



**CIVIL AVIATION SAFETY AND
SECURITY OVERSIGHT AGENCY**

Advisory Circular

CAA-AC- AGA011

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PROCEDURES FOR MONITORING AND REPORTING OF CONDITIONS OF MOVEMENT AREAS

1. PURPOSE

The purpose of this circular is to provide guidance to be used by aerodrome operators for aerodrome surface condition reporting for aircraft movement areas.

2. REFERENCES

Civil Aviation (Aerodromes) Regulations, 2007
Manual of Aerodrome Standards
ICAO Annex 14 VOL 1

3. Frequency of Inspection

1.1 Inspections of the movement area should be regular and as frequent as possible. In any event the minimum frequency should be:

a) Runways - Four inspections daily as described below:

- i. Dawn inspection - A detailed surface inspection covering the full width of all runways should be undertaken. This should take approximately 15 minutes for each runway (two runs).
- ii. Morning inspection - All runways, normally carried runway out on an ON/OFF basis concentrating on the area between the runway edge lights.
- iii. Afternoon inspection - Same as the morning is designed to bridge the gap in runway inspections.
- iv. Dusk inspection - This should cover all runways is designed to bridge the gap in runway inspections when the lighting inspection is not required until late in the evening, and should cover the whole runway surface.

- b) Taxiways - daily for those in normal regular use.
- c) Aprons – daily
- d) Grass areas - those areas that may be required to sustain aircraft should be inspected as frequently as adjacent paved areas. Other grass areas should be inspected at intervals suitable to observe any deterioration of the surface.

4. Method of Inspection

2.1 The areas to be covered may necessitate the use of vehicles for airport inspections. However, the higher the speed, the less effective the inspection: therefore, speeds should be kept as low as practicable. Detailed inspections of paved surfaces on foot will normally be completed by the Maintenance Department while other areas should be inspected by the relevant department. It will be necessary for airport operations to coordinate the program to ensure that inspections are carried out at the correct frequency.

2.2 Inspection Procedures

2.2.1 Before commencing any runway inspection, permission must be obtained from air traffic control. On entering the runway a positive entry call, e.g. "checker entering for inspection". must be made: on leaving the runway, air traffic control must be advised when the inspection vehicle is clear of the runway strip. Most inspections are carried out on an ON/OFF basis (i.e. where the inspection vehicle may be required to enter or leave the runway at short notice). The above calls must be made on each occasion that the inspection vehicle enters the runway.

2.2.2 It is essential to maintain a listening watch on the appropriate R/T channel during any runway inspection.

2.2.3 If, during an ON/OFF inspection, air traffic control requests the inspection team to clear the runway, the vehicle must move outside the runway strip before advising air traffic control that they are clear. They must then remain outside the runway strip while awaiting the re-entry instructions.

*Note. – While clearing a runway, caution should be taken to avoid entering an **ILS critical sensitive area**.*

2.2.4 Clearance must be obtained before crossing any runway.

2.2.5 All runway inspections are carried out in the direction opposite to that being used for landing or taking off, primarily for safety reasons. In the case of the first, light runway inspection involving two runs in the same direction, the "back-tracking" must be done outside the runway strip and can be utilized in inspecting the runway from a distance or the taxiway adjacent to the runway in question.

2.2.6 On final completion of a runway inspection the team should advise air traffic control of the fact and report the state of the runway.

2.2.7 The times of commencement and completion of the inspection must be noted and included in the Record of Inspection Log.

2.3 Paved Area Inspections

2.3.1 Attention should be paid to the following points:

a) general cleanliness with particular attention to material which could cause engine ingestion damage. This may include debris from runway maintenance or excessive grit remaining after runway gritting. Any build-up of tire rubber deposits should be noted;

b) signs of damage to the pavement surface including cracking and spalling of concrete, condition of joint sealing, cracking and looseness of aggregate in asphalt surfaces or break-up of friction courses. Damage or deterioration which could cause aircraft damage should be reported immediately for, inspection by the Airport Maintenance Department and, if the damage is sufficiently serious, the area closed to aircraft pending the results of such an inspection;

c) after rain, flooded areas should be identified and marked, if possible, to facilitate later resurfacing;

d) damage of light fittings;

e) cleanliness of runway markings; and the condition and fit of pit covers.

f) after accident or removal of disabled aircraft.

g) after rehabilitation or repair on the movement areas.

2.3.2 The extremities of the runway should be inspected for early touchdown marks; blast damage to approach lights, marker cones and threshold lights; cleanliness and obstacles in the runway end safety area.

2.4 Grassed Area Inspections

2.4.1 The following points should be observed:

a) the general state of ground cover vegetation ensuring in particular that excessive length is not obscuring lights, signs, markers, etc.;

b) any developing depressions should be noted and plotted;

c) any unreported aircraft wheel tracks should be carefully plotted and reported;

d) the condition of signs and markers should be noted and necessary repair work ordered;

e) the general bearing strength of grass areas, particularly those close to aircraft pavement surfaces, should be noted. A reasonable assessment can be from the depth of vehicle wheel tracks. Any areas showing signs of persistent water logging should be reported.

Any differences in levels between grass and paved areas should be noted and remedial action requested. Because of the hazard to aircraft engines particular note should be made of the general cleanliness of these areas. Signs of blast erosion should be noted and reported; and

f) water logged grass areas should be noted and reported particularly since they may be an attraction to birds.

2.4.2 The main object of grass cutting is to ensure that lights and markers are not obscured by tall vegetation. It should also be managed in such a fashion as to limit the attraction of the airport to birds and other wildlife. It will be necessary to ensure that mounds of grass cuttings are not left on areas where engine ingestion is possible.

2.5 Obstacles

2.6 A check should be made of all authorized obstacles for proper lighting and marking.

2.6.2 Any unauthorized obstacles must be reported to the designated persons or organizations immediately.

Where possible, prompt removal of the obstacle should be carried out. If this is not possible immediate consideration must be given to whether aircraft operations should be restricted in any form and appropriate marking and lighting of the obstacle carried out.

2.7 Reporting

2.7.1 If a dangerous unserviceability is discovered during a runway inspection (e.g. damaged pit covers or broken lights), the fact should be immediately reported by R/T in order that appropriate ATC action can be taken. In addition, airport operations management should be informed. If the runway is closed as a result of such damage the inspection team should continue their inspection whilst awaiting the arrival of airport maintenance support. The team should also be prepared to inspect any subsidiary runway if required.

2.7.2 If runway unserviceability of a type that will not affect its use is discovered the matter must be reported to the Airport Maintenance Department on the appropriate form stating the degree of urgency, date and time, etc.

2.7.3 Should aircraft parts or tire pieces be found during a runway inspection, then airport operations and air traffic control must be informed immediately so that tracing and notification can be taken.

2.7.4 To assist in identifying the location of faults on a runway, reference plates should be installed outside the runway edge lights on one side of the runway.

3. *Reporting and Dissemination*

Airport operators are responsible, under [Reg.49\(i\)](#) for providing notification of changes in runway status to aircraft operators using their facilities. This requires immediate notification when hazardous conditions occur and follow-up dissemination by NOTAM when changes in runway status will remain. The airport operator is also responsible for cancelling the information when the NOTAM is no longer applicable. The information should be submitted in a written format.

When a contaminant is such that it meets the conditions for distribution of information and clearing is not under way or not expected to commence within the next 30 minutes, when the meteorological conditions are such that the runway surface conditions are changing frequently, a NOTAM will include the agency and telephone number to contact for the current runway conditions.

The content of a NOTAM is the responsibility of the aerodrome operator and ATC & RFFS require the information to be disseminated as issued by the airport operator. If the ATIS operator doubts the validity of a report due to a significant change of conditions since the report was issued, the aircraft and airport operator will be informed of the reasons (e.g. reasons may be the disappearance or presence of water on the runway, etc.).