the facilities; and
 - (6) size of the aerodrome.
- (b) As a minimum, the integrity and safety of the movement areas should be established by an inspection on each day that aircraft operations are scheduled. The inspection shall be conducted at least 40 minutes prior to the first aircraft movement. The reasons for establishing the frequency of inspections shall be documented, and submitted to support the contents of the exposition, addressing the certificate holder's safety inspection programme.
- (c) <u>Regularly scheduled inspection.</u> The airport should be inspected at least daily during times when aircraft activity is minimal in order to create the least impact on airport operations. Part of this inspection should be done during the hours of darkness at those airports that serve air carriers after dark.
- (d) <u>Continuous surveillance inspection</u>. Those activities and facilities that have been identified to require continuous surveillance should be inspected any time personnel are in movement area. Hazardous conditions can occur at any time and in a short period of time.
- (e) <u>Periodic condition inspection.</u> Periodic condition inspection of activities and facilities can be conducted on a regularly scheduled basis but less frequently than daily. The time interval could be weekly, monthly, or quarterly, depending on the activity or facility.
- (f) <u>Special inspection</u>. Special inspections of activities and facilities should be conducted 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 should also be conducted at the end of construction activity to ensure that there are no unsafe conditions present related to the construction activity. A special inspection should be conducted prior to construction personnel leaving the airport in the event that corrective actions are necessary. Special inspections should be documented on the appropriate portions of the regularly scheduled inspection checklist.

1.1.3 Inspection records

- (a) An effective safety inspection programme includes procedures for reporting and correcting deficiencies. This means that the airport operator should have a work order system in place so that deficiencies can be corrected in an expeditious manner.
- (b) The aerodrome operator shall notify the Aeronautical Information Service (AIS) (for the issue of a NOTAM), as soon as practicable, of any aerodrome condition or defect which could have an immediate and critical impact on the safety of aircraft operations. When corrective action has been taken, the NOTAM is to be cancelled.
- (c) For even the smallest aerodrome, it is desirable to use an aerodrome inspection checklist which constitutes a written record of conditions noted, and acts as a check on the follow-up actions taken. The scheduled use of a dated checklist will assure the regularity and thoroughness of safety inspections and follow-up of deficient items. It is most desirable to use a format (see examples, Appendices C.1–C.4) in which each inspected area of the aerodrome complex is positively noted. Checklist in the form of "tick boxes" shall be avoided unless they are devised in such a way that each item is a question whereby a tick yes or no box serves as the complete response to that question.
- (d) MOS 10.2.9.1 specifies that the aerodrome operator must maintain aerodrome inspection records in the form of logbooks or similar for recording the date and time of each aerodrome serviceability inspection, the results of each inspection and any action taken. Records must be retained for at least 2 years.
- 1.1.4 **Follow-up.** The airport operator should follow up on complaints or requests for corrective action and on all deficient items or problem areas noted during the daily inspection. Determine which problems require immediate attention and treat those with highest priority, including developing appropriate NOTAM notification.

1.2 Inspection techniques

Inspectors should vary the pattern of the inspection. Fixed inspection patterns, while easy to learn, do not provide for an adequate inspection. The use of such fixed inspection patterns can lead to complacency and to the possibility of missing items that are in need of correction. When conducting an inspection on a runway and when there is time to do only one pass on that runway, inspection personnel, whenever practical, should drive towards the direction of landing aircraft with high intensity flashing beacon and headlights on day and night. This practice will enable inspection personnel to see approaching aircraft and improve visibility of the vehicle to pilots. However, it is recommended that a runway inspection be done in both directions. Inspection personnel should also drive the stub taxiways between the runway and parallel taxiway as these areas are commonly overlooked.

1.3 Knowledge and equipment for aerodrome inspection

- 1.3.1 Airport personnel who conduct safety self-inspections (referred to as inspectors in this AC) should receive training in at least the following areas:
 - (a) Airport familiarization, including airport signs, marking, and lighting;
 - (b) Airport Emergency Plan;
 - (c) Notice to Airmen (NOTAM) notification procedures;
 - (d) Procedures for pedestrians and ground vehicles in movement areas and safety areas;
 - (e) Airport inspection procedures and techniques; and
 - (f) Discrepancy reporting procedures.
- 1.3.2 The aerodrome inspection personnel who conduct aerodrome inspections shall:
 - (a) know the location and types of aerodrome facilities and their design criteria;
 - (b) know the standards applicable to the aerodrome as provided in CAR-Aerodromes 2.1.020 and the Manual of Standards for Aerodromes (MOS);
 - (c) have a vehicle equipped with:
 - (1) two way voice radio communications with the air traffic services unit, if provided for the aerodrome;
 - (2) a flashing or rotating beacon for night time (or inclement weather conditions) inspections; and
 - (3) either a beacon or chequered flag for day time inspections;
 - (d) know and use correct radio communication phraseology, procedures and techniques, as specified in the MOS-ATS;
 - (e) be supplied with checklists covering the various inspection areas;
- 1.3.3 While the format of checklists vary, it is important to develop a checklist that is useful for the aerodrome and its operation. If certain inspectors will be responsible for only certain items, separate checklists pertinent to those areas may be developed. A sketch of the aerodrome shall accompany the checklist so that the location of problems can be marked for easy identification;

- (a) review the most recently completed checklist from the previous inspection cycle prior to beginning the inspection;
- (b) if construction is in process, be familiar with the safety plan for the project; and
- (c) if the aerodrome is certificated under CAR-Aerodromes 2.2.015, be familiar with the aerodrome certification requirements about aerodrome inspections.

1.4 Components of an aerodrome inspection

- 1.4.1 An effective safety inspection programme has four components:
 - (a) a regularly scheduled inspection of physical facilities;
 - (b) continuous surveillance of certain aerodrome activities, such as fueling operations, construction, aerodrome maintenance;
 - (c) a periodic inspection programme for such things as surveying approach slopes, checking for obstructions, the checking of visual aids, operation of Air field lighting system etc.; and
 - (d) special inspections during unusual conditions or situations, such as inclement weather or following maintenance activity on the maneuvering areas.

2. REGULARLY SCHEDULED INSPECTION

2.1 Introduction

The regularly scheduled inspection consists of specific observations of aerodrome physical facilities on a frequency determined by the aerodrome operator. This inspection shall concentrate on the areas described in this section and if deficiencies exist, indicate the item and identify its location on a sketch. If the deficiency is such that it could affect the safety of aircraft operations, the affected area must be immediately marked as being unserviceable and a NOTAM issued to that effect. Take photographs, if appropriate, to document the condition.

2.2 Paved Movement Areas

The condition of pavement surfaces is an important part of aerodrome safety. Pavement inspection shall be conducted before beginning flight operations to ensure pavement surfaces are clear. As a minimum, a daily inspection shall be performed of all paved areas as follows:

- (a) check the pavement edges to assure that they are not greater than necessary to allow water to drain off the pavement. A lip height not greater than 25 mm to 35 mm is usually sufficient to allow proper drainage. Any edge of 75 mm or more would be considered to be a hazard to aircraft;
- (b) determine if there are any cracks wide enough to cause directional control problems for an aircraft. Report and monitor these cracks;
- (c) determine if there are any holes. A hole exceeding 125 mm in diameter that exceeds 75 mm in depth with a side slope of 45 degrees or greater, is considered to be a hazard to aircraft and shall be dealt with immediately;
- (d) check the condition of pavement areas for failures, scaling, spalling, bumps, low spots, and for debris that could cause damage to aircraft;
- (e) check for vegetation growth along runway and taxiway edges that may impede drainage from the pavement surface or slowly break up the paved surface;
- (f) check for vegetation growth in cracks; and
- (g) report and monitor any damage caused by damming or ponding water.

2.3 Unpaved Movement Areas

The condition of these surfaces are as important as for paved surfaces and shall be subject to the same level of thoroughness:

- (a) determine if there are any hazardous ruts, depressions, humps or variations from the normal smooth surfaces;
- (b) determine if there are any holes that could cause directional control problems for any aircraft;
- (c) check for debris and other foreign objects;
- (d) check the condition and length of grass surfaces. The height of thick grass shall not exceed 150mm on runways and taxiways and 300mm on runway strips; and
- (e) check for vegetation growth along the edges that may impede drainage from the movement areas.

2.4 Runway and taxiway strips and safety areas

The inspector shall know the dimensions of the runway and taxiway strips and runway end safety areas at the aerodrome and:

- (a) determine if there are any hazardous ruts, depressions, humps or variations from the normal smooth surface;
- (b) check to ensure no object is located in these areas, except objects that must be in the areas because of their functions (such as runway lights, signs, or navigational aids);
- (c) determine if the base for any equipment in safety areas is at grade level;
- (d) check to ensure that manhole and handhole covers can support vehicles and aircraft;
- (e) check to ensure that the ground has not been eroded from around light bases, manhole covers, or other fittings that shall be flush with the surface;
- (f) report any objects that are not frangible;
- (g) an exposed high edge could be a hazard to aircraft and shall be filled in; and
- (h) check for any damage that might be caused by rodents or animals.

2.5 Markings

Aerodrome markings and signs provide important information to pilots during take-off, landing and taxiing.

The inspector shall know the appropriate markings and signs at the aerodrome. During the marking inspection, the inspector should:

- (a) check markings for correct color coding, blistering, chipping, fading, and obscurity due to rubber build-up;
- (b) check to see if all runway hold position markings are clearly visible;
- (c) check that markers are correctly positioned and in good condition;
- (d) during and after construction projects, check new markings for compliance with the MOS;
- (e) if the markings have glass beads, check markings during periods of darkness to determine if the reflectivity of glass beads is adequate at night; and
- (f) report and monitor any nonstandard marking or markings that are obscured, faded or deteriorating.

2.6 Signs

Signs provide important information to pilots while taxiing. The inspector should know the appropriate sign standards and specifications at the airport. During the signs inspection, the inspector should:

- (a) check signs to ensure they are the correct color coding, easy to read, secure, and that all lights are working and not obscured by vegetation or dirt; and
- (b) check signs to ensure they are frangibly mounted and concrete bases are properly maintained at grade level;
- (c) check to see that sign panels are not missing or damaged, that they have the correct legend and arrow orientation, and that they are not cracked or broken;
- (d) during and after construction projects, check new signs for compliance with MOS;
- (e) during periods of darkness, check signs to ensure they are properly illuminated. Ensure mandatory instruction signs are illuminated with the associated runway lighting system. Check signs for correct operations and that they are on the correct circuits, they do not flicker and follow the intensity setting of the runway or taxiway lights;
- (f) check to see that signs are not missing, that they have the correct legend and orientation, and whether they are in need of repair; and
- (g) report and monitor any nonstandard sign or any sign that is not functioning, is faded or damaged.

2.7 Lighting

At night and during periods of low visibility, lighting is important for safe aerodrome operations. Lights come in different shapes, sizes, colors, and configurations and can be flush mounted or elevated. The inspector shall:

- (a) check to ensure that the following are operable, if installed, and that the optical systems are not obscured by vegetation or deposits of foreign material:
 - (1) runway threshold and end lights;
 - (2) runway, taxiway, and apron edge lights;
 - (3) runway centerline and touchdown zone lights;
 - (4) precision approach lighting system;
 - (5) simple approach lighting system;
 - (6) taxiway centerline lights and apron guidance lights;
 - (7) holding position lights;
 - (8) runway end lights;
 - (9) floodlights for signs;
 - (10) visual docking systems;
 - (11) apron floodlighting; and

(12) obstruction lights.

- (b) check that the following are operable, if installed:
 - (1) ramp lights and floodlights used in construction to ensure they are properly shielded;
 - (2) obstruction lights; and
 - (3) lighting in fuel storage areas.
- (c) report all damaged or missing fixtures, and lights that are not working;
- (d) report any broken lenses;
- (e) ensure that runway, taxiway and runway threshold lights are the proper color, properly aligned, oriented correctly, correct height, correct changes in intensity; and
- (f) check that lights function properly, including intensity controls, through the manual or radio control features, and that photocell controls function properly.

2.8 Navigation Aids (NAVAIDs)

The inspection shall concentrate on the visual navigational aids as follows:

- (a) ensure that the segmented circle of the wind direction indicator (WDI) area is clear of vegetation and that it can be easily seen from the air;
- (b) check the WDI to ensure that the supporting mast is upright, that the windsock swings freely and, if lighted, that all lights are operating;
- (c) ensure that the aerodrome rotating beacon, if provided, is visible and working properly;
- (d) ensure that the Runway Threshold Identification Lights are flashing, and not obscured to an approaching aircraft;
- (e) check Visual Glide Slope Indicators (VASIS, APAPI, PAPI) to ensure that their lights are working, not obscured to an approaching aircraft and that the mountings have not been damaged or disturbed;
- (f) determine if the Approach Lighting systems are functioning properly; and
- (g) report and monitor any NAVAID that is malfunctioning, inoperable or misaligned, damaged or missing.

2.9 Obstructions

The inspection shall concentrate on a visual check of any construction underway on or around the aerodrome vicinity that could affect aircraft operations:

(a) check for any new or unreported obstructions such as cranes, masts, advertising hoardings, balloons etc., that intrude into the aerodrome obstacle free surfaces;

- (b) determine that obstructions are properly marked and lit;
- (c) check for non-aeronautical ground light which by virtue of their location and setting can present a hazard to aircraft operations in accordance to CAR-Aerodromes 2.5.030; and
- (d) report and monitor any obstruction light that is missing, inoperative or damaged, and any object that appears to be an obstruction and is not properly marked or lit.

2.10 Fueling Operations

The daily inspection on aircraft fueling operations should concentrate on a quick inspection for the most common problems concerning compliance with local fire safety codes at fuel storage areas and with mobile fuelers. The inspection should also include security, fire protection, general housekeeping, and fuel dispensing facilities and procedures. A more detailed fueling operation inspection should be scheduled quarterly (see Quarterly Fueling Operations under Periodic Condition Inspection). During the daily inspection of aircraft fueling operations, the inspector should:

- (a) determine if the fueling operator is permitting any unsafe fueling practices or is in violation of local fire code, such as failure to bond aircraft with the mobile fuelers during fueling operations or fueling personnel smoking while fueling aircraft.
- (b) check to ensure that the appropriate signs for the fuel farm are installed and that all gates are locked except when the facility is occupied by an authorized user.
- (c) report and monitor any unsafe fueling practices and violation of local fire codes.

Note: Refer to ICAO Doc 9137 Airport Services Manual Part 1- Rescue and Firefighting.

2.11 Construction

The inspection shall focus on construction activities on the aerodrome to ensure that a high level of safety for aircraft operations is maintained:

- (a) determine if stockpiled material and construction materials are properly stored to keep them from being moved by wind, jet blast, or prop-wash;
- (b) check all construction adjacent to movement areas to ensure areas are identified with conspicuous marking and lighting;
- (c) determine if heavy construction equipment (such as bulldozers and cranes) are marked and lighted and parked clear of the runway and taxiway strips and any safety areas;
- (d) ensure construction barricades are properly positioned to define the limits of construction and hazardous areas and, if barricades are lighted, check to ensure lights are working properly and are positioned correctly;
- (e) check for open trenches in the safety areas or adjacent to movement areas.

- (f) check to determine that stockpiles and stored equipment are not left in a position that would infringe the obstacle free surfaces;
- (g) check to ensure that debris and foreign objects are continuously being picked up around construction areas;
- (h) check for open trenches in the safety areas or adjacent to movement areas;
- (i) check operation of lighting in areas adjacent to construction daily before the construction crews depart for the day. In particular, ensure that mandatory instruction signs remain lit with the associated runway lights, even on taxiways that have been closed for construction;
- (j) check NOTAMs daily during construction projects to ensure they accurately reflect the conditions on the airport;
- (k) verify that closed taxiways or runways are properly marked and lighted; and
- 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.

2.12 Aircraft Rescue and Fire-Fighting

The inspection shall focus, if rescue and fire-fighting is required, on the rescue firefighting capability as follows:

- (a) at applicable aerodromes, check aircraft rescue and fire-fighting equipment availability;
- (b) determine that all required rescue and fire-fighting vehicles are serviceable and the required personnel are available;
- (c) ensure communication systems are working;
- (d) determine the adequacy of the fire-fighting agents on hand;
- (e) check for construction or maintenance activity on the movement area that could affect ARFF response routes. Ensure that the RFFS has been notified if construction or maintenance activity could affect emergency response routes; and
- (f) report and monitor any ARFF vehicle, equipment or extinguishing agent that is not available or inoperative; any ARFF personnel that are not available; and any changes to aircraft that may require a change to ARFF capabilities.

Note: Refer to MOS 14 – Rescue and Firefighting Service.

2.13 Public protection

During the public protection inspection, check gates, fencing, locks, and other safeguards are in place and functioning properly to prevent inadvertent entry to movement areas by unauthorized persons and vehicles and offer protection from jet blast. Report and monitor any safeguards that are damaged or missing. In accordance with the airport's security plan, report unauthorized persons or vehicles in the movement area.

2.14 Wildlife Strike hazard management

- 2.14.1 During the wildlife hazard inspection, the inspector should check for evidence of birds or animals on the runways, taxiways, aprons, and ramps or other signs that wildlife problems may have developed such as large flocks of birds on or adjacent to the aerodrome.
- 2.14.2 Wildlife hazards found during the daily self-inspection should be properly documented. All dead wildlife found and all wildlife aircraft strikes should be reported using the IBIS format.
- 2.14.3 Additionally, the inspector should check fencing and gates for wildlife accessibility and should ensure that wildlife control equipment is available and operational.

3. CONTINUOUS SURVEILLANCE

3.1 Introduction

Continuous surveillance is an alertness practiced by personnel to look for defects at any time they are on the aerodrome operational area. Continuous surveillance of aerodrome physical facilities and activities shall cover at least the areas described in this section.

3.2 Ground vehicles

During the continuous surveillance inspection of ground vehicles, the inspector should:

- (a) determine if procedures and arrangements for the orderly operations of ground vehicles (including grass mowing machines) are being followed; and
- (b) report and monitor any vehicle operator that is not complying with the airport's vehicle procedures and arrangements; and
- (c) report any ground vehicle accident observed and any ground vehicle signs and markings that are damaged, missing or obscured.

3.3 Fueling Operations

The inspector should:

- (a) Emphasize fire and explosion hazards inherent in aircraft refueling.
- (b) Ensure proper bonding is being used, deadman controls are not blocked, and no smoking prohibitions are being observed, and aircraft are not being fueled inside hangars.
- (c) Check for proper parking of mobile fuelers to ensure these vehicles are at least 3m apart and 15m from buildings.
- (d) Check for fuel leaks or spills in the fuel storage area and around mobile fuelers.
- (e) Determine if the fuel farm is free of flammable materials, including litter and vegetation.
- (f) report and monitor any of unsafe fueling conditions discussed above and other obvious violations of local fire code and airport fuel fire safety procedures.

3.4 Construction

The Inspector should check construction projects to ensure that the contractor is following the construction works in accordance with the approved Method of Working Plan (MOWP). During the continuous surveillance inspection of construction activity, the inspector should check for, and report, any of the following conditions:

- (a) unauthorized use of runways, taxiways, and aprons by construction personnel and equipment;
- (b) conditions that may result in runway incursions and other irregularities. This includes ensuring that construction areas are delineated appropriately with barricades, cones, markings, etc.;
- (c) Construction equipment is not operated in ILS critical areas unless coordination with the service provider of the aid;
- (d) Perimeter gates are left open and unattended, unlocked or construction vehicles and personnel are 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 that can be tracked onto taxiways, aprons, and ramp areas;
- (g) Confusing or missing signs, markings or lighting that could potentially confuse or mislead pilots;
- (h) Barricades and lighting are in place and operational; and
- (i) check all construction projects to ensure that the safety plan is being followed by the contractor.

3.5 Public protection

Pay special attention to public protection during construction and special events. During the continuous surveillance inspection of safeguards used to protect the public, the inspector should:

- (a) be alert on the presence of unauthorized personnel, vehicles, and animals;
- (b) ensure gates are secured, serviceable and clear for access by rescue and firefighting vehicles.
- (c) Check for open or unlocked gates and missing or damaged signs posted to prevent unauthorized access to the airfield; and
- (d) check for damaged or missing jet blast fences.

3.6 Wildlife Strike hazard management

During the continuous surveillance inspection of wildlife hazards, the inspector should check for, and report, any of the following conditions:

- (a) any birds or animals on or adjacent to the runways, taxiways, and aprons, to determine if there is a potential wildlife hazard problem;
- (b) any potential hazard created by birds on or adjacent to the aerodrome; and
- (c) wildlife strikes and carcasses found on the runway/s.

3.7 Foreign Object Debris (FOD)

The inspector should continuously check for, and remove any FOD in movement areas, aircraft parking areas and loading ramps.

3.8 Potential problems

Check the following for any potential problems:

- (a) control of pedestrian access to the movement areas;
- (b) passenger loading and off-loading areas; and
- (c) other movement areas frequented by the general public.

4. PERIODIC CONDITION INSPECTION

4.1 Introduction

Periodic condition inspections consist of specific checks of physical facilities on a regularly scheduled basis (but less frequently than daily). Checks may require use of specialist equipment and shall cover at least the areas described in this section.

4.2 Pavement areas

Check pavement surfaces for the following conditions:

- (a) early signs of pavement failure, deformation and cracking;
- (b) rubber build-up, polishing, or other conditions affecting surface friction; and
- (c) grooves on grooved pavements are clear.

4.3 Markings and signs

- (a) check pavement markings to ensure they are correct and in good condition;
- (b) determine if markings are visible at night, especially examine for rubber buildup in the touchdown zone areas; and
- (c) check signs faces for peeling and for fading or faded colors.

4.4 Quarterly fueling inspections

The inspection procedures in this section are based on the US Federal Aviation Administration (FAA) Advisory Circular AC 150/5200-18C regarding fire code for airport fueling operations (NFPA 407), which is one of the more common fire codes in effect at certificated airports. The fire safety standards for fueling operations should be listed in the Aerodrome Manual (AM) and the quarterly inspections should be conducted for compliance to the fueling fire safety standards listed in the AM. Sample quarterly inspection checklists for fuel storage areas and mobile fuelers are included in Appendix C.5 & C.6. Typical fire safety standards to inspect quarterly are listed below.

4.4.1 Fuel storage areas and loading/unloading stations

The inspector should:

- (a) check fuel storage areas for adequate fencing and security to prevent unauthorized access or tampering;
- (b) check for "No Smoking" signs that are clearly visible;
- (c) check fuel storage areas for materials such as trash or vegetation that could contribute to the spread of fire. Also check for equipment, functions or activities that could be ignition sources;
- (d) note if fueling equipment appears to be in good operating condition and free of fuel leaks;
- (e) check piping for reasonable protection from damage by vehicles if piping is above ground;
- (f) check fuel storage areas for at least two accessible and serviceable fire extinguishers. Where the open hose discharge capacity of the equipment if more than 200 gallons per minute, at least one wheeled extinguisher with at least 125 lbs of agent is also required;

- (g) check for explosion proof equipment, switches and wiring that is reasonably protected from heat, abrasion or impact, which could cause an ignition source;
- (h) check for piping, filters, tanks and pumps being electrically bonded together and interconnected to an adequate grounding rod;
- (i) check for a serviceable bond/ground wire with clip at each loading/unloading facility for grounding tankers and mobile fuelers;
- (j) check loading stations for deadman control features; and
- (k) look for a boldly marked emergency cutoff capable of stopping all fuel flow with one physical movement. The emergency cutoff should 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.

4.4.2 **Mobile fuelers**

At least once every 3 months, inspect all fuel trucks to ensure they meet fire safety standards. The inspector should:

- (a) note if mobile fuelers appear to be in good operating condition and free of fuel leaks;
- (b) check mobile fuelers for parking at least 50 feet from a building and at least 3m from each other;
 - *Note:* Some airports have a mobile fueler maintenance building that is approved by the local fire marshal.
- (c) check for flammability decals on all sides. Lettering should be at least 3 inches high. Also check for hazardous materials placards on all sides. The Hazmat number for Jet A trucks should be #1863 and #1203 for 100LL trucks;
- (d) check the cab for a "No Smoking" sign and the presence of smoking equipment. Ashtrays and cigarette lighters are not to be provided;
- (e) check for two fire extinguishers, accessible from each side of the mobile fueler. Fire extinguishers should be charged, sealed and tagged from the last fire extinguisher inspection. 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;
- (f) check emergency fuel cutoffs to ensure they are boldly marked and operable. There should be an emergency fuel cutoff accessible from each side;
- (g) check electrical equipment, switches, wiring and tail light lens covers for explosion proof construction and reasonable protection form heat, abrasion or impact which could be an ignition source;
- (h) check for serviceable bonding wires and clamps;
- (i) check nozzles for deadman control feature; and

(j) check the vehicle exhaust system for exhaust leaks and for adequate shielding if it extends under the fuel tank portion of the vehicle.

4.5 Navigational Aids

An inspection programme for each visual navigation aid is essential to confirm their ongoing accuracy and reliability:

- (a) visual navigation aids inspections shall include regular checks of the power supply, light emission and alignment using such equipment as a spot meter and aiming and calibration bars;
- (b) ensure that power generator and circuit resistance tests are being conducted;
- (c) ensure that operation on auxiliary power will cause no deterioration in any aspect of the lighting systems and that the time to cut in does not exceed 15 seconds; and
- (d) for the flight checking of visual aids, refer to Section 6.

4.6 Obstacles

- (a) if the aerodrome is required to provide the AIS with data for the promulgation of aerodrome obstacle charts, survey all take-off flight paths to confirm the accuracy of the data;
- (b) survey the other aerodrome obstacle limitation surfaces established for the aerodrome for clearance from protruding obstacles;
- (c) if an obstruction is found to infringe an obstacle limitation surface, either immediately remove the obstruction or notify the AIS with the corrected available runway lengths for promulgation in a NOTAM; and
- (d) the period for the conduct of the checks shall be determined, and included in the aerodrome operating exposition, by a study of the aerodrome environment to identify the likelihood of significant obstructions, such as tree growth, structures, and similar, being developed in the intervening periods.

4.7 Aircraft Rescue and Firefighting

The inspector should:

- (a) periodically determine if the aircraft rescue and fire fighting equipment is capable of meeting response times, as required under MOS 14.4;
- (b) ensure that recurrent training and live fire drills are being conducted as required under MOS 14.9.2; and
- (c) check to ensure the availability of adequate entry tools.

5. SPECIAL INSPECTIONS

5.1 Introduction

Special inspections occur after receipt of a complaint such as substandard braking action, or as triggered by an unusual condition or event. A special inspection shall be conducted after an accident or incident.

Depending upon circumstances, special inspections may include the inspection of any of the specific facilities or activities under the other three components. A special inspection shall cover at least the areas described in this section.

5.2 Paved movement areas

After heavy precipitation, an inspection and assessment shall be made as follows:

5.2.1 <u>Water on a runway</u>. Whenever water is present on a runway, a description of the runway surface conditions on the center half of the width of the runway, including the possible assessment of water depth, where applicable, shall be made available using the following terms:

DAMP — the surface shows a change of color due to moisture.

WET — the surface is soaked but there is no standing water.

STANDING WATER — for aeroplane performance purposes, a runway where more than 25 per cent of the runway surface area (whether in isolated areas or not) within the required length and width being used is covered by water more than 3 mm deep

- 5.2.2 <u>Debris on runway</u>. After or during a period of heavy precipitation or strong winds, check for debris, mud and washouts on or at the edges of a runway.
- 5.2.3 <u>Unpaved movement areas</u>. After or during a period of heavy precipitation, check for ponding, and any surface softness which might affect the bearing strength and braking.
- 5.2.4 Runway and taxiway strips and safety areas
 - (a) check storm water system to verify that inlets are not clogged and drainage channels are free of debris. Note any standing water; and
 - (b) ensure all drain covers are in place and flush with the surface.
 - (c) conduct a special inspection before reopening a runway or taxiway following any construction or maintenance that has been performed in or around the maneuvering area;

- (d) any time an aircraft has left the pavement and entered a strip or safety area check to ensure that no ruts or holes have been made by the aircraft tires or personnel and equipment during the recovery operation;
- (e) check for construction and maintenance activities to ensure that no hazardous conditions have been created the likes of:
 - (1) equipment and debris left in safety areas;
 - (2) unacceptable pavement edges created by ground alteration work; and
 - (3) oil or hydraulic fluid spillage.
- (f) physically drive or walk the safety areas to check for any discrepancies.

5.2.5 Construction

- (a) ensure that construction areas are barricaded and lighted properly;
- (b) check construction equipment to ensure that they are parked within the pre-arranged areas;
- (c) conduct night inspections to ensure that barricades, warning lighting, and reflectors are adequate to keep aircraft away from the construction area;
- (d) check the location of construction material and stockpiles to ensure that they are outside of safety areas and do not block any sign;
- (e) check any movement areas adjacent to construction areas or movement areas traversed by construction vehicles to ensure there is no FOD present; and
- (f) check movement areas around construction sites for potentially confusing marking, lighting, and signs that could cause pilot confusion or result in a runway incursion.
- 5.2.6 <u>Ruts from mowing equipment or other vehicles.</u> After construction or maintenance operations, ensure that pavement markings are correct and that any unserviceable markers have been removed.

6. FLIGHT CHECKING OF VISUAL AIDS

6.1 Introduction

- 6.1.1 The objective for the flight checking of visual aid lights is to confirm the accuracy of the guidance provided by visual approach aids and to otherwise determine the complicity of all the lights required for the aerodrome.
- 6.1.2 Flight checking is not a means for determining the serviceability of lights and visual aids as this is best done by an effective aerodrome inspection, and preventive maintenance programme as mentioned earlier in Section 2.7. The requirements for on-going flight checking can also be minimized by such programmes.

6.2 Requirements for specific flight checking

- 6.2.1 Visual aids include markings, wind direction indicators and the like.
- 6.2.2 Visual aids and aerodrome lights, other than taxiway and apron lights, shall be flight checked in the following circumstances:
 - (a) prior to commissioning into service;
 - (b) when any major component is replaced with re-alignment or re-setting required;
 - (c) when any visual aid is re-set;
 - (d) periodically to confirm ongoing performance.

6.3 Flight checking criteria

- 6.3.1 Approach slope indicators shall be flight checked to confirm that each aid provides accurate guidance within the tolerances prescribed for that aid.
- 6.3.2 All other visual aid lighting shall be flight checked to verify the appearance, uniformity, intensities of the light and that there is no visual interference by any other light or object.
- 6.3.3 The visual aid lighting performance characteristics to be verified by flight checking prior to being commissioned into service shall be:

T-VASIS and AT-VASIS

- (a) Appearance and uniformity
- (b) Channel width, glide path angle and ILS/PAR coincidence
- (c) Top of red crossbar
- (d) Day and night angular coverage
- (e) Cut off light 1
- (f) Top of red light 1 and obstruction clearance
- (g) Cut in light 6
- (h) Range day and night, intensities and auxiliary power.

OTHER VASIS and PAPI

- (a) Appearance and uniformity
 - Channel width, glide path angle and ILS/PAR coincidence
- (b) Day and night angular coverage
 - Top of red crossbar

7. AERODROME CONDITION REPORTING

7.1 Introduction

- 7.1.1 Under MOS 5.1.5.2, each holder of an aerodrome operating certificate is required to provide information on any conditions which might affect the safe operations of aircraft.
- 7.1.2 Information on the condition of the movement area and the operational status of related facilities shall be notified to the AIS. The local air traffic service unit shall also be notified to enable them to provide the information to arriving and departing aircraft. The information shall be kept up to date and changes in condition reported without delay.

7.2 NOTAM

- 7.2.1 Each holder of an aerodrome operating certificate shall ensure that if unsafe conditions are uncovered as a result of aerodrome inspections, or from any other source, and cannot be immediately rectified, appropriate NOTAM are issued and that local aerodrome users are aware of the situation. After providing the information to the AIS, follow up to ensure that the NOTAM were issued.
- 7.2.2 Once a NOTAM has been issued it is the responsibility of the aerodrome operator to monitor the reported condition and to either update the NOTAM information or cancel the NOTAM if the condition has been rectified.

7.3 Information

- 7.3.1 The information provided for the issue of NOTAM shall be clear and precise and shall contain:
 - (a) type of unserviceability or unsafe condition;
 - (b) extent (area) of the unserviceability or condition; and
 - (c) duration (expected length of time) the condition will remain.
- 7.3.2 It is important that the area in which the unserviceability or unsafe condition occurs is referred to correctly. Runways and runway strips shall be referred to by their runway designator and the difference between the runways and runway strips shall be recognized and the correct terminology used.
- 7.3.3 In complying with MOS 10.3.2.2, the holder of an aerodrome operating certificate shall provide information to the AIS for the issue of NOTAM on any of the following aerodrome conditions which may affect the safe operations of aircraft:
 - (a) changes (temporary or permanent) in the published aerodrome information including additional changes to current permanent NOTAMs;
 - (b) changes in the level of protection normally available at the aerodrome for rescue and firefighting:
 - (c) aerodrome works affecting runways or the obstacle limitation surfaces, including time-limited works that require more than 10 minutes to re-

instate to serviceable order;

- (d) unserviceable portions of the runway or failure in lighting or obstacle lighting;
- (e) temporary obstacles to aircraft operations;
- (f) a significant increase in, or concentration of birds or animals on or in the vicinity of the aerodrome;
- (g) changes in excess of 0.05% of the published gradient data;
- (h) emergence of new obstacles;
- (i) when a radio navigation aid or landing aid owned by the aerodrome operator is unserviceable or returned to service; and
- (j) any other significant event which affects the safety of aircraft using the aerodrome.

8. AERODROME RUNWAY INSPECTION PROCEDURES

8.1 General guidance

- 8.1.1 The objective is for each aerodrome to develop and implement fully documented runway inspection procedures, based on hazard analysis and risk assessment. The procedures will probably comprise core inspections plus a number of additional variable elements, which combine to form a 'basket of measures' approach. It is likely that each aerodrome's 'basket of measures' will be different, being dictated by local circumstances. The hazard analysis shall be performed in order to identify local hazards, assess any level of risk, and determine the appropriate control measures.
- 8.1.2 The hazard analysis shall be reviewed on a regular basis, depending upon changes to critical areas of the runway environment and/or its operation.
- 8.1.3 Runway inspections are carried out to accomplish a wide variety of important aviation safety related activities that shall, as a minimum, include:
 - (a) the inspection of the runway surface condition;
 - (b) FOD detection and removal;
 - (c) bird control and the removal of remains;
 - (d) inspection of the visual aids, including markings and, where applicable, aeronautical ground lighting, particularly the structural integrity of the fittings;
 - (e) runway friction measurement, if applicable;
 - (f) checks in the clear and graded area; and
 - (g) any other purpose (e.g. after an abandoned take-off or landing incident).

A more detailed list of core and optional/variable inspection procedures is included in Appendix A1 to this Guidance.

- 8.1.4 For unpaved surfaces, inspections will probably need to be increased after periods of prolonged rain, which may result in damage to the surface and whereby the surface is considered no longer suitable for use. In addition to those already stated, checks shall also include the detection of irregular surfaces which may affect the performance and control of aircraft using it. There shall be in place a level of understanding of the local and seasonal variations that may affect the surface condition.
- 8.1.5 It is probable that to undertake these varied tasks, many different agencies under the control of the aerodrome will have inspection-related duties. These shall be carried out to a common high standard and so procedures shall be developed to reflect this.
- 8.1.6 At present, no proprietary system has been proven to be fully effective as a stand-alone or automatic method in the monitoring and identification of FOD on runways. However, while such systems shall not be ignored, the use of advanced technology shall only supplement current methods of inspection.
- 8.1.7 A runway inspection involves the deliberate entry of an active runway. It is therefore essential that any hazards associated with this activity are identified and addressed so that each agency with an inspection duty has a clear understanding of what is involved and how the task is carried out safely. All personnel with a task that involves entering a runway shall clearly understand their responsibilities and the identified hazards. This training shall be recorded and a system of review shall be established so that new hazards can be identified and new training needs satisfied.
- 8.1.8 Each inspection shall include a reporting mechanism to ensure that appropriate action is taken. Reports shall include details of the task(s); any remedial action(s) necessary or taken; and shall identify the person/agency responsible for undertaking the task and/or further action.
- 8.1.9 The runway inspection regime shall form an integral part of the existing aerodrome inspection procedure for the movement area, and the aerodrome certificate holder shall ensure that the development and use of runway inspection procedures are addressed in the safety management system employed at the aerodrome.

APPENDIX

APPENDIX A: RUNWAY INSPECTION PROCEDURES

A-1 CORE INSPECTIONS

- A-1.1 These inspections shall be carried out a number of times daily, dependent upon the movement rate and duration of operations. There is no minimum number, but they shall be spread over the main times of operational activity. Inspections planned to take place during the hours of darkness may need to be done in a different manner from those undertaken during the daytime, with consideration being given to the presence of vehicles, people, lighting etc.
- A-1.2 The frequency of on-runway inspections and the manner in which they are carried out will depend upon the results of the hazard analysis and risk assessment.

A-2 OPTIONAL ELEMENTS (DAILY)

A-2.1 SPECIFIC INSPECTIONS

A-2.1.1 These additional on-runway inspections, for example bird hazard control or FOD detection, might be undertaken by a single vehicle and shall be carried out at an appropriate speed for effective monitoring.

A-2.2 OFF-RUNWAY OBSERVATIONS

A-2.2.1 This inspection involves observation of the runway from various vantage points, such as the edge of the clear and graded area, holding points, taxiways or tracks. Observations shall be carried out from a stationary vehicle, with binoculars. This type of inspection may only be possible during daylight hours and, if utilized, shall be integrated with the core 'on-runway' inspections.

A-2.3 OFF-RUNWAY OBSERVATION BY A BIRD CONTROL UNIT

- A-2.3.1 The primary objective of a bird control unit is to keep the runway environment clear of birds.
- A-2.3.2 A critical element of this task is 'continuous' observation of the runway from various static observation points; but these observations may only be suitable for daylight hours, possibly integrated with the off-runway observations above.

A-2.4 RUNWAY LIGHTING CHECKS

A-2.4.1 Daily runway lighting checks are normally undertaken in order to identify unserviceable lamps and possible failures of light fittings. It might be possible to incorporate inspections of particular areas of the runway at the same time. These inspections will need to integrate with the other on-runway inspections and be flexible in timing to cater for the variability of the onset of night.

A-2.5 RUNWAY CRITICAL AREAS

A-2.5.1 It may be desirable to concentrate runway inspections within those areas that are 'high risk', such as touchdown zones, displaced thresholds and frequently used crossing points. The use of this type of inspection might be dictated by such variables as type of traffic, runway length, and the entry/exit points being used and whether mixed/single mode operations are in use.

A-3 VARIABLE ELEMENTS

A-3.1 RUNWAY CONDITION/AGE INSPECTION

A-3.1.1 Dependent upon the age and current condition of the runway surface, additional on-runway inspections may be needed, covering the whole surface or identified critical areas.

A-3.2 RUNWAY WALKING INSPECTIONS

A-3.2.1. Although it may take a long period of time, walking the runway can provide a more thorough examination of the runway. The number of full walking inspections planned for each year will depend upon the age and use of the runway surface, and the level of operations undertaken at each aerodrome.

A-3.3 RUNWAY SURFACE FRICTION MEASUREMENT

A-3.3.1 Use of the existing runway friction measurement regime may provide additional opportunities to observe the runway.

A-3.4 DURING AND AFTER PERIODS OF MAINTENANCE

A-3.4.1 When engineering staff are working on the runway, it may be possible to provide an additional inspection of either the whole runway or part of it. In addition, a runway inspection shall be conducted in the vicinity of the working area after completion of the works to ensure that tools, machinery and other forms of FOD are not present. This is particularly important after works at night where there is a greater risk of the misplacement of work items.

A-3.5 RUNWAY SWEEPING PROGRAMME

A-3.5.1 Dependent upon the age and current condition of the runway surface, a periodic sweeping programme shall be implemented.

APPENDIX B: ACRONYMS

1)	AIP	-	Aeronautical Information Publication
2)	FOD	-	Foreign Object Debris
3)	ILS	-	Instrument Landing System
4)	NOTAM	-	Notice to Airmen
5)	MOS	-	Manual of Standards for Aerodromes
6)	MOS-ATS	-	Manual of Standards for Air Traffic Services
7)	PALS	-	Precision Approach Lighting System
8)	PAPI	-	Precision Approach Path Indicator
9)	SALS	-	Simple Approach Lighting System
10)	VASIS	-	Visual Approach Slope Indicator

APPENDIX C: SUGGESTED AIRPORT SAFETY INSPECTION CHECKLISTS

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 developed so that it is useful for the airport and its operation. A sketch of the airport is highly recommended to readily identify the location of problems found during the daily inspection.

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

The blank squares indicate the conditions to be evaluated for each facility. A check $(\sqrt{})$ in one of these squares would indicate that the condition of the facility and equipment was found to be satisfactory. On the other hand, an "x" in one of these squares would indicate that the condition of the facility and equipment was found to be unsatisfactory.

When an unsatisfactory condition is found:

- 1. An "x" for each applicable square should be entered;
- 2. A note provided in the Remark/Action Taken section;
- 3. The location of the condition should be identified in the airport sketch; and
- 4. Appropriate follow-up action including NOTAMs should be initiated. Corrective action should be documented on either the self-inspection checklists or on a separate work order system.

Appendix C.1: AIRPORT SAFETY SELF-INSPECTION CHECKLIST

DATE: _____ DAY: _____ √ Satisfactory

ay Inspector/Time:	Night Ir	nspecto	X Un	X Unsatisfactory			
FACILITIES	CONDITIONS	D	N	REMARKS	RESOLVED BY (Date/Initials)		
	Pavement lips over 3"						
	Hole – 5" diam. 3" deep						
	Cracks/spalling/heaves						
Pavement Areas	FOD: gravel/debris/sand						
	Rubber deposits						
	Ponding/edge dams						
	Ruts/humps/erosion	_					
	Drainage/construction						
	Support equipment/aircraft						
Salely Aleas	Frangible bases						
	Unauthorized objects						
	Clearly visible/standard						
	Runway markings						
Markinga	Taxiway markings						
Markings	Holding position markings						
	Glass beads						
	Standard/meet Sign Plan						
Signs	Obscured/operable						
	Damaged/retroreflective						

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FACILITIES	CONDITIONS	D	N	REMARKS	RESOLVED BY (Date/Initials)
	Obscured/dirty/operable				
	Damaged/missing				
	Faulty aim/adjustment				
Lighting	Runway lighting				
	Taxiway lighting	-			
	Pilot control lighting				
	Rotating beacon operable				
Navigational Aids	Wind indicators				
Navigational Alds	Rotating beacon operable Image: Construction lights operable Image: Construction lights operable Ructions Image: Construction lights operable Image: Construction lights operable Image: Construction lights operable				
	Obstruction lights operable				
Obstructions	Cranes/trees				
	Fencing/gates/signs	-			
	Fuel marking/labeling				
	Fire extinguishers				
Fueling Operations	Frayed wires				
	Fuel leaks/vegetation				
	Barricades/lights				
Construction	Equipment parking				
in sectors - Loone a sector (25) (22 Stronger H42)	Material stockpiles				
	Damaged/missing Imaged/missing Faulty aim/adjustment Imaged/missing Runway lighting Imaged/missing Taxiway lighting Imaged/missing Taxiway lighting Imaged/missing Taxiway lighting Imaged/missing Taxiway lighting Imaged/missing Pilot control lighting Imaged/missing Pilot control lighting Imaged/missing gational Aids Rotating beacon operable Wind indicators Imaged/missing RENLs/VGSI systems Imaged/missing tructions Cranes/trees Imaged/missing tructions Fencing/gates/signs Imaged/missing Fuel marking/labeling Imaged/missing Imaged/missing ing Operations Frayed wires Imaged/missing Fuel leaks/vegetation Imaged/missing Imaged/missing struction Imaged/missing Imaged/missing Imaged/missing struction Imaged/missing Imaged/missing Imaged/missing Struction Imaged/missing Imaged/missing Imaged/missing struction Imaged/missing Imaged/missin				

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FACILITIES	CONDITIONS	D	N	REMARKS	RESOLVED BY (Date/Initials)
	Equipment/crew availability				
Aircraft Rescue	Communications/alarms				
and Fire Fighting	Response routes affected				
	Fencing/gates/signs				
Public Protection	Jet blast problems				
	Wildlife present/location				
Wildlife Hazards	Complying with WHMP				
	Dead birds				

Comments/Remarks:

Airfield Map on Reverse Side

Appendix C.2: CONTINUOUS SURVEILLANCE CHECKLIST

			v Satisfactory
DATE:	DAY:		X Unsatisfactory
ГІМЕ:	INSPECTOR:		
FACILITIES	CONDITIONS	1	REMARKS/ACTIONS TAKEN
Ground Vehicles	Rules/Procedures Followed		
ATE:	Fire/Explosion Hazards		
Fueling Operations	Signing/No smoking		
	MOWP		
	Safety Plan		
Construction	Runway Incursions		
Public Protection	Runway & Taxiway Use		
	FOD		
	Unauthorized Persons		
Public Protection Wildlife Hazards	Unauthorized Vehicles		
	Gates clear		
Wildlife Hazards	Birds/Animals		
Wildine Hazarda	Dedestriens in Mercanet		
	Pedestrians in Movement		
Vildlife Hazards	Passenger Load/Unload		
	Debris in Movement Area		
Additional Remarks			

Airfield Map on Reverse Side

Appendix C.3: PERIODIC CONDITION INSPECTION CHECKLIST

DATE:	DAY		√ Satisfactory X Unsatisfactory
TIME:			A Unsatisfactory
FACILITIES	CONDITIONS	~	REMARKS/ACTIONS TAKEN
	Rubber Deposits		
Pavement Areas	Polishing		
Markings and Signs	Visible		
DATE:	Standards		
	Physical Facilities		
	Mobile Fuelers		
Fueling Operations	Fire Extinguishers		
FACILITIES Pavement Areas Markings and Signs Fueling Operations Navigational Aids Lighting Obstructions Aircraft Rescue and Fire Fighting	Fuel Marking/Labeling		
	Frayed Wiring		
Navigational Aids	RENLs/VGSI Aiming		
	Power Generator Check		
Navigational Aids Lighting	Circuit Resistance Test		
	Aim/Adjustment		
	Surveyed Trees/Structures		
Obstructions	Overhead Power Lines		
	Response Times		
Aircraft Rescue and	Live Fire Drills		
File Fighting	Training		
Additional Remarks:			

Airfield Map on Reverse Side

A 242 17 14

Appendix C.4: SPECIAL INSPECTION CHECKLIST

			√ Satisfactory		
DATE:	DAY:	X Unsatisfactory			
TIME:	INSPECTOR:				
FACILITIES	CONDITIONS	\checkmark	REMARKS/ACTIONS TAKEN		
	Ponding/Edge Dams				
Pavement Areas					
	Visible after rain				
Vavement Areas	Standards after Construction				
	Drainage				
	Reopening Runways				
Safety Areas	Reopening Taxiways				
	Barricades				
Construction	Construction Lights				
	Equipment Parking				
	SMGCS Lighting				
SMGCS					
Additional Remarks					

Airfield Map on Reverse Side

Appendix C.5: QUARTERLY INSPECTION – MOBILE FUELERS

3 – Satisfactory	Jet A F	Jet A Fuelers			100LL Fuelers			uelers	
J – Unsatisfactory						P			
र – Remark Below	5	0	ĸ	5	0	ĸ	5	0	R
No Smoking sign in cab									
-lammability Signs/Haz Mat Placards all sides									
3onding Cables and Clips functional									
Deadman Control for all nozzles									
? Fire Extinguishers – Proper vpe/Inspected									
Emergency Shutoffs operable and marked									
No Fuel Leaks – Hoses/Gaskets/Valves									
/ehicle Exhaust System – Shielded/Leak free									
No evidence of Smoking – No ashtray in cab									
Vehicle Parking – 3m' apart/ 15m from buildings.									
Explosion proof electrical/Light lens ntact									
gnition Sources (Clothing, Shoes, Matches)									
							No of N	lobile Fu	lelers
Proper Fueling Procedures Observed							Jet A		
Fueling Personnel Meet Training Requirements									
Fueling Personnel Training Records maintained				1			Other		

Appendix C.6: QUARTERLY INSPECTION – FUEL STORAGE AREAS

S – Satisfactory	Jet A S	ection		100LL Section			Other		
U – Unsatisfactory R – Remark Below	S	U	R	S	U	R	S	U	R
Fencing/Locks/Signs									
Piping protected from vehicles				1					
No Smoking signs posted									
Deadman Controls for loading stations									
2 Fire Extinguishers – Inspected/Accessible									
Boldly Marked Emergency Cutoffs – Location									
No Fuel Leaks				1					
Bonding wire/clips at loading stations/operable									
Piping/Pumps bonded and grounded									
No vegetation or materials to spread fire									
No evidence of Smoking									
Hoses in good condition									
Explosion Proof Electrical Equipment									
Damadua									