# STATUTORY INSTRUMENTS SUPPLEMENT No. 18

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#### STATUTORY INSTRUMENTS SUPPLEMENT

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#### S T A T U T O R Y I N S T R U M E N T S

#### 2014 No. 58.

## THE CIVIL AVIATION (AERODROMES) REGULATIONS, 2014

#### ARRANGEMENT OF REGULATIONS

#### PART I—PRELIMINARY

## Regulation

- 1. Title
- 2. Interpretation
- 3. Use of common reference systems
- 4. Categories of aerodromes

#### PART II—CONSTRUCTION OF AERODROMES

- 5. Application of this Part
- 6. Requirements for application for an aerodrome construction permit
- 7. Issuance of aerodrome construction permits
- 8. Design and construction of aerodrome
- 9. Requirement for aerodrome design
- 10. Aerodrome reference code

#### PART III—LICENSING OF AERODROMES

- 11. Application of this Part
- 12. Application for licence
- 13. Conditions for issuance of licence
- 14. Issuance of licence
- 15. Breach of conditions of licence and non-conformance with the licensing requirements
- 16. Aerodrome licence

- 17. Validity of licence
- 18. Renewal of licence
- 19. Amendment of licence
- 20. Suspension and cancellation of licence
- 21. Surrender of licence
- 22. Charges at licensed aerodrome
- 23. Licences register
- 24. Notification and furnishing of information

#### PART IV—CERTIFICATION OF AERODROMES

- 25. Application of this Part
- 26. Application for certificate
- 27. Conditions for issuance of certificate
- 28. Breach of conditions of certificate and non-conformance with certification requirements
- 29. Issuance of certificate
- 30. Validity of certificate
- 31. Renewal of certificate
- 32. Amendment of certificate
- 33. Suspension and cancellation of certificate
- 34. Surrender of certificate
- 35. Charges at certificated aerodromes
- 36. Certificates register

## PART V—OBLIGATIONS OF AERODROME OPERATOR

- 37. Application of this Part
- 38. Compliance with conditions
- 39. Competence of operational and maintenance personnel
- 40. Aerodrome operations and maintenance
- 41. Safety management system
- 42. Storage of inflammable and other dangerous goods
- 43. Safety measures against fire
- 44. Access to and operations within restricted areas
- 45. Entry into or exit from restricted areas of aerodrome
- 46. Test-running of aircraft engine
- 47. Certain acts prohibited on aerodrome
- 48. Removal of obstructions from aerodrome movementsurfaces

- 49. Maintenance of environment management programme
- 50. Protection of navigation aids
- 51. Responsibilities of operator
- 52. Inspection of aerodromes and unhindered access by inspectors of the Authority
- 53. Notifying and reporting
- 54. Aerodrome movement area inspections
- 55. Special inspections
- 56. Warning notices

#### PART VI—AERODROME MANUAL

- 57. Application of this Part
- 58. Requirements for aerodrome manual
- 59. Information to be included in aerodrome manual
- 60. Amendment of aerodrome manual

#### PART VII—WILDLIFE HAZARD MANAGEMENT

- 61. Application of this Part
- 62. Animals not allowed in restricted areas of aerodrome
- 63. Wildlife hazard management
- 64. Wildlife hazard reduction at aerodrome
- 65. National Committee on Wildlife Hazard Management

#### PART VIII—OBSTACLE RESTRICTIONS AND REMOVAL

- 66. Application of this Part
- 67. Erection of obstacles
- 68. Establishment of obstacle limitation surfaces
- 69. Authorisation to construct within the vicinity of an aerodrome
- 70. Removal of obstacle
- 71. Marking and lighting of obstacle

## PART IX—AERONAUTICAL GROUND LIGHTING

- 72. Application of this Part
- 73. Establishment and maintenance of aeronautical ground lights
- 74. Secondary power supply
- 75. Aeronautical beacons

#### PART X—AERODROME VISUAL AIDS

- 76. Application of this Part
- 77. Wind direction indicators
- 78. Signalling lamp
- 79. Signal panel and signalling area
- 80. Markings
- 81. VOR aerodrome checkpoint marking
- 82. Aircraft stand markings
- 83. Apron safety lines
- 84. Road-holding positions
- 85. Mandatory instruction markings and signs
- 86. Information marking
- 87. Visual aids for denoting obstacles
- 88. Obstacles to be marked or lighted
- 89. Visual aids for denoting restricted areas

## PART XI—AERODROME OPERATIONAL SERVICES, EQUIPMENT, INSTALLATIONS AND FACILITIES

- 90. Application of this Part
- 91. Immigration, customs and excise aerodromes
- 92. Supply of aviation fuel to aircraft
- 93. Aerodrome emergency planning
- 94. Emergency planning committee
- 95. Aerodrome emergency exercise
- 96. Emergency operation centre and command post
- 97. Emergencies in difficult environment
- 98. Aerodrome rescue and fire fighting services
- 99. Removal of disabled aircraft
- 100. Apron management service
- 101. Ground servicing of aircraft
- 102. Aerodrome vehicle operation
- 103. Location, construction and installation of equipment on operational areas
- 104. Fencing of aerodromes and installations
- 105. Maintenance of safety inspection programme
- 106. Maintenance of fire prevention programme
- 107. Access of ground vehicles to aerodrome movement area

#### PART XII—AERODROME MAINTENANCE

- 108. Application of this Part
- 109. Maintenance programme
- 110. Maintenance of movement and adjacent areas
- 111. Preventive maintenance of visual aids
- 112. Construction or maintenance activity during low visibility operations
- 113. Works at aerodromes

#### PART XIII—ELECTRICAL SYSTEMS

- 114. Application of this Part
- 115. Electrical power supply systems for air navigation services and facilities

# PART XIV—Information To Be Reported To Aeronautical Information Services

- 116. Application of this Part
- 117. Availability of Information
- 118. Action required for occurrences of operational significance other than those involving electronic aids and communication facilities
- 119. Action required for occurrences that affect electronic aids and communication facilities
- 120. Aeronautical data reporting

#### PART XV—EXEMPTIONS

- 121. Application of this Part
- 122. Application for exemption
- 123. Initial review by the Authority
- 124. Evaluation of application for exemption

#### PART XVI—GENERAL PROVISIONS

- 125. Application of this Part
- 126. Change of name of a licence or certificate holder
- 127. Change of address of a licence or certificate holder
- 128. Use and retention of licences, certificates and records
- 129. Replacement of documents
- 130. Aeronautical user charges

- 131. Conditions for operating an aerodrome
- 132. Standards for physical characteristics
- 133. Dangerous light
- 134. Lighting of en-route obstacles
- 135. Land use in the vicinity of an aerodrome
- 136. Aeronautical studies
- 137. Deviations from standards
- 138. Safety inspections and audits
- 139. Obligation to insure an aerodrome
- 140. Contravention of Regulations
- 141. Offences and Penalties

#### PART XVII—SAVINGS AND TRANSITION

- 142. Savings and Transition
- 143. Revocation

#### **SCHEDULES**

- FIRST SCHEDULE SYSTEMATIC MANAGEMENT OF SAFETY AT AERODROMES
- SECOND SCHEDULE- PARTICULARS TO BE INCLUDED IN AN

IN CATEGORY A

THIRD SCHEDULE - PARTICULARS TO BE INCLUDED IN AN

AERODROME MANUAL FOR AERODROMES

AERODROME MANUAL FOR AERODROMES

IN CATEGORIES B AND C

FOURTH SCHEDULE - PARTICULARS TO BE INCLUDED IN AN

AERODROME MANUAL FOR AERODROMES

IN CATEGORY D (HELIPORTS)

FIFTH SCHEDULE - AERODROME DATA

## S T A T U T O R Y I N S T R U M E N T S

## 2014 No. 58.

# The Civil Aviation (Aerodromes) Regulations, 2014.

(Under sections 34(2) and 61 of the Civil Aviation Authority Act, Cap 354)

IN EXERCISE of the powers conferred on the Minister by sections 34(2) and 61 of the Civil Aviation Authority Act, Cap 354, and on the recommendation of the Civil Aviation Authority, these Regulations are made this 6th day of June, 2014.

#### PART I—PRELIMINARY

#### 1. Title.

These Regulations may be cited as the Civil Aviation (Aerodromes) Regulations, 2014.

# 2. Interpretation.

In these Regulations unless the context otherwise requires—

- "Act" means the Civil Aviation Act;
- "aerodrome" means a defined area on land including any buildings, installations, and equipment used for the arrival, departure and surface movement of aircraft licensed or certificated under these Regulations;
- "aerodrome beacon" means an aeronautical beacon used to indicate the location of an aerodrome from the air;
- "aerodrome elevation" means the elevation of the highest point of the landing area;
- "aerodrome facilities and equipment" means facilities and equipment, inside or outside the boundaries of an aerodrome that are constructed or installed and maintained for the arrival, departure and surface movement of aircraft;

- "aerodrome manual" means the manual that forms part of the application for a licence or a certificate under these Regulations, including any amendments to the manual, approved by the Authority;
- "aerodrome mapping data (AMD)" means data collected for the purpose of compiling aerodrome mapping information for aeronautical uses.
- "aerodrome mapping database (AMDB)" means a collection of aerodrome mapping data organized and arranged as a structured data set.
- "aerodrome reference code" means a code used for planning purposes to classify an aerodrome with respect to the critical aircraft characteristics for which the aerodrome is intended;
- "aerodrome reference point" means the designated geographical location of an aerodrome;
- "aerodrome traffic zone" means the airspace extending from aerodrome level to a height of two thousand feet over the area comprising the aerodrome and the surrounding land or water within a distance of two thousand yards of its boundaries;
- "aeronautical beacon" means an aeronautical ground light visible at all azimuths, either continuously or intermittently, to designate a particular point on the surface of the earth;
- "aeronautical ground light" means any light provided as an aid to air navigation, other than a light displayed on an aircraft;
- "Aeronautical Information Circular" means a notice containing information that does not qualify for the origination of a NOTAM or for inclusion in the Aeronautical Information Publication, but which relates to flight safety, air navigation, technical, administrative or legislative matters;
- "Aeronautical Information Publication" means an aeronautical information publication of a lasting character essential to air navigation, issued by the Authority;

- "air traffic service" means a flight information service, alerting service, air traffic advisory service, or air traffic control service;
- "air traffic service unit" is a generic term meaning variously, air traffic control unit, flight information centre or air traffic services reporting office;
- "Aircraft Classification Number" means a number expressing the relative effect of an aircraft on a pavement for a specified standard sub grade category;
- "aircraft stand" means a designated area on an apron intended to be used for parking an aircraft;
- "apron" means a defined area, on an aerodrome, intended to accommodate aircraft for purposes of loading or unloading of passengers, mail or cargo, fuelling, parking or maintenance;
- "apron management service" means a service provided to regulate the activities and the movement of aircraft and vehicles on an apron;
- "Authority" means the State Civil Aviation Authority;
- "authorized person" means any person authorized by the Authority either generally or in relation to a particular case or class of cases and reference to an authorized person includes references to the holder for the time being of an office designated by the Authority;
- "certificate" means the certificate to operate an aerodrome issued by the Authority under Part IV of these Regulations;
- "clearway" means a defined rectangular area under the control of the appropriate authority selected or prepared as a suitable area over which an aircraft may make a portion of its initial climb to a specified height;

- "controlled aerodrome" means an aerodrome where air traffic services are provided;
- "critical aircraft" means the most demanding aircraft in terms of its size and maximum take-off weight that is proposed to use an aerodrome facility;
- "dangerous goods" means articles or substances which are capable of posing a risk to health, safety, property or the environment;

### "declared distance" means—

- (a) "accelerate-stop distance available" which is the length of the take-off run available plus the length of the stopway, if provided;
- (b) "landing distance available" which is the length of the runway which is declared available and suitable for the ground run of an aircraft landing;
- (c) "take-off distance available" which is the length of the take-off run available plus the length of the clearway, if provided;
- (d) "take-off run available" which is the length of runway declared available and suitable for the ground run of an aircraft taking off;
- "displaced threshold" means a threshold not located at the extremity of a runway;
- "geoid" means the equipotential surface in the gravity field of the earth which coincides with the undisturbed Mean Sea Level extended continuously through the continents;
- "hazard beacon" means an aeronautical beacon used to designate a danger to air navigation;
- "holding bay" means a defined area where aircraft can be held, or bypassed, to facilitate efficient surface movement of aircraft;

- "hot spot" means a location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots and drivers is necessary;
- "human factor principles" means principles which apply to aeronautical design, certification, training, operations and maintenance and which seek safe interface between the human and other system components by proper consideration to human performance;
- "human performance" means human capabilities and limitations, which have an impact on the safety and efficiency of aeronautical operations;
- "identification beacon" means an aeronautical beacon emitting a coded signal by means of which a particular point of reference can be identified:
- "incident" means an occurrence other than an accident associated with the operation of an aircraft, which affect or may affect the safety of operation of aircraft;
- "instrument runway" means any of the following types of runways intended for the operation of aircraft using instrument approach procedures—
  - (a) "non- precision approach runway" which means an instrument runway served by visual aids and a non-visual aid providing at least directional guidance adequate for a straight-in approach;
  - (b) "precision approach runway, category I", which means an instrument runway served by instrument landing system and microwave landing system and visual aids intended for operation with a decision height not lower than 60m (200 ft) and either a visibility not less than 800 m or a runway visual range not less than 550m;

- (c) "precision approach runway, category II", which means an instrument runway served by Instrument Landing System and Microwave Landing System and visual aids intended for operation with a decision height lower than 60m (200 ft) but not lower than 30 m (100 ft) and a runway visual range not less than 300 m;
- "integrity classification (aeronautical data)" means classification based upon the potential risk resulting from the use of corrupted data. Aeronautical data is classified as—
  - (a) routine data: there is a very low probability when using corrupted routine data that the continued safe flight and landing of an aircraft would be severely at risk with the potential for catastrophe;
  - (b) essential data: there is a low probability when using corrupted essential data that the continued safe flight and landing of an aircraft would be severely at risk with the potential for catastrophe; and
  - (c) critical data: there is a high probability when using corrupted critical data that the continued safe flight and landing of an aircraft would be severely at risk with the potential for catastrophe.
- "intermediate holding position" means a designated position intended for traffic control at which taxiing aircraft and vehicles stop and hold until they are cleared to proceed, when so instructed by the aerodrome control tower;
- "landing area" means that part of a movement area intended for the landing or take-off of aircraft;
- "licence" means a licence to operate an aerodrome issued by the Authority under Part II of these Regulations;
- "lighting system reliability" means the probability that the complete installation operates within the specified tolerances and that the system is operationally usable;

- "manoeuvring area" means that part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, excluding aprons;
- "Manual of Aerodrome Standards" means a manual developed by the Authority on aerodrome standards;
- "marker" means an object displayed above ground level in order to indicate an obstacle or delineate a boundary;
- "marking" means a symbol or group of symbols displayed on the surface of the movement area in order to convey aeronautical information;
- "Minister" means the Minister for the time being responsible for civil aviation;
- "movement area" means that part of the aerodrome to be used for take-off, landing and taxiing of aircraft, consisting of the manoeuvring area and apron;
- "notify" means shown in Aeronautical Information Publications, Aeronautical Information Circulars, NOTAM, civil aviation publications or any other official publication issued for the purpose of enabling any of the provisions of these Regulations to be complied with;
- "non-instrument runway" means a runway intended for the operation of aircraft using visual approach procedures;
- "obstacle" means any fixed (whether temporary or permanent) and mobile object, or part thereof, that—
  - (a) is located on an area intended for the surface movement of aircraft;
  - (b) extends above a defined surface intended to protect aircraft in flight; or
  - (c) stands outside those defined surfaces and that has been assessed as being a hazard to air navigation.

- "obstacle free zone" means the airspace above the inner approach surface, inner transitional surfaces, the balked landing surface and that portion of the strip bounded by these surfaces, which is not penetrated by any fixed obstacle other than a low-mass and frangibly mounted one required for air navigation purposes;
- "obstacle limitation surfaces" means a series of surfaces that define the volume of airspace at and around an aerodrome to be kept free of obstacles in order to permit the intended aircraft operations to be conducted safely and to prevent the aerodrome from becoming unusable by the growth of obstacles around the aerodrome;
- "operator" means a person operating an aerodrome licensed or certificated under these Regulations;
- "pavement Classification Number" means a number expressing the bearing strength of a pavement for unrestricted operations;
- "precision approach runway" (see instrument runway);
- "prescribed" means prescribed by the Authority in the Manual of Aerodrome Standards, Circulars, Orders, Notices, Aeronautical Publications and any other documents;
- "primary runway" means a runway used in preference to others whenever conditions permit;
- "recommended practice" means any specification for the physical characteristics configuration, material, performance or procedure, the uniform application of which is recognised as desirable in the interest of safety, regularity or efficiency of international air navigation;
- "relevant authority" means any authority other than the Civil Aviation Authority whose action may be necessary or complimentary for the implementation of these Regulations;
- "road" means an established surface route on the movement area meant for the exclusive use of vehicles;

- "road holding position" means a designated position at which vehicles may be required to hold;
- "runway" means a defined rectangular area on a land aerodrome prepared for the landing and take-off of aircraft;
- "runway end safety area" means an area symmetrical about the extended runway centreline and adjacent to the end of the strip primarily intended to reduce the risk of damage to an aircraft undershooting or overrunning the runway;
- "runway-holding position" means a designated position intended to protect a runway, an obstacle limitation surface, or an Instrument Landing System/Microwave Landing System critical or sensitive area at which taxiing aircraft and vehicles shall stop and hold, unless otherwise authorized by the aerodrome control tower;
- "runway strip" means a defined area including the runway and stopway, if provided, intended—
  - (a) to reduce the risk of damage to aircraft running off a runway; and
  - (b) to protect aircraft flying over it during take-off or landing operations;
- "runway visual range" means the range over which a pilot of an aircraft on the centre line of a runway can see the runway surface markings or the lights delineating the runway or identifying its centre line;
- "safety" means a state in which the risk of harm to persons or of property damage is reduced to, and maintained at or below unacceptable level through a continuing process or hazard identification and risk management;
- "safety management system" means a system for the management of safety at an aerodrome, including the organizational structure, responsibilities, procedures, processes and provisions for the implementation of aerodrome safety policies by an operator, which provides for the control of safety at an aerodrome and its safe use;

- "shoulder" means an area adjacent to the edge of a pavement, prepared to provide a transition between the pavement and the adjacent surface;
- "standard" means any specification for physical characteristics, configuration, material, performance, personnel or procedure, the uniform application of which is recognised as necessary for the safety of air navigation;
- "stopway" means a defined rectangular area on the ground at the end of the take-off run available, prepared as a suitable area in which an aircraft can be stopped in the case of an abandoned take-off:
- "taxiway" means a defined path on a land aerodrome established for the taxiing of aircraft and intended to provide a link between one part of the aerodrome and another, including—
  - (a) an aircraft stand taxi lane which is a portion of an apron designated as a taxiway and intended to provide access to aircraft stands only;
  - (b) an apron taxiway which is a portion of a taxiway system located on an apron and intended to provide a through taxi route across the apron;
  - (c) rapid exit taxiway which is a taxiway connected to a runway at an acute angle and designed to allow landing aircrafts to turn off at higher speeds than are achieved on other exit taxiways thereby minimizing runway occupancy times;
- "taxiway strip" means an area including a taxiway intended to protect aircraft operating on a taxiway and to reduce the risk of damage to an aircraft accidentally running off the taxiway;
- "threshold" means the beginning of that portion of the runway usable for landing;
- "touchdown zone" means the portion of a runway beyond the threshold, intended for landing aircraft on first contact with the runway;

- "unserviceable area" means a part of the movement area that is unfit and unavailable for use by aircraft;
- "vicinity" means a defined airspace around an aerodrome for control of obstacles that may infringe the obstacle limitation surfaces around the aerodrome, contained within a radius of twelve and half kilometres from the aerodrome reference point upto a height of one thousand five hundred feet above ground level;
- "visual traffic pattern" means the aerodrome traffic zone of the aerodrome;
- "wildlife" means feral birds and animals, including domestic animals out of the control of their owners:
- "wildlife hazard" means a potential for a damaging aircraft collision with wildlife on or near an aerodrome.

## 3. Use of common reference systems.

- (1) The World Geodetic System 1984 (WGS-84) shall be used as the horizontal reference system to express aeronautical geographical coordinates for aerodromes.
- (2) The Mean Sea Level datum shall be used as the vertical reference system (elevation) at aerodromes.
- (3) Except where notified in the Aeronautical Information Publication or the Aeronautical Information Circular of the State, the Gregorian calendar and Coordinated Universal Time shall be used as the temporal reference system.
- (4) Unless otherwise prescribed by the Authority, the International System of Units developed and maintained by the General Conference of Weights and Measures (CGPM) shall be used as the standard system of units of measurement

## 4. Categories of aerodromes.

In these Regulations, aerodromes shall be categorized as follows—

- (a) category A comprising aerodromes available for use by both international and domestic air traffic;
- (b) category B comprising aerodromes available for use by domestic air traffic including aircraft of maximum certificated take-off mass above five thousand seven hundred kilogrammes;
- (c) category C comprising aerodromes available for use by domestic air traffic of maximum certificated take-off mass not exceeding five thousands seven hundred kilogrammes;
- (d) category D comprising aerodromes available for use by helicopters only.

#### PART II—CONSTRUCTION OF AERODROMES

## 5. Application of this Part.

This Part applies to all categories of aerodromes except where otherwise specified.

# 6. Requirements for application for an aerodrome construction permit.

- (1) A person shall not construct an aerodrome unless that person has a valid aerodrome construction permit issued under regulation 7.
- (2) An application for an aerodrome construction permit shall be considered for approval, where—
  - (a) the applicant holds a valid authorization from a relevant authority for use of the place as an aerodrome;
  - (b) the application is approved by the authority responsible for national environment management;
- (3) The Authority shall prior to issuance of a construction permit, assess the suitability of the place proposed for construction taking into consideration—

- (a) the proximity of the place to other aerodromes and landing areas including military aerodromes;
- (b) obstacles, terrain and existing airspace restrictions; and
- (c) that it is not against public interest that the place where the aerodrome is to be constructed should be used as such.
- (4) An applicant for an aerodrome construction permit shall submit to the Authority for approval an application in the prescribed form accompanied by—
  - (a) a detailed design of the proposed construction including related architectural requirements approved by the relevant authority;
  - (b) aerodrome data in accordance with the characteristics of the aircraft for which the aerodrome is intended; and
  - (c) a topographical map of the proposed aerodrome site as specified by the Authority.

# 7. Issuance of aerodrome construction permits.

The Authority shall issue an aerodrome construction permit to an applicant where the application meets the requirements provided in regulation 6 and any other requirements as may be specified by any relevant authority.

# 8. Design and construction of aerodromes

- (1) An applicant for a construction permit shall ensure that the design and construction of the aerodrome is undertaken by a person registered by the relevant professional body.
- (2) The Authority shall inspect the site of an aerodrome during construction to ascertain compliance with the standards prescribed and the terms of the aerodrome construction permit.

# 9. Requirements for aerodrome design.

- (1) An aerodrome design shall—
- (a) indicate the physical characteristics as prescribed by the Authority;
- (b) indicate the obstacle limitation surfaces;
- (c) integrate security measures in accordance with the Civil Aviation (Security) Regulations;
- (d) indicate visual aids for navigation obstacles and restricted areas; and
- (e) indicate the appropriate equipment and installations.
- (2) The physical characteristics, obstacle limitation surfaces, visual aids and equipment and installations, required under sub-regulation (1) shall—
  - (a) be appropriate to the critical aircraft characteristics for which the aerodrome intends to serve:
  - (b) be at the lowest meteorological minima for each runway;
  - (c) provide ambient light conditions during the operations of aircraft;
  - (d) comply with the appropriate aerodrome design standards as prescribed by the Authority.

## 10. Aerodrome reference code.

- (1) An aerodrome reference code comprising a code number and a code letter shall be used for aerodrome planning purposes.
- (2) The Authority shall determine the aerodrome reference code in accordance with the critical aircraft characteristics for which the aerodrome facility is intended.
- (3) The aerodrome reference code numbers and code letters required under sub-regulation (1) shall be determined in accordance with specifications in Table 1.

Table 1: Aerodrome reference code

Code Element 1		Code Element 2		
Code number (1)	Aerodrome reference field length (2)	Code letter (3)	Wing span (4)	Outer main gear wheel span (5)
1	Less than 800 m	A	Up to but not including 15 m	Up to but not including 4.5 m
2	800 m up to but not including 1 200 m	В	15 m up to but not including 24 m	4.5 m up to but not including 6 m
3	1 200 m up to but not including 1 800 m	С	24 m up to but not including 36 m	6 m up to but not including 9 m
4	1 800 m and over	D	36 m up to but not including 52m	9 m up to but not including 14 m
		Е	52 m up to but not including 65 m	9 m up to but not including 14 m
		F	65 m up to but not including 80 m	14m up to but not including 16 m

## PART III—LICENSING OF AERODROMES

# 11. Application of this Part.

This Part applies to aerodromes in categories B, C and D except where otherwise specified.

# 12. Application for licence.

An application for a licence shall be made in the prescribed form accompanied by—

- (a) an aerodrome manual;
- (b) a site plan for the aerodrome;
- (c) an environmental impact assessment report;
- (d) approval from any relevant authority;
- (e) proof of financial capability in the case of aerodromes in Category B;

- (f) particulars of any non-compliance or deviations from the appropriate aerodrome design, operation or equipment standards; and
- (g) charges as prescribed by the Authority in the Aeronautical Information Publication or Aeronautical Information Circular.

## 13. Conditions for issuance of licence.

- (1) A licence may be issued subject to any conditions that may be prescribed by the Authority.
- (2) The Authority shall endorse on a licence the conditions for use of an aerodrome and any other details as may be deemed necessary by the Authority.
- (3) Subject to sub regulation (4), where an applicant requests or the Authority considers that an aerodrome should be available for public use, a licence may be granted subject to a condition that the aerodrome shall at all times be available to all persons on equal terms and conditions.
- (4) An aerodrome operator may refuse an aircraft from using the aerodrome except in an emergency situation.

## 14. Issuance of licence.

- (1) The Authority shall issue a licence in the prescribed form and manner where—
  - (a) an applicant is found to be competent to operate an aerodrome on consideration of the previous conduct and experience of the applicant, the equipment, organisation, staffing, maintenance and other arrangements of the applicant;
  - (b) the physical characteristics of the aerodrome and its surroundings are safe for use by aircraft; and
  - (c) an applicant for a licence complies with the Civil Aviation (Security) Regulations, 2014 where applicable.

- (2) The issuance of a licence shall be subject to compliance with these Regulations and standards prescribed by the Authority and any other condition as may be specified or notified by the Authority in accordance with safety audit and inspection.
- (3) The Authority may refuse to grant a licence to an applicant, and where the Authority so refuses, it shall notify the applicant in writing, of the reasons for the refusal, not later than fourteen days after making that decision.
- (4) A person shall not operate an aerodrome without a licence issued by the Authority.

# 15. Breach of conditions of licence and conformance with the licensing requirements.

- (1) The breach of any condition subject to which a licence is issued including any approval, permission or exemption shall render the licence invalid.
- (2) The Authority shall impose operating restrictions or sanctions at a licensed aerodrome in the event of non-conformance with the licensing requirements or any unresolved safety concerns.

## 16. Aerodrome licence.

- (1) A licence shall specify—
- (a) the category of the Aerodrome and the aerodrome reference code;
- (b) the restrictions, if any, relating to non-compliance with or deviations from the appropriate aerodrome design, operation or equipment standards;
- (c) the period of validity of the licence.
- (2) A licence issued under these Regulations shall not be transferable.

## 17. Validity of licence.

- (1) A licence issued under these Regulations shall be valid for a period of two years and shall remain in force until it expires or is suspended or cancelled by the Authority, in accordance with regulation 20.
- (2) A holder of an aerodrome licence which is suspended or cancelled shall within thirty days of the suspension or cancellation, surrender the licence to the Authority.
- (3) Notwithstanding sub-regulation (2), where an aerodrome licence is suspended for a period of less than thirty days, a holder of the licence shall surrender the licence immediately.

### 18. Renewal of licence.

- (1) An application for the renewal of a licence shall be made to the Authority in the prescribed form and shall be accompanied by—
  - (a) the aerodrome manual if significant changes have been made following the initial licensing;
  - (b) particulars of deviations, if any, from the appropriate design, operation or equipment standards; and
  - (c) the appropriate charges as prescribed by the Authority in the Aeronautical Information Publication or Aeronautical Information Circular.
- (2) An application for renewal shall be submitted sixty days before the expiry of the licence.
- (3) The renewal of a licence shall be subject to compliance with these Regulations, standards prescribed by the Authority and any other conditions as may be specified or notified by the Authority as determined by safety inspections and audit procedures by the Authority, before the renewal of the licence.

### 19. Amendment of licence.

- (1) An application for amendment of a licence shall be submitted in a form prescribed by the Authority.
- (2) The Authority may request that the application be accompanied by any or all of the following—
  - (a) an aerodrome manual;
  - (b) a site plan for the aerodrome;
  - (c) an environmental impact assessment report;
  - (d) approval from any relevant authority;
  - (e) proof of financial capability in the case of aerodromes in Category B;
  - (f) particulars of any non-compliance or deviations from the appropriate aerodrome design, operation or equipment standards; and
  - (g) charges as prescribed in the Aeronautical Information Publication or Aeronautical Information Circular by the Authority.
- (3) The Authority may, provided the requirements of regulations 14, are met, where necessary, amend a licence—
  - (a) for a change in the use or operation of the aerodrome;
  - (b) for a change in the boundaries of the aerodrome;
  - (c) if the holder of the licence requests an amendment; or
  - (d) if the Authority deems it necessary.

# 20. Suspension and cancellation of licence.

(1) The Authority may suspend an aerodrome licence where—

- (a) following a safety inspection or audit, it is evident that the holder of the licence has not complied with the requirements prescribed in these Regulations and failed to remedy the non-compliance within a period of thirty days after the inspection;
- (b) the holder of the licence prevents the Authority from carrying out a safety inspection or audit in accordance with these Regulations;
- (c) the holder of the licence is under receivership, liquidation or bankruptcy proceedings;
- (d) it is deemed necessary in the interest of aviation safety.
- (2) The Authority may, on giving reasons to the holder of a licence, suspend the licence for a period not exceeding sixty days.
- (3) A holder of a licence who is notified of a suspension in sub regulation (2) may submit a response in writing within a period not exceeding fourteen days.
- (4) Notwithstanding sub regulation (3), the Authority may suspend any or all of the operations at an aerodrome pending receipt of a response from the holder.
- (5) A holder of a licence who is aggrieved by the suspension of a licence may appeal against the suspension to the Minister, within thirty days of the suspension.
- (6) Where an appeal is made under sub-regulation (5), the holder of a licence shall state in writing the reasons why in his or her opinion, the suspension should be varied or set aside.
- (7) The Minister may vary or set aside the suspension made under sub-regulation (2) on the basis of the reasons given in the appeal under sub-regulation (5).
- (8) Where a holder of a licence does not appeal against the suspension in accordance with sub-regulation (5), the Authority may cancel the licence, on giving reasons to the holder of a licence.

#### 21. Surrender of licence.

- (1) Subject to sub-regulation (2), a holder of a licence may surrender the licence to the Authority at any time.
- (2) A holder of a licence who wishes to surrender the licence shall give the Authority not less than thirty days notice in writing, before the date on which the licence is to be surrendered
- (3) The Authority shall cancel the licence upon the expiry of the period of notice in sub-regulation (2).
- (4) Where, after the expiry of the period in sub-regulation (2), an aerodrome is abandoned or is not maintained in accordance with the conditions of the licence, the holder of the licence shall remove, obliterate or modify the prescribed markings referred to in regulation 52 (f).

## 22. Charges at licensed aerodrome.

- (1) A holder of a licence shall prescribe charges for the use of the aerodrome or of any facilities provided at the aerodrome for the safety, security, efficiency or regularity of air navigation.
- (2) Where required by the Authority, a holder of a licence shall, furnish particulars of the charges levied for the use of an aerodrome or the performance of services at the aerodrome.
- (3) Notwithstanding sub regulation (1), the Authority may where necessary, prescribe the maximum charges which may be levied for the use of an aerodrome or the performance of services at the aerodrome, for a specified period.
- (4) A holder of a licence of the aerodrome for which the Authority prescribes charges under sub-regulation (3) shall not cause or permit any charges to be made in contravention of that sub-regulation.
- (5) A holder of a licence of an aerodrome for which the Authority prescribes charges shall cause the prescribed charges to be posted in a conspicuous place at the aerodrome.

## 23. Licences register.

- (1) The Authority shall maintain a register of all licences issued in accordance with these Regulations.
  - (2) The register shall contain—
  - (a) the full name of the holder of an aerodrome licence;
  - (b) the nationality of the holder of a licence;
  - (c) the postal, telephone, facsimile and e-mail addresses of a holder of a licence;
  - (d) the name and location of the aerodrome for which a licence is issued;
  - (e) the number of the licence;
  - (f) the date on which the licence was issued; and
  - (g) any other relevant information.

# 24. Notification and furnishing information.

An aerodrome operator shall—

- (a) in the case of a licence for public use, cause to be notified the times during which the aerodrome is to be available for take-off and landing of aircraft for public transport or instruction in flying; and
- (b) upon request, furnish to an authorised person, information concerning the terms of the licence.

## PART IV—CERTIFICATION OF AERODROMES

## 25. Application of this Part.

- (1) This Part applies to aerodromes in category A.
- (2) The Authority may, by notice in the *Gazette*, determine the aerodromes in category B to which this Part may apply.

## 26. Application for certificate.

An application for a certificate shall be submitted in a form prescribed by the Authority and shall be accompanied by—

- (a) two copies of the aerodrome manual;
- (b) a plan for the aerodrome;
- (c) an environmental impact assessment report;
- (d) approval from any relevant authority;
- (e) proof of financial capability;
- (f) particulars of any non-compliance or deviations from the appropriate aerodrome design, operation or equipment standards; and
- (g) charges as prescribed by the Authority in the Aeronautical Information Publication or Aeronautical Information Circular.

## 27. Conditions for issuance of certificate.

- (1) A certificate may be issued subject to any conditions that may be prescribed by the Authority.
- (2) The Authority shall endorse on a certificate the conditions for use of an aerodrome and any other details as may be deemed necessary by the Authority.

# 28. Breach of conditions of certificate and non-conformance with the certification requirements.

- (1) The breach of any condition subject to which a certificate is issued including any approval, permission or exemption shall render the certificate invalid.
- (2) The Authority shall impose operating restrictions or sanctions at a certified aerodromes in the event of non-conformance with the certification requirements or any unresolved safety concerns.

## 29. Issuance of certificate.

- (1) The Authority shall issue a certificate in the prescribed form and manner where the Authority is satisfied that—
  - (a) the applicant and the personnel of the applicant are adequate in number and have the necessary competency and experience to operate and maintain an aerodrome;
  - (b) the aerodrome manual prepared for the aerodrome and submitted with the application contains all the relevant information:
  - (d) the aerodrome facilities, services and equipment are established in accordance with approved standards and recommended practices;
  - (e) the aerodrome operating procedures make satisfactory provision for the safety of aircraft;
  - (f) an approved safety management system is in place;
  - (g) the applicant has an approved aviation security programme in accordance with the Civil Aviation (Security) Regulations, 2014.
- (2) The issuance of a certificate shall be subject to compliance with these Regulations and standards prescribed by the Authority and any other condition as may be specified or notified by the Authority in accordance with safety audit and inspection.
- (3) The Authority may refuse to grant a certificate to an applicant and where the Authority refuses, it shall notify the applicant in writing, of the reasons for the refusal, not later than fourteen days after making that decision.
- (4) A person shall not operate an aerodrome unless that person holds a certificate issued by the Authority in accordance with this Part.
- (5) An aerodrome certificate issued under these Regulations is not transferable.

## 31. Validity of certificate.

A certificate shall be valid for a period of one year, unless the certificate is suspended, cancelled or revoked in accordance with these Regulations.

#### 32. Renewal of certificate.

- (1) An application for the renewal of a certificate shall be made to the Authority in the prescribed form and shall be accompanied by—
  - (a) the aerodrome manual if significant changes have been made following the initial certification;
  - (b) particulars of deviations, if any, from the appropriate design, operation or equipment standards; and
  - (c) the appropriate charges as prescribed by the Authority in the Aeronautical Information Circular;
- (2) An application for renewal shall be submitted sixty days before the expiry of the certificate.
- (3) The renewal of a certificate shall be subject to compliance with these Regulations, standards prescribed by the Authority and any other conditions as may be specified or notified by the Authority as determined by safety inspections and audit procedures by the Authority, before the renewal of the certificate.

## 33. Amendment of certificate.

- (1) An application for amendment of a certificate shall be submitted in a form prescribed by the Authority.
- (2) The Authority may request that the application be accompanied by any or all of the following—
  - (a) two copies of the aerodrome manual;
  - (b) a site plan for the aerodrome;
  - (c) an environmental impact assessment report;
  - (d) approval from any relevant authority;
  - (e) proof of financial capability;

- (f) particulars of any non-compliance or deviations from the appropriate aerodrome design, operation or equipment standards; and
- (g) charges as prescribed in the Aeronautical Information Publication or Aeronautical Information Circular by the Authority.
- (3) The Authority may, provided the requirements of regulations 29, are met, where necessary, amend an aerodrome certificate—
  - (a) for a change in the use or operation of the aerodrome;
  - (b) for a change in the boundaries of the aerodrome;
  - (c) if the holder of the aerodrome certificate requests an amendment; or
  - (d) if the Authority deems it necessary.

## 34. Suspension and cancellation of certificate.

- (1) The Authority may suspend a certificate where—
- (a) following a safety inspection or audit, it is evident that the holder of the certificate has not complied with the requirements prescribed in these Regulations and failed to remedy the non-compliance within a period of thirty days after the inspection;
- (b) the holder of the certificate prevents the Authority from carrying out a safety inspection or audit in accordance with these Regulations;
- (c) the holder of the certificate is under receivership, liquidation or bankruptcy proceedings;
- (d) it is deemed necessary in the interest of aviation safety.
- (2) The Authority may, on giving reasons to the holder of a certificate, suspend the certificate for a period not exceeding sixty days.

- (3) A holder of a certificate who is notified of a suspension in sub regulation (2) may submit a response in writing within a period not exceeding fourteen days.
- (4) Notwithstanding sub regulation (3), the Authority may suspend any or all of the operations at an aerodrome pending receipt of a response from the holder.
- (5) A holder of a certificate who is aggrieved by the suspension of a certificate may appeal against the suspension to the Minister, within thirty days of the suspension.
- (6) Where an appeal is made under sub-regulation (5), the holder of a certificate shall state in writing the reasons why in his or her opinion, the suspension should be varied or set aside.
- (7) The Minister may vary or set aside the suspension made under sub-regulation (2) on the basis of the reasons given in the appeal under sub-regulation (5).
- (8) Where a holder of a certificate does not appeal against the suspension in accordance with sub-regulation (5), the Authority may cancel the certificate, on giving reasons to the holder of a certificate.

#### 35. Surrender of certificate.

- (1) Subject to sub-regulation (2), a holder of a certificate may surrender the certificate to the Authority at any time.
- (2) A holder of a certificate who wishes to surrender the certificate shall give the Authority not less than sixty days notice in writing, before the date on which the certificate is to be surrendered.
- (3) The Authority shall cancel the certificate upon the expiry of the period of notice in sub-regulation (2).
- (4) Where, after the expiry of the period in sub-regulation (2), an aerodrome is abandoned or is not maintained in accordance with the conditions of the certificate, the holder of the certificate shall remove, obliterate or modify the prescribed markings referred to in regulation 50 (f).

## 36. Charges at certified aerodrome.

- (1) A holder of a certificate shall prescribe charges for the use of the aerodrome or of any facilities provided at the aerodrome for the safety, security, efficiency or regularity of air navigation.
- (2) Where required by the Authority, a holder of a certificate shall, furnish particulars of the charges levied for the use of an aerodrome or the performance of services at the aerodrome.
- (3) Notwithstanding sub regulation (1), the Authority may where necessary, prescribe the maximum charges which may be levied for the use of an aerodrome or the performance of services at the aerodrome, for a specified period.
- (4) A holder of a certificate of the aerodrome for which the Authority prescribes charges under sub-regulation (3) shall not cause or permit any charges to be made in contravention of that sub-regulation.
- (5) A holder of a certificate of an aerodrome for which the Authority prescribes charges shall cause the prescribed charges to be posted in a conspicuous place at the aerodrome.

## 37. Certificates register.

- (1) The Authority shall maintain a register of all certificates issued in accordance with these Regulations.
  - (2) The register shall contain—
  - (a) the full name of the holder of an aerodrome certificates;
  - (b) the nationality of the holder of a certificate;
  - (c) the postal, telephone, facsimile and e-mail addresses of a holder of a certificate;
  - (d) the name and location of the aerodrome for which a certificate is issued;
  - (e) the number of the certificate;
  - (f) the date on which the certificate was issued; and
  - (g) any other relevant information.

### PART V—OBLIGATIONS OF AERODROME OPERATOR

## 38. Application of this Part.

This Part applies to all categories of aerodromes except where otherwise specified.

# 39. Compliance with conditions.

An aerodrome operator shall comply with conditions, if any, endorsed on a licence or certificate.

## 40. Competence of operation and maintenance personnel.

- (1) An operator shall ensure that there is an adequate number of qualified and skilled personnel to perform activities for aerodrome operation and maintenance.
- (2) Where the Authority or any other relevant authority requires competence certification for the personnel of an aerodrome, the operator shall employ only those persons with the required certification.

## 41. Aerodrome operations and maintenance.

- (1) Subject to any directives the Authority may issue, an operator shall operate and maintain an aerodrome in accordance with the procedures set out in the aerodrome manual.
- (2) The Authority may give written directives to an operator to alter the procedures set out in an aerodrome manual.
- (3) An operator shall ensure proper and efficient maintenance of the aerodrome facilities.
- (4) Where air traffic services are provided at an aerodrome, the operator shall co-ordinate with the air traffic services, to ensure the safety of aircraft operating in the airspace, associated with the aerodrome.

## 42. Safety management system.

(1) An operator of an aerodrome shall have a safety management system that complies with the requirements specified in the First Schedule and the standards specified in the Manual of Aerodrome Standards (2) This regulation shall not apply to aerodromes in categories B, C and D aerodromes.

# 43. Storage of inflammable and other dangerous goods.

A person shall not store fuel, pyrotechnic materials and other highly inflammable or dangerous goods at an aerodrome except with the permission of the Authority and in accordance with the prescribed standards.

## 44. Safety measures against fire.

- (1) A person shall not—
- (a) smoke within any place, or bring an open flame into any place, where that act is prohibited by a displayed notice;
- (b) where there is no notice prohibiting smoking in a place, smoke within that place, or bring an open flame into that place, within a distance of an aircraft or, of any vehicle used for the supply of fuel to an aircraft, or a store, dump, liquid fuel or explosives, as may be prescribed;
- (c) wilfully give a false fire alarm;
- (d) tamper or interfere with any fire hose reel, hydrant or any other item of equipment provided for fire fighting purposes;
- (e) keep, store, discard or discharge any flammable liquid, gas, signal flares or other like material in an aircraft, except in the receptacle appropriate for the purpose or in a place on the aerodrome specifically approved by the aerodrome operator for the purpose; or
- (f) store, stack or use any material or equipment in a manner which constitutes or is likely to constitute a fire hazard.
- (2) An operator shall display in conspicuous places appropriate signage in respect of the acts prohibited under sub regulation (1).

### 45. Access to and operations within the restricted areas.

- (1) A person shall not access a restricted area of an aerodrome unless authorised by the operator and subject to such conditions as the operator may impose.
- (2) A person authorised to access a restricted area under sub-regulation (1) shall not—
  - (a) move an aircraft or a vehicle in the restricted area except with the permission and directions issued by the air traffic services personnel;
  - (b) move an aircraft or vehicle in the restricted area in a manner that endangers the safety of persons and property;
  - (c) use a portion of the aerodrome for landing or taking off, other than the area designated for that purpose.

#### 46. Entry into or exit from restricted areas of aerodrome.

- (1) A person, aircraft or vehicle shall not enter or leave a restricted area of an aerodrome except through points established by the operator for the purpose.
- (2) Except in an emergency or at an appropriate point of entry or exit established by an operator for that purpose, a person—
  - (a) other than a person carried in an aircraft or in a vehicle, shall not enter or leave a restricted areas of an aerodrome; or
  - (b) shall not move an aircraft on the surface of an aerodrome or a vehicle into or from the restricted area.

## 47. Test-running of aircraft engine.

A person shall not test-run an aircraft engine at an aerodrome except at the approved aircraft maintenance facility of the aerodrome or a place designated for that purpose, by the operator.

## 48. Certain acts prohibited on aerodrome.

- (1) A person shall not, on an aerodrome—
- (a) obstruct or interfere with the proper use of the aerodrome;
- (b) obstruct any person executing his or her duties at the aerodrome;
- (c) remove or deface any notice, writing, document or marking erected or displayed by the aerodrome operator;
- (d) throw, leave or drop anything capable of causing injury to any person or damage to any property;
- (e) dump any waste matter except at a place approved for the purpose by the aerodrome operator;
- (f) dump or spill any substance capable of causing water pollution, whether solid, liquid, vapour or gas or a combination of these, except at a place approved for that purpose by the aerodrome operator.
- (2) Except with the permission of the operator, a person shall not—
- (a) interfere or tamper with any part of the aerodrome or any equipment associated with the operation of the aerodrome;
- (b) climb any wall, fence, barrier, ceiling, gate or post on an aerodrome;
- (c) handle any baggage or carry baggage for a passengers at an aerodrome;
- (d) bring a vehicle into or drive into an aerodrome; or
- (e) obstruct an entrance to or a passage at an aerodrome in a manner that inconvenience other users of the entrance or passage.

#### 49. Removal of obstructions from the aerodrome surface.

An operator shall remove from the aerodrome surface any vehicle or other obstruction that is likely to be hazardous to aircraft operations.

#### 50. Maintenance of environment management programme.

- (1) An operator shall establish and maintain an aerodrome environment management programme for the area within the authority of the operator and for the area where any wildlife presents or is likely to present a hazard to aircraft operations.
- (2) An operator shall ensure that the environment management programme established under sub-regulation (1) minimises the effects of any hazards or potential hazards taking into account the provisions of the laws on environmental management.
- (3) This regulation shall not apply to aerodromes in categories C and D.

## 51. Protection of navigation aids.

An operator shall in consultation with the Authority—

- (a) prevent construction of any facilities on the aerodrome, which may adversely affect the operation of any electronic or visual navigation or air traffic service facility on the aerodrome; and
- (b) as far as it is within the authority of the operator, prevent any interruption of visual or electronic signal of navigation aids.

## 52. Responsibilities of operator.

An operator shall—

- (a) maintain the aerodrome in a serviceable condition;
- (b) keep the aerodrome free of unauthorized persons, vehicles and animals which are not under proper control or any other obstructions;
- (c) mark all obstructions in accordance with the prescribed guidelines;

- (d) inform the Authority of any alterations to obstruction or works on the aerodrome;
- (e) install approved wind direction indicators to show the surface direction of the wind and ensure that they function satisfactorily;
- (f) maintain the prescribed markings in a conspicuous condition and ensure that they are readily visible to aircraft in the air or manoeuvring on the ground;
- (g) avail facilities and ensure that they are in serviceable condition and that all apparatus installed function efficiently;
- (h) appropriately mark the unserviceable areas on the landing terrain;
- (i) inform the Authority where the aerodrome becomes unserviceable through any cause or where any portion of the surface of the landing area deteriorates to such an extent that the safe operation of aircraft may be endangered;
- (j) submit to the Authority reports on the condition of the aerodrome as may be required by the Authority;
- (k) ensure that organisations performing activities at the aerodrome comply with safety requirements specified by the operator; and
- (l) report all incidents and accidents at the aerodrome to the Authority.

# 53. Inspection of aerodromes and unhindered access by inspectors of the Authority.

(1) Before an aerodrome licence or certificate is issued or renewed and, subsequently, at any other time, for the purpose of ensuring that safety at the aerodrome is maintained, the Authority shall inspect and carry out tests on the aerodrome facilities, services and equipment, inspect the documents and records of the aerodrome and verify the safety management system of the aerodrome.

(2) For the purpose of facilitating the functions of the Authority specified in sub-regulation (1), an inspector of the Authority shall have unhindered access to any part of the aerodrome or any aerodrome facility, including equipment, records, documents and personnel.

#### 54. Notifying and reporting.

- (1) An operator shall notify and report to the Authority, the air traffic control unit and pilots, within the specified time limits, information on—
  - (a) any inaccuracies in the Aeronautical Information Publication;
  - (b) any changes to the aerodrome facilities, equipment and level of service planned in advance;
  - (c) issues that may require immediate notification including obstacles, obstructions and hazards, levels of service, movement areas, and any other condition that affects aviation safety at the aerodrome and against which precautions are warranted.
- (2) Where it is not feasible for an operator to arrange for the air traffic control and the flight operations unit to receive notice of the circumstances referred to in sub-regulation (1) (c), the operator shall give immediate notice, directly to the pilots who may be affected by that circumstance.

#### 55. Aerodrome movement area inspections.

An aerodrome operator shall carry out inspections of the movement area each day at least once for aerodromes in category B, C and D, and at least twice for aerodromes in category A.

# **56.** Special inspections.

- (1) An operator shall inspect an aerodrome—
- (a) as soon as practicable after any accident or incident;
- (b) during any period of construction or repair of the aerodrome facilities or equipment that is critical to the safety of aircraft operation; and

- (c) at any other time when there are conditions at the aerodrome that may affect aviation safety.
- (2) An operator shall notify and report to the Authority, within the specified time limits, information on any special inspection carried out under sub regulation (1).

#### 57. Warning notices.

- (1) Where a low flying aircraft, at or near an aerodrome, or where a taxiing aircraft, is likely to be hazardous to people or vehicles, an operator shall—
  - (a) post hazard warning notices to that effect, on any public way that is adjacent to the manoeuvring area; or
  - (b) where the public way is not controlled by the operator, inform the relevant authority of the hazard.

PART VI —AERODROME MANUAL

#### 58. Application of this Part.

This Part applies to all categories of aerodromes except where otherwise specified.

#### 59. Requirements for aerodrome manual.

- (1) Upon making an application for a licence or a certificate the applicant shall submit to the Authority an aerodrome manual for approval.
  - (2) An aerodrome manual shall—
  - (a) be typewritten or printed;
  - (b) be signed by the operator;
  - (c) be in a format that is easy to revise;
  - (d) have a system for recording the current pages and any amendments, including a page for logging revisions; and

- (e) be organized in a manner that facilitates the preparation, review and approval processes.
- (3) An operator shall keep at least one approved copy of the aerodrome manual at the aerodrome and one copy at the principal place of business of the operator, where it is different from the aerodrome.
- (4) Where an operator of an aerodrome in category C and D is unable to keep a copy of the aerodrome manual at the aerodrome, the operator shall keep the aerodrome manual at a place authorised by the Authority.

#### 60. Information to be included in aerodrome manual.

- (1) An aerodrome manual shall contain all information and instructions necessary to enable the personnel of an aerodrome perform their duties.
- (2) Notwithstanding sub regulation (1), and to the extent that the particulars are applicable, a manual for an aerodrome in category A shall include the particulars provided in the Second Schedule, for an aerodrome in category B and C the particulars provided in the Third Schedule and for an aerodrome in category D, the particulars provided in the Fourth Schedule.
- (3) Where a person is given an exemption in accordance with Part XV, the aerodrome manual shall show the exemption notice number given for the exemption by the Authority, the date the exemption came into effect and any conditions or procedures subject to which the exemption was granted.

## 61. Amendment of aerodrome manual.

- (1) For the purpose of maintaining the accuracy of the information in an aerodrome manual—
  - (a) an operator shall whenever necessary, amend the aerodrome manual; or
  - (b) the Authority may issue a written directive requiring the operator to alter or amend the aerodrome manual.

- (2) Notwithstanding sub-regulation (1), an operator shall submit the proposed amendment to the Authority for approval, before the aerodrome manual is amended.
- (3) The Authority shall approve the amendment made to an aerodrome manual where the amendment meets the requirements of these Regulations.

#### PART VII—WILDLIFE HAZARD MANAGEMENT

#### 62. Application of this Part.

In this Part, regulation 62 applies to all categories of aerodromes and regulations 63, 64 and 65 apply to aerodromes in categories A and B.

#### 63. Animals not allowed in restricted areas of aerodrome.

- (1) A person shall not bring, permit or graze an animal in the restricted area of an aerodrome or cause any animal to graze or feed in the restricted area of an aerodrome.
- (2) Subject to sub-regulation (1), a person who brings, permits or grazes an animal in the restricted area of an aerodrome or who causes an animal to graze or feed in a restricted area of an aerodrome or who receives an animal in the restricted area of the aerodrome, shall ensure that the animal is at all times under proper control while in the restricted area.
- (3) In this regulation, "animal" means a domesticated animal and a bird.

# 64. Wildlife hazard management.

- (1) An operator shall, in consultation with the authority responsible for wildlife, take necessary action to control wildlife hazards at the aerodrome.
- (2) An operator shall ensure that procedures to deal with the danger posed to aircraft operations by the presence of wildlife in the aerodrome flight pattern or movement area are in place.
- (3) The wildlife management plan of an aerodrome shall be approved by the Authority and shall form part of the aerodrome manual.

#### 65. Wildlife hazard reduction at aerodrome.

- (1) An operator shall, in consultation with the authority responsible for wildlife, take all reasonable steps to minimize the risks associated with wildlife strike hazards.
- (2) An operator shall take practical measures to control the wildlife habitat at or around the aerodrome and to disperse birds, which are a potential hazard to aircraft operations.
- (3) A wildlife strike hazard on, or in the vicinity of, an aerodrome shall be assessed through—
  - (a) the establishment of a national procedure for recording and reporting wildlife strikes to aircraft;
  - (b) the collection of information from aircraft operators, airport personnel, and other sources on the presence of wildlife on or around the aerodrome constituting a potential hazard to aircraft operations.; and
  - (c) an ongoing evaluation of the wildlife hazard by competent personnel.
- (4) The operator shall collect and forward wildlife strike reports to the Authority for submission to ICAO for inclusion in the ICAO Bird Strike Information System (IBIS) database.
- (5) An operator shall take action to decrease the risk to aircraft operations by adopting measures to minimize the likelihood of collisions between wildlife and aircraft.
- (6) An operator shall consult with the relevant authorities to take action to eliminate or to prevent the establishment of garbage disposal dumps, landfills, or any other source which may attract wildlife to the aerodrome, or its vicinity, unless an appropriate wildlife assessment indicates that they are unlikely to create conditions conducive to a wildlife hazard problem.

- (7) Subject to sub-regulation (6), garbage disposal dumps and landfills shall be located no closer than 13km from an aerodrome facility and where located in the vicinity of an approach and take-off path of an aerodrome, shall be subject to an aeronautical study.
- (8) Where the elimination of existing sites is not possible, the operator and the relevant authorities shall ensure that any risk to aircraft posed by these sites is assessed and reduced to as low as reasonably practicable.
- (9) An operator shall establish a wildlife hazard control unit to control and manage the wildlife hazard.
- (10) The operator shall cause records of all aspects of wildlife hazard control to be kept and shall report all wildlife strikes to the Authority.
- (11) An operator shall monitor the local environment including any activities that may attract wildlife and in designing the wildlife hazard management programme, shall consider that environment and the activities that may attract wildlife.

#### 66. National Committee on Wildlife Hazard Management.

- (1) There shall be a National Committee on Wildlife Hazard Management for the purpose of—
  - (a) analysing wildlife hazard problems at aerodromes;
  - (b) carrying out research and development on wildlife hazard management;
  - (c) acting as an interface between the aerodrome operators and air operators;
  - (d) advising aerodrome operators on wildlife hazard management; and
  - (e) reviewing the effectiveness of the wildlife hazard management programmes at aerodromes.

- (2) The Committee shall be established by the National Authority responsible for airports and shall consist of persons from—
  - (a) the ministries responsible for civil aviation, local government, and defence;
  - (b) the Authority;
  - (c) aerodrome operators;
  - (d) aircraft operators;
  - (e) air navigation service providers; and
  - (f) agencies responsible for wildlife services.
- (3) The Committee shall be chaired by the Chief Executive of the National Authority responsible for airports.
- (4) Notwithstanding sub-regulation (2), the establishment and functions of the Committee shall be in accordance with requirements prescribed by the Authority.

PART VIII—OBSTACLE RESTRICTIONS AND REMOVAL

## 67. Application of this Part.

This Part applies to all categories of aerodromes.

#### 68. Erection of obstacles.

- (1) A person shall not cause or permit the erection or growth of an obstacle at or in the vicinity of an aerodrome, where the obstacle may prevent an aircraft operation from being conducted safely or the aerodrome from being usable.
- (2) A person shall not cause or permit any object, to penetrate the obstacle limitation surface, without the written permission of the Authority, where the object may cause an increase in an obstacle clearance altitude or in the height for an instrument approach procedure or of any associated visual circling procedure.

- (3) The object referred to in sub-regulation (2) includes a new object or an extension of an existing object above the obstacle limitation surface.
- (4) The obstacle clearance altitude and height applicable to obstacle limitation surface, and the obstacle limitation requirements shall comply with the specifications prescribed by the Authority.

#### 69. Establishment of obstacle limitation surfaces.

- (1) Notwithstanding regulation 9, an operator shall ensure that obstacle limitation surfaces are established for the aerodrome in accordance with the standards prescribed by the Authority.
- (2) An operator shall monitor the established obstacle limitation surfaces around the aerodrome for infringement by objects, buildings or other structures.

### 70. Authorisation to construct within the vicinity of an aerodrome.

- (1) A person shall not construct a building or a structure within the vicinity of an aerodrome unless authorised by the Authority.
- (2) Where the Authority is consulted regarding a proposed construction in sub regulation (1), the Authority shall cause an aeronautical study of the effect of the construction on operation of aircraft, to be carried out.

#### 71. Removal of obstacle.

- (1) A person shall remove any obstacle in the vicinity of aerodrome, except where, after an aeronautical study, the Authority determines that the obstacle does not adversely affect the safety or significantly affect the regularity of operations of aircraft.
- (2) The Authority may direct the removal of any obstacle which, in the opinion of the Authority, constitutes a hazard to aircraft operations.
- (3) Where an owner fails to remove an obstacle within the time directed by the Authority, the Authority shall remove the obstacle at the cost of the owner of that obstacle.

## 72. Marking and lighting obstacle.

- (1) An operator shall ensure that an obstacle is marked and where a runway is used at night and is associated with the obstacle, that obstacle shall be lighted.
- (2) The markings and lights referred to in sub-regulation (1) shall be in accordance with guidelines prescribed by the Authority.
- (3) An operator shall, where practicable, ensure that all fixed obstacles to be marked in accordance with sub-regulation (1) are coloured as prescribed by the Authority.
- (4) Where the conditions required in sub-regulation (3) are not practicable, markers or flags shall be displayed on or above the fixed obstacles, except the obstacles that are sufficiently conspicuous by their shape, size or colour, which may not be marked.
- (5) An operator shall ensure that a mobile obstacle is coloured as prescribed by the Authority or has displayed on it or above it, a flag.
- (6) An obstacle lighted in accordance with sub-regulation (1) shall be indicated as low-intensity, medium-intensity or high-intensity light obstacle or a combination of these lights and shall be displayed in accordance with guidelines prescribed by the Authority.

#### PART IX—AERONAUTICAL GROUND LIGHTING

## 73. Application of this Part.

Part applies to aerodromes in categories A.

## 74. Establishment and maintenance of aeronautical ground lights.

- (1) An operator shall establish and maintain aeronautical ground lights and any other lights as may be appropriate for the safe operation of aircraft and for runways, taxiways, aprons, thresholds and stopways.
- (2) Where an aerodrome is used at night or during conditions of poor visibility, an operator shall ensure that aeronautical ground lights and any other lights are installed on the aerodrome.

- (3) Without prejudice to the generality of sub-regulation (1), the location, characteristics, intensity control and settings of aeronautical ground lights shall be in accordance with specifications prescribed by the Authority.
- (4) A non-aeronautical ground light, which, by reason of its intensity, configuration or colour, may prevent or cause confusion in the clear interpretation of aeronautical ground lights, shall be extinguished, screened or modified to eliminate such a possibility.
- (5) Except with the permission of the Authority, a person shall not establish, maintain or alter the character of—
  - (a) an aeronautical beacon within the State except an aeronautical beacon which is or may be visible from the waters;
  - (b) any aeronautical ground light, other than an aeronautical beacon, at an aerodrome, or any aeronautical ground light which forms part of the lighting system for use by aircraft taking off from or landing at the aerodrome.
  - (6) A person shall not—
  - (a) intentionally or negligently damage an aeronautical ground light; or
  - (b) interfere with an aeronautical ground light without the permission of the operator.
- (7) The Authority shall not grant permission under this regulation except with the consent of the lighthouse authority of the area where the aerodrome is situated.

## 75. Secondary power supply.

An operator shall not operate or maintain an aerodrome provided with runway lighting, without a secondary power supply.

#### 76. Aeronautical beacons.

- (1) An operator shall provide, where necessary, at each aerodrome intended for use at night, an aerodrome beacon, where—
  - (a) aircraft navigate predominantly by visual means;
  - (b) reduced visibility is frequent; or
  - (c) it is difficult to locate the aerodrome from the air due to a surrounding light or terrain.
- (2) An identification beacon shall be provided at an aerodrome, which is intended for use at night and which is not easily identifiable from the air by other means.
- (3) The location and characteristics of an aerodrome and identification beacon described in sub-regulations (1) and (2) shall be in accordance with specifications prescribed by the Authority.

#### PART X—AERODROME VISUAL AIDS

# 77. Application of this Part.

This Part applies to all categories of aerodromes.

#### 78. Wind direction indicators.

- (1) An operator shall provide and maintain at least one wind direction indicator for an aerodrome.
- (2) The wind direction indicator required under sub-regulation (1) shall be located so as to be visible to an aircraft in-flight or on the movement area and in such a way as to be free from the effects of air disturbances caused by nearby objects.
- (3) The characteristics of the wind direction indicator, the methods and procedures for installation and maintenance shall be in accordance with the methods and procedures prescribed by the Authority.

#### 79. Signalling lamp.

- (1) An operator shall ensure that a signalling lamp is provided at a controlled aerodrome in the aerodrome control tower.
- (2) The characteristics and operating procedure of a signalling lamp shall be in accordance with specifications prescribed by the Authority.

#### 80. Signal panel and signalling area.

- (1) The Authority may where it deems necessary, require a signalling panel and a signalling area to be provided at an aerodrome for safe operation of aircraft.
- (2) Where provided, the location and the characteristics of the signal area shall be in accordance with specifications prescribed by the Authority.

#### 81. Markings.

- (1) An operator shall provide markings for paved runway centreline, paved runway edge, paved runway threshold, paved runway touchdown zone, paved runway holding position, aiming point, paved runway side stripe, paved runway turn pad, and intermediate holding positions at an aerodrome, in accordance with specifications prescribed by the Authority.
  - (2) Runway marking shall be white in colour.
- (3) Taxiway markings, runway turn pad markings and aircraft stand markings shall be yellow in colour.
- (4) Apron safety-lines shall be of a conspicuous colour, which shall contrast with that used for aircraft stand markings.
- (5) The application, location and the characteristics of markers for unpaved runway edge markers, stopway edge markers, taxiway edge markers, taxiway centreline markers and boundary markers shall be in accordance with the specifications prescribed by the Authority.

#### 82. VOR aerodrome checkpoint marking.

- (1) An operator shall ensure that where a VOR aerodrome checkpoint is established at an aerodrome, it is indicated by a VOR aerodrome checkpoint sign.
- (2) The VOR aerodrome checkpoint location and characteristics shall be in accordance with specifications prescribed by the Authority.

#### 83. Aircraft stand markings.

An operator shall provide aircraft stand markings for designated parking positions on a paved apron in accordance with specifications prescribed by the Authority.

## 84. Apron safety lines.

An operator shall provide apron safety lines on a paved apron as required by the parking configuration and ground facilities and in accordance with specifications prescribed by the Authority.

#### 85. Road-holding positions.

- (1) An operator shall provide road-holding position markings at all road entrances to a runway.
- (2) The road-holding position markings provided under subregulation (1) shall be located across the road at all the holding positions.
- (3) The road-holding position marking shall be as prescribed by the Authority.

#### 86. Mandatory instruction markings and signs.

- (1) An operator shall provide a mandatory instruction marking and a sign to identify a location beyond which a taxiing aircraft or vehicle shall not proceed, unless authorized by the aerodrome control tower.
- (2) Where it is impracticable to install a mandatory instruction marking and a sign in accordance with sub-regulation (1), a mandatory instruction marking or sign shall be provided on the surface of the pavement.

- (3) The location and characteristics of the mandatory instruction marking or sign shall be in accordance with specifications prescribed by the Authority.
- (4) An operator shall provide signs to convey mandatory instructions and information on a specific location or destination on a movement area, or to provide surface movement guidance and control.
- (5) The location and characteristics of the signs referred to in subregulation (4) shall be in accordance with the specifications prescribed by the Authority.

#### 87. Information marking.

An operator shall install information marking, in accordance with specifications prescribed by the Authority, where an information sign is required but is physically impossible to install.

# 88. Visual aids for denoting obstacles.

An operator shall ensure that the visual aids for denoting obstacles are frangible and that those located near a runway or taxiway are sufficiently low to preserve clearance for propellers and for engine pods of jet aircraft.

# 89. Obstacles to be marked or lighted.

- (1) An operator shall ensure that all fixed obstacles that extend above take-off climb surfaces are marked and that where the runway is used at night, the obstacles are lighted in accordance with the specifications prescribed by the Authority.
- (2) A fixed obstacle that extends above an approach surface within 3 000 m of the inner edge or above a transitional surface shall be marked and, if the runway is used at night, lighted—
  - (a) such marking and lighting may be omitted when the obstacle is shielded by another fixed obstacle;
  - (b) the marking may be omitted when the obstacle is lighted by medium-intensity obstacle lights, Type A, by day and its height above the level of the surrounding ground does not exceed 150 m:

- (c) the marking may be omitted when the obstacle is lighted by high-intensity obstacle lights by day; and
- (d) the lighting may be omitted where the obstacle is a lighthouse and an aeronautical study indicates the lighthouse light to be sufficient.

#### 90. Visual aids for denoting restricted areas.

- (1) An operator shall ensure that restricted areas are marked in a manner that is visible to aircraft operating on the ground and in the air.
- (2) Without prejudice to the generality of sub-regulation (1), markings denoting restricted areas such as closed runways and taxiways, non-load-bearing surfaces, pre-threshold areas and unserviceable areas shall be done in accordance with the specifications prescribed by the Authority.

PART XI—AERODROME OPERATIONAL SERVICES, EQUIPMENT,
INSTALLATIONS AND FACILITIES

## 91. Application of this Part.

This Part applies to all categories of aerodromes except where otherwise specified.

# 92. Immigration, customs and excise aerodromes.

The Authority may, in consultation with the authorities responsible for immigration, customs and excise, notify of any aerodrome which is introduced as, or ceases to be a place for landing or departure of aircraft for purposes of the laws relating to immigration, customs and excise.

# 93. Supply of aviation fuel to aircraft.

- (1) An operator of an aviation fuel installation at an aerodrome shall not cause or permit any aviation fuel to be delivered to that installation or from it, to an aircraft unless—
  - (a) when the aviation fuel is delivered to the installation, the operator of the aviation fuel installation is satisfied that—

- (i) the installation is capable of storing and dispensing the fuel so as not to render it unfit for use in an aircraft;
- (ii) the installation is marked in an appropriate manner to the grade of the fuel stored or where different grades are stored in different parts, that each part is so marked;
- (iii) in the case of delivery into the installation or part of the installation from a vehicle or vessel, the fuel has been sampled and is of the grade appropriate to that installation or part of the installation as the case may be and is fit for use in an aircraft;
- (b) when aviation fuel is dispensed from the installation, the operator of the aviation fuel installation is satisfied after sampling, that the fuel is fit for use in an aircraft.
- (2) A person shall not cause or permit aviation fuel to be dispensed for use in an aircraft where that person knows or has reason to believe that the aviation fuel is not fit for use in an aircraft.
- (3) An operator of an aviation fuel installation shall not on an aerodrome, supply fuel to an aircraft except at a place and in a manner approved by the operator.
- (4) An operator may subject to the approval granted under subregulation (3), ensure compliance with any conditions as the operator may impose, in order to safeguard persons or property on the ground.
- (5) An operator of an aviation fuel installation shall keep a written record in respect of each installation managed by that operator.
  - (6) The record in sub-regulation (5) shall include—
  - (a) particulars of the grade and quantity of aviation fuel delivered and the date of delivery;
  - (b) particulars of all samples taken of the aviation fuel and of the results of the tests of those samples; and
  - (c) particulars of the maintenance and cleaning of the installation.

- (7) An operator of an aviation fuel installation shall preserve the written record for a period of twelve months or such longer period as the Authority may in a particular case direct and shall, within a reasonable time after being requested to do so by an authorised person, produce the record to that authorised person.
- (8) The Authority or an authorised person may direct the operator of an aviation fuel installation not to permit aviation fuel to be dispensed from that installation until the direction is revoked by the Authority or that authorised person, where it appears to the Authority or to that authorised person that aviation fuel is intended or likely to be delivered in contravention of this regulation.
  - (9) For the purpose of this regulation—
  - (a) "aviation fuel" means fuel intended for use in an aircraft; and
  - (b) "aviation fuel installation" means any apparatus or container, including a vehicle designed, manufactured or adapted for the storage of aviation fuel or for the delivery of fuel to an aircraft.

## 94. Aerodrome emergency planning.

- (1) An operator shall establish an aerodrome emergency plan at the aerodrome, which shall—
  - (a) be commensurate with the aircraft operations and activities conducted at the aerodrome; and
  - (b) provide for the coordination of the actions to be taken in the event of an emergency occurring at the aerodrome or in its vicinity.
- (2) An emergency referred to in sub-regulation (1) includes an aircraft emergency, natural disasters and sabotage including bomb threats, unlawful seizure of aircraft, the effect of improper handling, transportation and storage of dangerous goods and occurrences of building fires and public health emergencies.

- (3) The emergency plan shall provide for the coordination with the rescue coordination centre and for the response and participation of all agencies whose assistance is required in the event of an emergency, including—
  - (a) at an aerodrome—
    - (i) air traffic control unit;
    - (ii) rescue and fire fighting services;
    - (iii) aerodrome administration;
    - (iv) medical and ambulance services;
    - (v) aircraft operators;
    - (vi) security services;
    - (vii) airport police unit;
  - (b) outside the aerodromes—
    - (i) fire departments;
    - (ii) Police force;
    - (iii) medical and ambulance services;
    - (iv) hospitals and public health services;
    - (v) military forces;
    - (vi) harbour patrol or coast guard.
  - (4) The emergency plan shall include—
  - (a) the types of emergencies planned for;
  - (b) agencies to be involved in the plan;
  - (c) the responsibility and role of each agency, the emergency operation centre and the command post for each type of emergency;

- (d) names and contacts of offices or people to be contacted in the case of a particular emergency; and
- (e) a grid map of the aerodrome and its immediate vicinity.
- (5) In developing an aerodrome emergency plan, the operator shall take into consideration the human factor principles to ensure optimum response by all existing agencies participating in the emergency operations.
  - (6) This regulation applies to aerodromes in category A.

#### 95. Emergency planning committee.

- (1) An operator shall form an emergency planning committee to discuss, determine and implement emergency planning arrangements commensurate with the size and type of aircraft that use the aerodrome.
  - (2) This regulation applies to aerodromes in category A,

## 96. Aerodrome emergency exercise.

- (1) An emergency plan established under regulation 93 shall contain procedures for periodic testing of the adequacy of the plan and for reviewing of the results in order to improve its effectiveness.
- (2) Without prejudice to the generality of sub-regulation (1), the plan shall be tested by conducting—
  - (a) a full-scale aerodrome emergency exercise at intervals not exceeding two years and partial emergency exercises in the intervening year to ensure that any deficiencies found during the full-scale aerodrome emergency exercise have been corrected; or
  - (b) a series of modular tests commencing in the first year and concluding in a full-scale aerodrome emergency exercise at intervals not exceeding three years; and reviewed thereafter, or after an actual emergency, so as to correct any deficiency found during such exercises or actual emergency;

- (c) contingency plan exercises in accordance with the Civil Aviation (Security) Regulations.
- (3) This regulation applies to aerodromes in category A.

## 97. Emergency operation centre and command post.

- (1) An operator of an aerodrome shall ensure that a fixed emergency operations centre and a mobile command post are available for use during an emergency.
  - (2) This regulation shall apply to aerodromes in category A.

## 98. Emergencies in difficult environment.

- (1) Where an aerodrome is located close to water or a swampy area and where a significant portion of approach or departure operations takes place over the area, the emergency plan established under regulation 93 shall include the ready availability of and co-ordination with appropriate specialist rescue services.
- (2) At an aerodrome located close to a water body, a swampy area, or difficult terrain, the aerodrome emergency plan shall include the establishment, testing and assessment at regular intervals of a predetermined response for the specialist rescue services.
  - (3) This regulation applies to aerodromes in category A.

# 99. Aerodrome rescue and fire fighting services.

- (1) An operator shall put in place rescue and fire fighting facilities commensurate with the category of the aerodrome as specified in Table 2.
- (2) Where an aerodrome is located close to a water body, a swampy area or difficult terrain and where a significant portion of approach or departure operations takes place over such an area, specialist rescue services and fire-fighting equipment appropriate to the hazard and risk shall be made available.

- (3) The level of protection provided at an aerodrome for rescue and fire fighting shall be appropriate to the aerodrome category which shall be determined using the principles in sub-regulations (4) and (5) except that, where the number of movements of the aeroplane in the highest category normally using the aerodrome is less than 700 in the busiest consecutive three months, the level of protection provided shall be not less than one category below the determined category.
- (4) For purposes of aerodrome rescue and fire fighting services, the aerodrome category shall be determined using Table 2 and shall be based on the longest aircraft that normally uses the aerodrome, and its fuselage width.
- (5) Where after selecting the aerodrome category appropriate to the overall length of the longest aircraft, the fuselage of that aircraft is found to be greater than the maximum width provided for that category, in column 3 of Table 2 the category for that aircraft shall be the next category.

Table 2 – Aerodrome category for rescue and fire fighting

Aerodrome fire category	Aircraft overall length	Maximum fuselage width		
1	0 metres up to but not including 9 metres	2 metres		
2	9 metres up to but not including 12 metres 2 metres			
3	12 metres up to but not including 18 metres	3 metres		
4	18 metres up to but not including 24 metres 4 metres			
5	24 metres up to but not including 28 metres 4 metres			
6	28 metres up to but not including 39 metres 5 metres			
7	39 metres up to but not including 49 metres 5 metres			
8	49 metres up to but not including 61 metres 7 metres			
9	61 metres up to but not including 76 metres	7 metres		
10	76 metres up to but not including 90 metres	8 metres		

- (6) The amounts of water for foam production and the complementary agents to be provided on the rescue and fire fighting vehicles shall be in accordance with the aerodrome category determined under sub-regulations (3) and (4) and Table 3.
- (7) Except that the amounts of water for foam production may be substituted with as follows—
  - (a) for aerodrome categories one and two, up to one hundred *per cent* of water may be replaced by a complementary agent;
  - (b) For the purpose of agent substitution, 1 kg of complementary agent shall be taken as equivalent to 1.0 L of water for production of a foam meeting performance level A.

Table 3 - Minimum usable amounts of extinguishing agents

	Foam meeting performance level A		Foam meeting performance level B		Complementary agents	
Aerodrome Category (1)	Water (litres) (2)	Discharge rate Foam solution/minute (litres) (3)	Water (litre) (4)	Discharge rate Foam solution/minute (litres) (5)	Dry Chemical Powder (DCP) (kg) (6)	Discharge rate (kg/sec)
1	350	350	230	230	45	2.25
2	1000	800	670	550	90	2.25
3	1800	1300	1200	900	135	2.25
4	3600	2600	2400	1800	135	2.25
5	8100	4500	5400	3000	180	2.25
6	11800	6000	7900	4000	225	2.25
7	18200	7900	12100	5300	225	2.25
8	27300	10800	18200	7200	450	4.5
9	36400	13500	24300	9000	450	4.5
10	48200	16600	32300	11200	450	4.5

(8) The quantities of water shown in columns 2, 4 and column 6 of Table 3 are based on the average overall length of aircraft in a given category and where operations of aircraft larger than the average size are expected, the quantities of water shall be recalculated.

- (9) From 1st January, 2015, at aerodromes where operations by aeroplanes larger than the average size in a given category are planned, the quantities of water shall be recalculated and the amount of water for foam production and the discharge rates for foam solution shall be increased accordingly.
- (10) The complementary agents shall comply with the appropriate specifications of the International Organization for Standardisation (ISO).
- (11) The operational objective of a rescue and fire fighting service shall be to achieve a response time not exceeding three minutes to any point of each operational runway, in optimum visibility and surface conditions.
- (12) Any vehicles, other than the first responding vehicle(s), required to deliver the amounts of extinguishing agents specified in Table 3 shall ensure continuous agent application and shall arrive no more than four minutes from the initial call.
- (13) All rescue and fire fighting personnel shall be properly trained, including training in human performance and team coordination and shall participate in live fire drills commensurate with the types of aircraft and rescue and fire fighting equipment in use at the aerodrome, including pressure-fed fuel fires.
- (14) In determining the minimum number of rescue and fire fighting personnel required, a task resource analysis should be completed and the level of staffing documented in the Aerodrome Manual.
- (15) The minimum number of rescue and fire fighting vehicle provided at an aerodrome shall be as provided in the second column for the aerodrome category for rescue and fire fighting in the first column of Table 4 and shall correspond to the foam meeting performance in the third column of Table 3.

Table 4 - Minimum number of rescue and fire fighting vehicle

Aerodrome fire category	Number of rescue and fire fighting vehicles		
1	1		
2	1		
3	1		
4	1		
5	1		
6	2		
7	2		
8	3		
9	3		
10	3		

(16) The Authority may prescribe alternative means of compliance with this regulation for aerodromes in categories C and D.

#### 100. Removal of disabled aircraft.

- (1) An operator shall have in place a plan for the removal of disabled aircraft from the movement area or adjacent to it.
- (2) The plan for the removal of disabled aircraft shall be based on the characteristics of the type of aircraft operations and shall include—
  - (a) a list of equipment and personnel available for the purpose;
  - (b) arrangement for the rapid receipt of aircraft recovery equipment kits from other aerodromes, where applicable; and
  - (c) the name of the co-ordinator designated to implement the plan.
- (3) The plan under this regulation shall include particulars of the procedures for removing a disabled aircraft on the movement area or adjacent to it.
- (4) This regulation shall not apply to aerodromes in categories B, C and D unless otherwise specified by the Authority.

### 101. Apron management service.

- (1) An operator shall provide an apron management service at an aerodrome where air traffic service is provided at that aerodrome.
- (2) The apron management service established under subregulation (1) shall be provided by an operator, an aerodrome air traffic service unit, or a combination of these, as may be specified for each aerodrome category, in the Aeronautical Information Publication and Aeronautical Information Circular.
- (3) Subject to sub-regulation (2), where the aerodrome control tower does not participate in the apron management service, procedures shall be established to facilitate the orderly transition of aircraft between the apron management unit and the aerodrome control tower.
- (4) An operator shall ensure that, where an apron management service is established, radio communication facilities are provided.
- (5) Where low visibility procedures are in effect, persons and vehicles operating in the apron shall be restricted to the essential minimum.
- (6) An emergency vehicle responding to an emergency shall have priority over all other surface movement traffic and any vehicle operating on an apron shall give way to an emergency vehicle or to an aircraft about to taxi, or which is being pushed or towed.
- (7) An aircraft stand at an apron where apron management service is provided shall be visually monitored to ensure that the recommended clearance distances are provided to an aircraft using the stand.
- (8) This regulation does not apply to aerodromes in categories C and D unless otherwise specified by the Authority.

#### 102. Ground servicing of aircraft.

(1) An operator shall ensure that fire extinguishing equipment, suitable for at least the initial intervention in the event of a fuel fire, is readily available during the ground servicing of an aircraft, and that there is means of quickly summoning the rescue and fire fighting service in the event of a fire or major fuel spill.

- (2) An operator shall ensure that, when aircraft refuelling operations take place while passengers are on board, embarking or disembarking, ground equipment are positioned in a manner that allows—
  - (a) the use of a sufficient number of exits for expeditious evacuation; and
  - (b) a ready escape route from each of the exits to be used in an emergency.

#### 103. Aerodrome vehicle operation.

- (1) A person shall not operate a vehicle on the manoeuvring area at an aerodrome where air traffic service is provided, except where authorized by the aerodrome control tower.
- (2) A person shall not operate a vehicle on an apron of an aerodrome except where authorized by the operator.
- (3) A vehicle operating on the movement area shall have a rotating beacon.
- (4) A driver of the vehicle on the movement area shall comply with all mandatory instructions conveyed by markings and signs, where the vehicle is on the manoeuvring area, except where the driver is authorized by the aerodrome control tower.
- (5) A driver of the vehicle on the movement area shall comply with all mandatory instructions conveyed by markings and signs, where the vehicle is on an apron, except where the driver is authorized by the aerodrome operator.
- (6) A driver of a vehicle on the movement area shall comply with all mandatory instructions conveyed by lights and instructions issued by the aerodrome control tower where the vehicle is on the manoeuvring area or by the appropriate designated authority, where the vehicle is on an apron.
- (7) A driver of a vehicle on the movement area shall be appropriately trained for the tasks to be performed and shall be issued with a permit by the operator.

- (8) A driver of a radio-equipped vehicle shall establish satisfactory two-way radio communication with the aerodrome control tower before entering the manoeuvring area and with the appropriate designated authority before entering the apron, and shall maintain a continuous listening watch on the assigned frequency while on the movement area.
- (9) This regulation shall not apply to aerodromes in categories C and D unless otherwise specified by the Authority.

# 103. Location, construction and installation of equipment on operation areas.

- (1) Except for the purpose of air navigation or for aircraft safety, a person shall not construct or install equipment or any installation on a runway strip, a runway end safety area, a taxiway strip, a clearway or within any distances determined by the Authority, where the construction or the equipment may endanger the safety of an aircraft.
- (2) Where any equipment or installation required for air navigation or for aircraft safety purposes is to be located on a portion of a runway strip or on a runway end safety area, a taxiway strip or within any distances determined by the Authority, the equipment or installation shall be frangible and mounted as low as possible in accordance with the standards specified by the Authority.

### 104. Fencing of aerodromes and installations.

- (1) An operator of an aerodrome shall provide a fence or a suitable barrier on the aerodrome—
  - (a) to prevent the entrance into the movement area, of any animals likely to be a hazard to aircraft; and
  - (b) to deter the inadvertent or premeditated access of an unauthorised person onto a non-public area of the aerodrome.
- (2) An operator shall provide suitable means of protection for an aerodrome to deter the inadvertent or premeditated access of unauthorised persons into ground installations and facilities essential for the safe operation of aircraft.

- (3) The fence or barrier required under sub-regulation (1) shall be located so as to separate the movement area and other facilities or zones on the aerodrome which are vital to the safe operation of aircraft from areas open to public use.
- (4) Where greater security is needed, a cleared area shall be provided on both sides of the fence or barrier to facilitate the work of patrols and to make trespassing more difficult and provision for a perimeter road along the aerodrome fencing for the use of both maintenance personnel and security patrols may be made.
- (5) Where the Authority deems it necessary for security reasons, the fence or barrier provided under sub-regulation (1) shall be illuminated at a minimum essential level and the security lighting shall be located so that the ground area on both sides of the fence or barrier, particularly at access points, is illuminated.
  - (6) This regulation applies to aerodromes in category A.
- (7) This regulation applies to aerodromes in category B except where deemed otherwise by the Authority.

## 105. Maintenance of safety inspection programme.

- (1) An operator shall establish and maintain a safety inspection programme for the aerodrome.
  - (2) The safety inspection programme shall—
    - (a) provide procedures to ensure that competent aerodrome personnel execute the programme effectively; and
    - (b) provide a reporting system to ensure prompt correction of unsafe aerodrome conditions noted during any inspection.

# 106. Maintenance of fire prevention programme.

(1) An operator shall establish a fire prevention programme with preventive measures against possible fires on the aerodrome and identify a person to maintain the fire prevention programme for the aerodrome and the aerodrome buildings.

- (2) Where an aerodrome does not have designated fire service, the operator shall arrange with the relevant local government authority or any other concerned authority to maintain a fire prevention programme for the aerodrome and to advise the operator of any dangerous conditions for rectification.
- (3) An operator shall ensure that unsafe practices that may result in fire are not performed on the aerodrome or within its vicinity.
- (4) Notwithstanding sub-regulation (3) where unsafe practices are performed during maintenance on the aerodrome, an operator shall alert the rescue and fire fighting services concerned, to be on standby for the duration of the practices.

#### 107. Access of ground vehicles to aerodrome movement area.

- (1) An operator shall—
- (a) limit the access of any ground vehicles used for aerodrome and aircraft operations, to the aerodrome manoeuvring area;
- (b) provide adequate procedures for the safe and orderly access to the aerodrome and operation in the manoeuvring area of ground vehicles, where an air traffic service unit is in operation at the aerodrome, in order to ensure that each ground vehicle operating in the aerodrome manoeuvring area is controlled by—
  - (i) two-way radio communication between the vehicle and the air traffic service unit;
  - (ii) an accompanying radio communication or an escort vehicle with adequate measures including signals or guards to control the vehicle, where the vehicle does not have a radio;
- (c) provide adequate measures to ensure that ground vehicles operating in the aerodrome movement area are controlled by signs, pre-arranged signals or standards prescribed by the Authority, where an air traffic service unit is not in operation at the aerodrome;

- (d) ensure that any person who operates a ground vehicle on the aerodrome movement area is familiar with and complies with the rules and procedures for the operation of ground vehicles as prescribed by the Authority.
- (2) An operator shall ensure that a person who has access to the aerodrome movement area wears a coloured reflective gear which shall be conspicuously displayed while on the movement area.
- (3) In this regulation, "gear" includes a vest, band, overcoat, helmet and socks.

#### PART XII—AERODROME MAINTENANCE.

## 108. Application of this Part.

This part shall apply only to aerodromes in categories A and B.

#### 109. Maintenance programme.

- (1) An operator shall establish at the aerodrome, a maintenance programme, including preventive maintenance to maintain a facility in a condition that does not impair the safety, regularity and efficiency of air navigation.
  - (2) In this regulation—
  - "facility" includes a pavement, visual aid, fencing, drainage system and building; and
  - "preventive maintenance" means programmed maintenance work done to prevent failure or degradation of a facility.

## 110. Maintenance of movement and adjacent areas.

- (1) An operator shall at all times ensure that—
- (a) the surfaces of all movement areas including pavements (runways, taxiways, and aprons) and adjacent areas are inspected and their conditions monitored regularly as part of an aerodrome preventive and corrective maintenance programme with the objective of avoiding and eliminating any loose objects/debris that might cause damage to aircraft or impair the operation of aircraft systems;

- (b) the surface of the runway is maintained in a condition that precludes formation of harmful irregularities such as water pools and rough surfaces;
- (c) a paved runway shall be maintained in a condition so as to provide surface friction characteristics at or above the minimum friction level specified by the State;
- (d) runway surface friction characteristics for maintenance purposes shall be periodically measured with a continuous friction measuring device using self-wetting features and documented;
- (e) corrective maintenance action is taken to prevent the runway surface friction characteristics for either the entire runway or a portion thereof from falling below a minimum friction level specified by the State;
- (f) when there is reason to believe that the drainage characteristics of a runway or portions of the runway, are poor due to slopes or depressions, then the runway friction characteristics are assessed under natural or simulated conditions that are representative of local rain and corrective maintenance action is taken where necessary;
- (g) where a taxiway is used by turbine-engine aircraft, the surface of the taxiway shoulders is maintained so as to be free of any loose stones or other objects that may be ingested by the aircraft engines;
- (h) standing water, mud, dust, sand, oil, rubber deposits and other contaminants are removed from the surface of runways in use as rapidly and completely as possible to minimize accumulation.
- (2) An operator shall ensure that the overlaying of runway pavements is done in accordance with standards prescribed by the Authority.

- (3) The frequency of these measurements (in new c) shall be sufficient to determine the trend of the surface friction characteristics of the runway.
- (4) An operator shall ensure that, the overlay is constructed and maintained above the minimum friction level as prescribed by the Authority.

#### 111. Preventive maintenance of visual aids.

- (1) An operator shall not operate an aerodrome unless a system of preventive maintenance of visual aids is employed at the aerodrome.
- (2) The system of preventive maintenance required under subregulation (1) shall, if employed for instrument precision approach runways categories I and II include -
  - (a) visual inspections and in-field measurement of the intensity, beam spread and orientation of lights included in the approach and runway lighting systems;
  - (b) control and measurement of the electrical characteristics of each circuitry included in the approach and runway lighting systems; and
  - (c) control of the correct functioning of the light intensity settings used by air traffic control unit.
- (3) The in-field measurements of intensity, beam spread and orientation of lights applicable to instrument precision approach runways categories I and II shall be undertaken by measuring all lights, as far as practicable to ensure conformity with prescribed specifications using a mobile measuring unit of sufficient accuracy to analyse the characteristics of individual lights.
- (4) The frequency of measurement of lights shall be at least twice a year for instrument precision approach runways categories I and II and at least once a year for other lights.

# 112. Construction or maintenance activity during low visibility operations.

An operator shall ensure that any construction or maintenance activity is not undertaken in the proximity of aerodrome electrical systems at any time during periods of low visibility operations.

#### 113. Works at aerodromes.

- (1) An operator shall establish procedures and precautions to ensure that any works carried out at an aerodrome do not endanger the safety of any aircraft operations.
- (2) The procedures and precautions in sub-regulation (1) shall comply with standards prescribed by the Authority.

#### PART XIII—ELECTRICAL SYSTEMS.

### 114. Application of this Part.

- (1) This part shall apply to aerodromes in category A.
- (2) This part may apply to aerodromes in categories B, C, and D where deemed necessary by the Authority

# 115. Electrical power supply systems for air navigation services and facilities.

- (1) An operator shall not operate an aerodrome unless adequate primary power supply systems are made available for the safe functioning of air navigation services and facilities.
- (2) The design and provision of electrical power systems for aerodrome visual and radio navigation aids shall be such that an equipment failure does not leave the pilot with inadequate visual and non-visual guidance or misleading information.
- (3) Where secondary power is required for air navigation services and facilities, the operator shall arrange the electric power supply connections so as to ensure that the facilities are automatically connected to the secondary power supply upon failure of the primary power supply.

- (4) Sub-regulation (3) applies for non-instrument runways except that a secondary power supply for visual aids may not be provided where an emergency lighting system is provided and is capable of being deployed within fifteen minutes.
- (5) At an aerodrome where the primary runway is an instrument non-precision approach runway, a secondary power supply capable of fulfilling the requirements of sub-regulation (3) shall be provided, except that a secondary power supply for visual aids need not be provided for more than one instrument non-precision approach runway.
- (6) An operator shall provide the following aerodrome facilities with secondary power supply capable of supplying power where there is a failure of the primary power supply—
  - (a) the signalling lamp and the minimum lighting necessary to enable air traffic services personnel to carry out their duties;
  - (b) all obstacle lights which, in the opinion of the Authority are essential to ensure the safe operation of aircraft;
  - (c) approach, runway and taxiway lighting;
  - (d) meteorological equipment;
  - (e) essential security lighting, if provided;
  - (f) essential equipment and facilities for the aerodrome emergency agencies;
  - (g) floodlighting on a designated isolated aircraft packing position if provided; and
  - (h) illumination of apron areas over which passengers may walk.
- (7) The maximum switch-over time between failure of the primary source of power and the secondary source of power for the services required by sub-regulation (6) shall be as indicated in Table 5.

Table 5—Secondary power supply requirements

Runway Type	Lighting aids requiring power	Maximum
		switch-over time
Non-instrument	Visual approach slope indicators <sup>a</sup>	15 seconds
	Runway edge	15 seconds
	Runway threshold <sup>b</sup>	15 seconds
	Runway end <sup>b</sup> Obstacle	15 seconds
		15 seconds
Non-precision	Approach lighting system	15 seconds
approach	Visual approach slope indicators a,d	15 seconds
	Runway edge "	15 seconds
	Runway threshold "	15 seconds
	Runway end	15 seconds
	Obstacle <sup>a</sup>	15 seconds
Precision approach	Approach lighting system	15 seconds
category I	Visual approach slope indicators a,d	15 seconds
	Runway edge d	15 seconds
	Runway threshold d	15 seconds
	Runway end	15 seconds
	Essential taxiways a	15 seconds
	Obstacle <sup>a</sup>	15 seconds
Precision approach	Inner 300 m of the approach lighting system	1 second
category II	Other parts of the approach lighting system	15 seconds
	Obstacle <sup>a</sup>	15 seconds
	Runway edge	15 seconds
	Runway threshold	1 second
	Runway end	1 second
	Runway centre line	1 second
	Runway touchdown zone	1 second
	All stop bars	1 second
	Essential taxiway	15 seconds
Runway meant for	Runway edge	15 seconds °
take-off in runway	Runway end	1 second
visual range	Runway centre line	1 second
conditions less than	All stop bars	1 second
a value of 800 m	Essential taxiway <sup>a</sup>	15 seconds
	Obstacle <sup>a</sup>	15 seconds
N7 .		15 seconds

#### Note

a. Supplied with secondary power when their operation is essential to the safety of flight operation.

c. One second where no runway centre line lights are provided.

d. One second where approaches are over hazardous or precipitous terrain.

(8) For the purpose of this regulation, "switch-over time" means the time required for the actual intensity of a light measured in a given direction to fall from fifty *per cent* and recover to fifty *per cent* during a power supply changeover, when the light is being operated at intensities of twenty five *per cent* or more.

PART XIV—Information to be reported to Aeronautical Information Services.

### 116. Application of this Part.

This part shall apply to all categories of aerodromes.

# 117. Availability of information.

- (1) An operator shall ensure that information relating to the aerodrome and its facilities, which is significant for the conduct of flights to and from the aerodrome, is available to the users of the aerodrome.
- (2) An operator shall be responsible for notifying the Aeronautical Information Services of any errors and omissions in the aeronautical information of operational significance, published in the Aeronautical Information Publication or Aeronautical Information Circular or in the NOTAM, and of any pending changes in the aerodrome or its facilities which are likely to affect this information.
- (3) An operator shall provide information on the following for the guidance of pilots and other operators—
  - (a) status of licensing and certification of the aerodrome;
  - (b) construction or maintenance work on or immediately adjacent to the manoeuvring area;
  - (c) unserviceable portions of any part of the manoeuvring area;
  - (d) the runway surface conditions when affected by water, damp, wet, water patches or flooded, as appropriate;

- (e) parked aircraft or other objects on, or immediately adjacent to the taxiways;
- (f) the presence of other temporary hazards;
- (g) failure or irregular operation of any part of the aerodrome lighting system, or of the aerodrome main and secondary power supplies;
- (h) failure, irregular operation and changes in the operational status of any electronic approach or navigation aid, or aeronautical communication facility;
- (i) failures and changes in the runway visual range observer system; and
- (j) any other information of operational significance.

# 118. Action required for occurrences of operational significance other than those involving electronic aids and communication facilities.

- (1) Where any of the following conditions occur or are anticipated, an operator shall take immediate action to amend the information contained in the Aeronautical Information Circular and where necessary, promulgate the change by NOTAM through the Aeronautical Information Services using the Aeronautical Information Services address notified in the Aeronautical Information Circular—
  - (a) changes in the availability of the manoeuvring area and changes in the runway declared distance; except that increases in declared distances may only be made with the approval of the Authority;
  - (b) significant changes in aerodrome lighting and other visual aids:
  - (c) presence or removal of temporary obstructions to aircraft operation in the manoeuvring area;

- (d) presence of airborne hazards to air navigation;
- (e) interruption, return to service, or major changes to rescue facilities and fire fighting services in terms of the new category of the rescue and fire fighting service available at the aerodrome; except that permanent changes to the promulgated rescue fire fighting category may only be made with the approval of the Authority;
- (f) failure of or return to operation of hazard beacons and obstruction lights on or in the vicinity of the aerodrome;
- (g) erection or removal of obstructions to air navigation, and erection or removal of significant obstacles in take-off, climb or approach areas;
- (h) air displays, air races, parachute jumping, or any unusual aviation activity; and
- (i) any other information of operational significance.
- (2) Where any of the conditions in sub-regulation (1) arises at short notice, an operator shall notify the Aeronautical Information Services for promulgation of a NOTAM.
- (3) Where any of the conditions in sub-regulation (1) is intended, the operator shall make a written request to the Aeronautical Information Services, for the amendment of the Aeronautical Information Publication and Aeronautical Information Circular or for supplementary action.

# 119. Action required for occurrences that affect electronic aids and communication facilities.

- (1) An operator or a person in charge of a navigation facility shall initiate NOTAM action—
  - (a) for the establishment or withdrawal of electronic aids to air navigation; and
  - (b) for changes in the regularity or reliability of operation of any electronic aid to air navigation or aeronautical communication facility.

(2) An operator or a person in charge of a navigation facility shall request for the NOTAM action, or an amendment or a supplement of Aeronautical Information Publication or Aeronautical Information Circular directly from the Aeronautical Information Services or through channels established by the Authority.

### 120. Aeronautical data reporting.

- (1) An operator shall provide to the Authority for promulgation, accurate aeronautical data as specified in the Fifth Schedule to these Regulations.
- (2) An operator shall ensure that aerodrome related aeronautical data is adequate and accurate and that the integrity of the data is maintained and protected throughout the data process from survey or origin up to the next intended user.
- (3) An operator shall determine and report aerodrome related aeronautical data in accordance with prescribed accuracy and integrity requirements while taking into account the established quality system procedures.
- (4) Accuracy requirements for aeronautical data shall be based upon a ninety five *per cent* confidence level and in that respect, three types of positional data, namely; surveyed points, calculated points and declared points shall be identified.
- (5) Without prejudice to the generality of sub-regulations (1), (2), (3) and (4), the determination and reporting of aerodrome aeronautical data shall be in accordance with the accuracy and integrity specifications prescribed by the Authority or a person in charge of a navigation facility.
- (6) Subject to sub-regulation (5), the following classification and data integrity levels shall apply—
  - (a) for routine data: avoid corruption throughout the processing of the data;

- (b) for essential data: ensure corruption does not occur at any stage of the entire process and may include additional processes as needed to address potential risks in the overall system architecture to further assure data integrity at this level; and
- (c) for critical data: assure corruption does not occur at any stage of the entire process and include additional integrity assurance procedures to fully mitigate the effects of faults identified by thorough analysis of the overall system architecture as potential data integrity risks.
- (d) essential data, integrity level 1 x 10<sup>-5</sup>: where there is a low probability, when using corrupted essential data that the continued safe flight and landing of an aircraft may be severely at risk with the potential for catastrophe;
- (e) routine data, integrity level 1 x 10<sup>-3</sup>: where there is a very low probability when using corrupted essential data that the continued safe flight and landing of an aircraft may be severely at risk with the potential for catastrophe.

#### PART XV-EXEMPTIONS.

#### 121. Application of this Part.

This regulation shall apply to all categories of aerodromes.

# 122. Application for exemption.

- (1) A person may apply to the Authority for an exemption from any provision of these Regulations.
- (2) An application for an exemption from any provision of these Regulations shall be submitted at least sixty days before the proposed effective date of exemption.
  - (3) An application for exemption shall contain—

- (a) the name, physical address, mailing address, telephone number, fax number and email address of the applicant, where available;
- (b) the specific requirement from which the applicant seeks exemption;
- (c) justification for the exemption;
- (d) a description of the type of operations to be conducted under the proposed exemption;
- (e) the proposed duration of the exemption;
- (f) a detailed description of the alternative means by which the applicant is to ensure a level of safety equivalent to that established by the regulation from which the exemption is applied for;
- (g) a review of any known safety concerns related to the required exemption, including information about any relevant accidents or incidents of which the applicant is aware;
- (h) where the applicant seeks to operate under the proposed exemption outside the air space of the State, an indication as to whether the exemption may contravene any provision of the standards and any regulations pertaining to the airspace in which the operation is to occur; and
- (i) any other relevant information that may be required by the Authority.
- (4) Where the applicant seeks emergency processing of an application for exemption, the application shall contain facts and reasons to support the reasons for not filing the application within the time specified in sub regulation (2) and satisfactory reasons for deeming the application an emergency.

- (5) The Authority may refuse an application made under subregulation (4) where in the opinion of the Authority, the reasons given for the exemption are not satisfactory.
- (6) An application for exemption shall be accompanied by a fee specified by the Authority.

#### 123. Initial review by the Authority.

- (1) The Authority shall review an application for exemption for accuracy and compliance with the requirements of regulation 122.
- (2) Where the Authority determines that the application for exemption meets the requirements of this Part and that a review of its merits are justified, the Authority shall notify and may publish in the *Gazette* or at least one local daily newspaper of wide circulation, a detailed summary of the application, for public comment, specifying the date by which the comments are to be received by the Authority for consideration.
- (3) Where the applicant does not meet the requirements of regulations 122, the Authority shall inform the applicant and no further action shall be taken on that application.

# 124. Evaluation of application for exemption.

- (1) The Authority shall conduct an evaluation of an application after the initial review in accordance with regulation 123, to determine whether—
  - (a) the proposal by the applicant provides a level of safety equivalent to that established by the regulation from which the exemption is sought;
  - (b) a grant of the exemption would contravene the applicable standards;
  - (c) the request shall be granted or refused and any conditions or limitations that may be part of the exemption.

- (2) The Authority shall inform the applicant in writing and publish a detailed report of its evaluation and decision to grant or deny the application for exemption.
- (3) The report referred to in sub-regulation (2) shall specify the duration of the exemption and any conditions or limitations of the exemption.
- (4) Where an exemption affects a significant population of the aviation industry in the State, the Authority shall publish the report in the Aeronautical Information Circular.

#### PART XVI—GENERAL PROVISIONS

# 125. Application of this Part.

This part shall apply to all categories of aerodromes except where otherwise specified.

# 126. Change of name of a licence or certificate holder.

- (1) A holder of a licence or certificate may apply to the Authority to change the name of the holder of the licence or certificate.
  - (2) An application in sub regulation (1) shall be accompanied by—
  - (a) the current licence or certificate; and
  - (b) a court order, or any other legal document verifying the change of name, if any.
- (3) The Authority shall change the name of the holder and issue a replacement licence or certificate with the appropriate endorsement.
- (4) The Authority shall retain copies of the documents submitted under sub regulation (2).

# 127. Change of address of a licence or certificate or certificate holder.

(1) A holder of a licence or certificate, shall inform the Authority of—

- (a) change in the physical address at least fourteen days in advance; and
- (b) the mailing address upon the change.
- (2) Where a holder of a licence or certificate does not inform the Authority of the change in the physical address within the time specified in sub regulation (1), the Authority may suspend the licence or certificate.

### 128. Use and retention of licences, certificates and records.

- (1) A person shall not—
- (a) use a licence, certificate, approval, permission, exemption or any other document issued or required by or under these Regulations which is forged, altered, revoked, or suspended, or which the person is not entitled to use;
- (b) forge or alter a licence, certificate, approval, permission, exemption or any other document issued or required by or under these Regulations;
- (c) lend a licence, certificate, approval, permission, exemption or any other document issued or required by or under these Regulations to any other person; or
- (d) make any false representation for the purpose of procuring for himself, herself or any other person the issue, renewal or variation of an licence, certificate, approval, permission or exemption or other document.
- (2) A person shall not, during the period for which it is required under these Regulations to be preserved—
  - (a) mutilate, alter, render illegible or destroy a licence, certificate or any entry made in any record;
  - (b) knowingly make, procure or assist in the making of any false entry in a licence, certificate or record, or

- (c) wilfully omit to make a material entry in an licence, certificate or record.
- (3) A record required to be maintained under these Regulations shall be recorded in a permanent and indelible material.
- (4) A person shall not purport to issue a licence, certificate or exemption for the purpose of these Regulations unless that person is authorised to do so.
- (5) The authority may suspend or cancel a licence or certificate of an operator who contravenes any provision of these Regulations.

### 129. Replacement of documents.

A holder of a licence or certificate who requires a replacement of the licence or certificate may apply to the Authority in the prescribed form

#### 130. Aeronautical user charges.

- (1) The Authority shall notify of the fees to be charged in connection with—
  - (a) the issue, validation, renewal, extension or variation of any licence, certificate or any other document, including a copy of any of these;
  - (b) the undertaking of any examination, test, inspection or investigation;
  - (c) the grant of any permission or approval required for the purpose of these Regulations.
- (2) Where an application for which any fee is chargeable under sub-regulation (1) is made, the applicant shall, before the application is processed, pay the required fee.
- (3) The Authority shall not refund the fees where an application is withdrawn after payment of fees is made or where the application ceases to have effect or is refused.

#### 131. Conditions for operating an aerodrome.

A person shall not operate an aerodrome licensed or certificated under these Regulations unless the facilities and characteristics of the aerodrome are effectively related and match the needs of the aircraft for which the aerodrome is intended.

### 132. Standards for physical characteristics.

A person shall not operate an aerodrome unless the physical characteristics of the aerodrome comply with the standards prescribed by the Authority and any publications as may be published or approved by the Authority.

# 133. Dangerous light.

- (1) A person shall not exhibit a light in the vicinity of an aerodrome which, by its glare, endangers the safety of aircraft arriving or departing from the aerodrome.
- (2) Where a light appears to the Authority to be capable of endangering the safety of aircraft as described in sub-regulation (1), the Authority may direct the owner of the place where the light is exhibited or the person having charge of light to extinguish and to prevent in the future, the exhibition of the light within the period specified.
- (3) Where a light is or may be visible from any waters within the area of a general lighthouse authority, the power of the Authority under this regulation shall not be exercised except with the consent of that lighthouse authority.

### 134. Lighting of en-route obstacles.

- (1) An owner or a person in charge of an en-route obstacle shall ensure that the en-route obstacle is fitted with medium intensity steady red light—
  - (a) positioned as close as possible to the top of the obstacle; and
  - (b) spaced as far as practicable, equally between the top lights and ground level with an interval not exceeding thirty three metres, at the intermediate levels.

- (2) Where any light which is required by this regulation to be displayed fails, an owner or a person in charge of an en-route obstacle shall repair or replace the light as soon as is reasonably practicable but in any case not later than twenty four hours after the failure of the light.
- (3) Subject to sub-regulation (2), an owner or a person in charge of an en-route obstacle shall ensure that the lights required to be fitted by this regulation are displayed.
- (4) An owner or a person in charge of an en-route obstacle shall ensure that sufficient light is fitted and arranged at each level of an obstacle where lights are required to be fitted, so as to show, when displayed, in all directions.
- (5) The Authority may direct that an en-route obstacle is fitted with additional lights which shall be displayed in such positions and at such times as the Authority may specify.
  - (6) For the purpose of this regulation—
  - (a) "en-route obstacle" means any building, structure or erection, which is one hundred metres or more, above ground level, except a building, structure or erection, which is in the vicinity of an aerodrome;
  - (b) "medium intensity steady light" means a light, which complies with the characteristics described for a medium intensity type C light as specified in the Manual of Aerodrome Standards.

# 135. Land use in the vicinity of an aerodrome.

All land use practices and activities in the vicinity of an aerodrome shall conform to the guidelines prescribed by the Authority.

### 136. Aeronautical study.

Where an aerodrome does not meet the requirements of prescribed standards, the Authority may determine, after carrying out aeronautical studies, the conditions and procedures that are necessary to ensure a level of safety equivalent to that established by the relevant prescribed standard.

#### 137. Deviations from standards.

Any deviation from a prescribed standard or procedure in these Regulations shall be set out in an endorsement on the aerodrome manual.

# 138. Safety inspections and audits.

The Authority shall –

- (a) carry out such safety inspections and audits as may be necessary for the purpose of verifying the validity of an application for construction and operation of an aerodrome;
- (b) carry out safety inspections and audits of any document and records of an operator, which may be necessary to determine compliance with the appropriate requirements as prescribed in these Regulations.

### 139. Obligation to insure an aerodrome.

- (1) A person shall not operate, or cause or permit any other person to operate, an aerodrome unless there is a policy of insurance in force in relation to that aerodrome.
- (2) A policy of insurance shall be of no effect for the purposes of sub regulation (1) unless—
  - (a) there has been issued by the insurer to the operator a certificate in relation to the policy of insurance in such form and containing such particulars as the Authority may prescribe, and
  - (b) the operator has sent, or caused to be sent, to the Authority a copy of such certificate.
- (3) If the policy of insurance at any time or for any reason ceases to have effect, any licence or certificate issued under these Regulations in respect of the aerodrome to which the policy of insurance relates shall thereupon be deemed to have been revoked.
- (4) A licence or certificate shall not be renewed or amended under these Regulations in relation to the operation of an aerodrome where the policy of insurance has expired.

- (5) In this regulation "policy of insurance" means a policy which insures the operator of an aerodrome against liability in respect of loss and damage caused to any person or property at that aerodrome and which complies with such conditions as may be prescribed by the Authority.
- (6) This regulation shall not apply to aerodromes in categories C and D unless required by the Authority.

#### PART XVII—OFFENCES AND PENALTIES.

# 140. Contravention of Regulations.

A person who contravenes any provision of these Regulations may have his or her certificate, licence, approval, authorisation or such other document revoked or suspended.

#### 141. Offences and Penalties.

- (1) A person who contravenes any provision of these Regulations, orders or notices made the Act shall, be guilty of an offence and upon conviction, shall be liable to a fine or imprisonment or both, and in the case of a continuing contravention, each day of the contravention shall constitute a separate offence.
- (2) A person who has been convicted under sub regulation (1) shall be liable to a fine not exceeding ten currency points or to imprisonment not exceeding six months or to both, and in a case of a continuing offence shall be liable to a fine of not more than five currency points for each day the offence continues.
- (3) Where it is proved that an act or omission of any person, which would otherwise have been a contravention by that person of a provision of these Regulations, orders or notices made there under was due to any cause not avoidable by the exercise of reasonable care by that person, the act or omission shall be deemed not to be a contra-vention by that person of that provision.

#### PART XVIII—SAVINGS AND TRANSITION.

#### 142. Savings and Transition.

A licence, certificate or any other document issued to an operator prior to the commencement of these Regulations shall continue in force as if it was issued under these Regulations until it expires or is cancelled by the Authority.

#### 143. Revocation.

The Civil Aviation (Aerodromes) Regulations, 2007 are hereby repealed.

**SCHEDULES** 

#### FIRST SCHEDULE

Regulation 41

#### PART A

#### SYSTEMATIC MANAGEMENT OF SAFETY AT AERODROMES

#### Safety Management\_

Aerodromes in Category A shall have in place a system for managing safety, to which it is committed, is readily identifiable by the personnel of the Aerodrome and the personnel of the Authority and is clearly documented in the Aerodrome Manual.

### 2. **Interpretation**

In this Schedule, unless the context otherwise requires—

"risk" is the combination of the probability, or frequency of occurrence of a defined hazard and the magnitude of the consequences of the occurrence.

#### 3. Safety Objective

An aerodrome and the facilities, equipment and systems of the aerodrome shall be designed and operated such that for any hazard, the combination of the probability of occurrence and the seriousness of the consequences of the hazard occurring must not result in a level of risk that is unacceptable.

### 4. Safety Management Policy Statements

Safety Management Systems (SMS) established at aerodromes shall include the following—

- (a) a statement that the highest priority shall be attached to safety in relations to all business activities;
- (b) a business objective for safety that shall minimise the aerodrome's contribution to aviation accidents risk to as low as reasonably practicable;
- (c) a commitment by the aerodrome operator to adopt an explicit and pro-active approach to safety management;
- (d) statements of safety-related responsibilities and accountabilities at all levels of the organization;

- (e) a commitment to comply with all appropriate safety standards;
- (f) a commitment that the safety assurance processes used by external suppliers comply with safety standards and requirements;
- (g) an emergency response plan that provides for the orderly and efficiency transition and coordination of operations from normal to emergency and back to normal.

### 5. Safety Management Principles

- (1) (a) Whenever practicable, quantitative safety levels shall be derived, maintained and improved for all aviation products and services delivered by the aerodrome; and when quantitative safety levels cannot be derived, a qualitative reasoning shall be performed in order to meet the safety objective.
  - (b) An operator shall assess all existing operations, proposed changes, additions or replacements for their safety significance.
  - (c) An operator shall identify and record the safety requirements for a service or product, the results of the safety assessment process and the evidence that the safety requirements have been met; and the records shall be maintained throughout the life of the service or product.
  - (d) An operator shall ensure that personnel whose functions impact on safety at the aerodrome are adequate, trained and qualified for the job they are required to do and for which they have accountability.
- (2) (a) An operator shall ensure that there is accountability, at a suitable senior level for the management, development and monitoring of the safety management system.
  - (b) An operator shall routinely carry out internal safety audits to provide assurance of the safety activities and to confirm compliance with the safety requirements and the safety management system.

- (c) An operator shall have in place suitable monitoring arrangements so that undesirable trends in service or product performance can be recognized and be subject to remedial action; and in order to achieve this, the operator shall in accordance with the provisions of the Part B of this Schedule—
  - establish a reporting system for accident and incident reporting that ensures the Authority is informed of the aviation safety aspects in connection with the aerodrome:
  - (ii) investigate safety significant occurrences, identify any failures of its management of safety and take corrective action if required;
- (d) The operator shall establish and maintain procedures, which enable tracing of documents and data related to the safety management system, and the procedures shall ensure that all safety related documents and data are available, and that invalid documents and data shall be destroyed and secured against unintended use.

# 6. Safety Management Strategy

- (1) An operator shall establish processes to identify safety shortcomings, so that remedial action can be taken to ensure safety levels are maintained.
- (2) The basic principles to be applied in the safety management strategy shall include—
  - (a) safety achievement; specifying the means by which the safety performance of the organization meets its safety objectives and derived requirements;
  - (b) safety assurance; specifying the means for providing assurance that risks are being managed properly and effectively;
  - (c) safety performance monitoring and measurement; specifying the means to verify safety performance of the organisation and to validate the effectiveness of safety risk controls;

- (d) safety promotion; specifying the means by which safety issues are communicated within the aerodrome to eliminate unnecessary risks and avoid repeat errors or risks and safety training programme that ensures personnel are trained and competent to perform SMS duties.
- (3) An operator shall develop and maintain a formal process to—
- (a) ensure that hazards in operations are identified.
- (b) identify changes within the organisation which may affect processes and services and shall describe arrangements to ensure safety performance before implementing changes.
- (c) identify the causes of substandard performance of safety management systems, determine the implications of substandard performance of the SMS in operation and eliminate or mitigate such processes.

#### 7. Operational safety assurances documentation

An operator shall produce and maintain safety assurance documentation, and this documentation shall cover—

- (a) all safety related roles and functions;
- (b) a safety based risk assessment of the roles and functions where practicable;
- (c) a process of risk management for safety related tasks and functions to ensure that identified risks remain tolerable:
- (d) safety performance measurements of the current operations as part of the ongoing risk management; and
- (e) corrective procedures and measures that modify the original tasks or functions to address inadequate performance.

#### 8. Safety assurance documentation on systems requiring approval

(1)An operator shall, when intending to introduce new systems into operation, or introduce changes to, or replace existing systems, submit an application for approval by the Authority.

- (2) The aerodrome operator shall also submit an application for approval if the intended changes affect the approvals in the aerodrome licence.
- (3)An aerodrome licensee shall, if satisfied that their own safety requirements as well as those issued by the Authority have met the compliance criteria, notify the Authority in writing indicating compliance with the specified safety requirements for any operational system.

#### 9. Safety assessment methodology

The safety assessment of the aerodrome shall involve—

- (a) systematic identification of possible hazards to aircraft;
- (b) evaluation of the seriousness of the consequences of the hazard occurring;
- (c) considering the chances of a hazard happening;
- (d) determining whether the consequent risk is tolerable and within the operators acceptable safety performance criteria; and
- (e) taking action to reduce the severity of the hazard or the probability of it arising in order to reduce the risk to a tolerable level.

# 10. Safety auditing of aerodromes

An operator shall carry out internal safety auditing of the aerodrome in order to determine—

- (a) the level of compliance with requirements;
- (b) the areas and degree of risk and their effective management; and
- (c) the competence and performance of those responsible for safety.

# PART B—AIRCRAFT ACCIDENT AND INCIDENT REPORTING AND INVESTIGATION AT AERODROMES

#### 1. Aerodrome occurrence reporting

(1) This schedule prescribes the requirements for reporting the occurrence or detection of defects, failures or malfunctions at an aerodrome, its components or equipment, which could jeopardize the safe operation of the aerodrome or cause it to become a danger to persons or property.

- (2) The objectives of the aerodrome occurrence reports are as f—ows –
- (a) to ensure that knowledge of these occurrences is disseminated so that other persons and organizations may learn from them; and
- (b) to enable an assessment to be made by those concerned (whether internal or external to the aerodrome operator) of the safety implications of each occurrence, both in itself and in relation to previous similar occurrences, so that they may take or initiate any necessary action.

#### 2. Reportable occurrences and reporting procedures

(1)An operator shall notify the Authority of any accident, serious incident, fatal or serious injury occurring at the aerodrome as soon as practicable after the occurrence and provide a detailed occurrence report thereafter.

- (2) For the purpose of this Schedule—
- (a) "accident" means an occurrence associated with the operation of an aircraft, which takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, in which—
  - (i) a person is fatally or seriously injured as a result of—
    - (aa) being in the aircraft;
    - (bb) direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or
    - (cc) direct exposure to jet blast, except when the injury are from natural causes, self-inflicted, or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew;
  - (ii) the aircraft sustains damage or structural failure which—
    - (aa) adversely affects the structural strength, performance or flight characteristics of the aircraft; and
    - (bb) would normally require major repair or replacement of the affected component except for engine failure or

damage, when the damage is limited to the engine, its cowlings or accessories; or for damage limited to propellers, wing tips, antennas, tires, brakes, fairings, small dents or puncture holes in the aircraft skin; or

- (iii) the aircraft is missing or is completely inaccessible.
- (b) "serious incident" includes—
  - a near collision requiring avoidance manoeuvre to avoid a collision or an unsafe situation or where an avoidance action would have been appropriate;
  - (ii) a controlled flight into terrain only marginally avoided;
  - (iii) an aborted take-off on a closed or engaged runway;
  - (iv) a take-off from a closed or engaged runway with marginal separation from an obstacle;
  - (v) a landing or attempted landing on a closed or engaged runway;
  - (vi) a take-off or landing incident such as undershooting; or overrunning or running off the side of runways; or
  - (v) a major failure of any navigation aid when a runway is in use;
- (c) "serious injury" means any injury that is sustained by a person in an accident and that—
  - requires hospitalisation for more than forty eight hours, commencing within seven days from the date the injury was received;
  - (ii) results in a fracture of any bone, except simple fractures of fingers, toes or nose;
  - (iii) involves lacerations which cause severe haemorrhage, nerve, muscle, or tendon damage;
  - (iv) involves any injury to any internal organ;
  - (v) involves second or third degree burns, or any burns affecting more than 5% of the body surface; or

- (vi) involves verified exposure to infectious substances or injurious radiation.
- (3) The operator shall notify the Aircraft Accident and Incident Investigation Branch whenever an accident or serious incident occurs on or adjacent to his aerodrome in accordance with the provisions of the Civil Aviation (Aircraft Accident and Incident Investigation) Regulations.
- (4) Information to be provided in the reporting and notification of an accident, serious incident or serious injury shall as far as possible include the following—
  - (a) the date and local time of occurrence;
  - (b) the exact location of the occurrence with reference to some easily defined geographical point;
  - (c) detailed particulars of the parties involved, including the owner, operator, manufacturer, nationality, registration marks, serial numbers, assigned identities of aircraft and equipment;
  - (d) a detailed description of the sequence of events leading up to the incident;
  - (e) the physical characteristics, environment or circumstances of the area in which the incident occurred and an indication of the access difficulties or special requirements to reach the site;
  - (f) the identification of the person sending the notice and where the incident occurred;
  - (g) in the case of an aircraft accident, the number of crew members, passengers or other persons respectively killed or seriously injured as a result of the accident; and
  - (h) a description of the follow-up action being taken after the incident has occurred.

#### 3. Aerodrome occurrence records

(1) An operator shall establish and maintain aerodrome occurrence reports for any accident, serious incident, serious injury or any occurrence or event that has a bearing on the safety of aerodrome operations.

- (2) An operator shall use aerodrome occurrence reports to monitor and improve the level of operational safety, including reviews of safety standards required.
- (3) The Authority may require the operator to produce and provide information contained in the aerodrome occurrence report relating to any safety occurrence or event.

#### 4. Aircraft accident and incident investigation

- (1) In the event of an accident or serious incident, an operator shall carry out its own investigations.
- (2) The investigations carried out by the aerodrome operator shall be additional to that carried out by the Aircraft Accident and Incident Investigation Branch to enable the operator to assess safety of aircraft operations at his aerodrome.
- (3) The investigator, or team of investigators, shall be technically competent and shall either possess or have access to the background information, so that the facts and events are interpreted accurately. The investigations shall be a search to establish how the mishap happened, why it occurred, including organizational contributing factors, and to recommend action to prevent a recurrence, and shall not be intended to apportion blame.
- (4) The lesson learnt derived from an aerodrome incident or accident investigation shall be disseminated to personnel to provide feedback for safety improvement.
- (5) The Authority may require the operator to produce and provide information contained in the aerodrome accident or incident investigation report relating to any such event.
- (6) An operator shall inspect his aerodrome, as circumstances require, to ensure safety as soon as practicable after any aircraft accident or incident.

#### SECOND SCHEDULE

Regulation 59

# PARTICULARS TO BE INCLUDED IN AN AERODROME MANUAL FOR AERODROMES IN CATEGORY A

#### **PART I: GENERAL**

General information, including the following—

- (a) purpose and scope of the aerodrome manual;
- (b) the legal requirement for an certificate and an aerodrome manual as prescribed in the national regulations;
- (c) conditions for use of the aerodrome a statement to indicate that the aerodrome shall at all times, when it is available for the takeoff and landing of aircraft, be so available to all persons on equal terms and conditions:
- (d) the available aeronautical information system and procedures for its promulgation;
- (e) the system for recording aircraft movements; and
- (f) obligations of the operator.

#### PART 2: PARTICULARS OF THE AERODROME SITE

General information, including the following –

- (a) a plan of the aerodrome showing the main aerodrome facilities for the operation of the aerodrome including, particularly, the location of each wind direction indicator;
- (b) a plan of the aerodrome showing the aerodrome boundaries;
- (c) a plan showing the distance of the aerodrome from the nearest city, town or other populous area, and the location of any aerodrome facilities and equipment outside the boundaries of the aerodrome; and

(d) particulars of the land title of the aerodrome site. If the boundaries of the aerodrome are not defined in the land title documents particulars of the land title to, or interest in, the property on which the aerodrome is located and a plan showing the boundaries and position of the aerodrome.

# PART 3: PARTICULARS OF THE AERODROME REQUIRED TO BE REPORTED TO THE AERONAUTICAL INFORMATION SERVICE

#### 1. General Information

- (a) the name of the aerodrome:
- (b) the location of the aerodrome:
- (c) the geographical coordinates of the aerodrome reference point determined in terms of the World Geodetic System 1984 reference datum;
- (d) the aerodrome elevation and geoid undulation;
- (e) the elevation of each threshold and geoid undulation, the elevation of each runway end and any significant high and low points along the runway, and the highest elevation of the touchdown zone of a precision approach runway;
- (f) the aerodrome reference temperature;
- (g) details of the aerodrome beacon; and
- (h) the name of the operator and the address, telephone and facsimile numbers at which the operator may be contacted at all times.

#### 2. Aerodrome dimensions and related information

General information, including the following –

- (a) runway true bearing, designation number, length, width, displaced threshold location, slope, surface type, type of runway and, for a precision approach runway, the existence of an obstacle free zone;
- (b) length, width and surface type of strip, runway end safety areas, stopways;
- (c) length, width and surface type of taxiways;

- (d) apron surface type and aircraft stands;
- (e) clearway length and ground profile;
- (f) visual aids for approach procedures, viz. Approach lighting type and visual approach slope indicator system (PAPI/APAPI and T-VASIS/AT-VASIS); marking and lighting of runways, taxiways, and aprons; other visual guidance and control aids on taxiways (including runway holding positions, intermediate holding positions and stop bars) and aprons, location and type of visual docking guidance system; availability of standby power for lighting;
- (g) the location and radio frequency of VOR aerodrome checkpoints;
- (h) the location and designation of standard taxi routes;
- (i) the geographical coordinates of each threshold;
- (j) the geographical coordinates of appropriate taxiway centre line points;
- (k) the geographical coordinates of each aircraft stand;
- (1) the geographical coordinates and the top elevation of significant obstacles in the approach and take-off area, in the circling area and in the vicinity of the aerodrome. (This information may best be shown in the form of charts such as those required for the preparation of aeronautical information publications, as specified in Annexes 4 and 15 to the Convention);
- (m) pavement surface type and bearing strength using the Aircraft Classification Number Pavement Classification Number method;
- (n) one or more pre-flight altimeter check locations established on an apron and their elevation;
- (o) declared distances: take-off run available, take-off distances available, accelerate-stop distance available, landing distance available;
- (p) disabled aircraft removal plan: the telephone/telex/facsimile number and e-mail address of the aerodrome coordinator for the removal of a disabled aircraft on or adjacent to the movement area, information on the capability to remove a disabled aircraft, expressed in terms of the largest type of aircraft which the aerodrome is equipped to remove; and

(q) rescue and fire-fighting; the level of protection provided, expressed in terms of the category of the rescue and fire-fighting services, which should be in accordance with the longest aircraft normally using the aerodrome and the type and amounts of extinguishing agents normally available at the aerodrome.

Note.- the accuracy of the information in Part 3 is critical to aircraft safety. Information requiring engineering survey and assessment should be gathered or verified by qualified technical persons.

# PART 4: PARTICULARS OF THE AERODROME OPERATING PROCEDURES AND SAFETY MEASURES

#### 1. Aerodrome reporting

Particulars of the procedures for reporting any changes to the aerodrome information set out in the Aeronautical Information Publication and Aeronautical Information Circular and procedures for requesting the issue of NOTAMs, including the following—

- (a) arrangements for reporting any changes to the Authority and recording the reporting of changes during and outside the normal hours of aerodrome operations;
- (b) the names and roles of persons responsible for notifying the changes, and their telephone numbers during and outside the normal hours of aerodrome operations; and
- (c) the address and telephone and facsimile numbers, as provided by the Authority, of the place where changes are to be reported to the Authority.

#### 2. Access to the aerodrome movement area

Particulars of the procedures that have been developed and are to be followed in coordination with the agency responsible for preventing unlawful interference in civil aviation at the aerodrome and for preventing unauthorized entry of persons, vehicles, equipment, animals or other things into the movement area, including the following –

(a) the role of the operator, the aircraft operator, aerodrome fixed-base operator, the aerodrome security entity, the Authority and other government departments, as applicable; and

(b) the personnel responsible for controlling access to the aerodrome, and the telephone numbers for contacting them during and after working hours.

### 3. Aerodrome emergency plan

Particulars of the aerodrome emergency plan, including the following -

- (a) plans for dealing with emergencies occurring at the aerodrome or in its vicinity, including the malfunction of aircraft in flight; structural fires; sabotage, including bomb threats (aircraft or structure); unlawful seizure of aircraft; and incidents on the aerodrome covering "during the emergency" and "after the emergency" considerations;
- (b) details of test and aerodrome facilities and equipment to be used in emergencies, including the frequency of those tests;
- (c) details of exercises to test emergency plans, including the frequency of those exercises;
- (d) a list of organizations, agencies and persons of authority, both onand/off-aerodrome, for site roles; their telephone and facsimile numbers, e-mail addresses and the radio frequencies of their offices;
- (e) the establishment of an aerodrome emergency committee to organize training and other preparations for dealing with emergencies; and
- (f) the appointment of an on-scene commander for the overall emergency operation.

# 4. Rescue and fire-fighting

Particulars of the facilities, equipment, personnel and procedures for meeting the rescue and fire-fighting requirements, including the names and roles of the persons responsible for dealing with the rescue and fire-fighting services at the aerodrome.

# 5. Inspection of the aerodrome movement area and obstacle limitation surface by the operator

Particulars of the procedures for the inspection of the aerodrome movement area and obstacle limitation surfaces, including the following—

(a) arrangements for carrying out inspections, including runway friction and water-depth measurements on runways and taxiways, during and outside the normal hours of aerodrome operations;

- (b) arrangements and means of communicating with air traffic control during an inspection;
- (c) arrangements for keeping an inspection logbook, and the location of the logbook;
- (d) details of inspection intervals and times;
- (e) inspection checklist;
- (f) arrangements for reporting the results of inspections and for taking prompt follow-up actions to ensure correction of unsafe conditions; and
- (g) the names and roles of persons responsible for carrying out inspections, and their telephone numbers during and after working hours.

#### 6. Visual aids and aerodrome electrical systems

Particulars of the procedures for the inspection and maintenance of aeronautical lights (including obstacle lighting), signs, markers and aerodrome electrical systems, including the following—

- (a) arrangements for carrying out inspections during and outside the normal hours of aerodrome operation, and the checklist for such inspections;
- (b) arrangements for recording the result of inspections and for taking follow-up action to correct deficiencies;
- (c) arrangements for carrying out routine maintenance and emergency maintenance;
- (d) arrangements for secondary power supplies and, if applicable, the particulars of any other method of dealing with partial or total system failure; and
- (e) personnel responsible for the inspection and maintenance of the lighting, and the telephone numbers for contacting those persons during and after working hours.

#### 7. Maintenance of the movement area

Particulars of the facilities and procedures for the maintenance of the movement area, including arrangements for—

- (a) maintaining the paved areas;
- (b) maintaining the unpaved runways and taxiways;

- (c) maintaining the runway and taxiway strips; and
- (d) the maintenance of aerodrome drainage.

# 8. Aerodrome works - safety

Particulars of the procedures for planning and carrying out construction and maintenance work safely (including work that may have to be carried out at short notice) on or in the vicinity of the movement area which may extend above an obstacle limitation surface, including the following –

- (a) arrangements for communicating with air traffic control during the progress of such work;
- (b) the names, telephone numbers and roles of the persons and organizations responsible for planning and carrying out the work, and arrangements for contacting those persons and organizations at all times;
- (c) the names and telephone numbers, during and after working hours, of the aerodrome fixed-base operators, ground handling agents and aircraft operators who are to be notified of the work;
- (d) a distribution list for work plans, if required.

#### 9. Apron management

Particulars of the apron management procedures, including the following—

- (a) arrangements between air traffic control and the apron management unit;
- (b) arrangements for allocating aircraft parking positions;
- (c) arrangements for initiating engine start and ensuring clearance of aircraft push-back;
- (d) marshalling service; and
- (e) leader (van) service.

# 10. Apron safety management

Procedures to ensure apron safety, including—

- (a) protection from jet blasts;
- (b) enforcement of safety precautions during aircraft refuelling operations;

- (c) apron sweeping;
- (d) apron cleaning;
- (e) arrangements for reporting incidents and accidents on an apron; and
- (f) arrangements for auditing the safety compliance of all personnel working on the apron.

#### 11. Airside vehicle control

Particulars of the procedure for the control of surface vehicles operating on or in the vicinity of the movement area, including the following—

- (a) details of the applicable traffic rules (including speed limits and the means of enforcing the rules);
- (b) the method of issuing driving permits for operating vehicles in the movement area.

#### 12. Birds and wildlife hazard management

Particulars of the procedures to deal with the danger posed to aircraft operations by the presence of birds or mammals in the aerodrome flight pattern or movement area, including the following-

- (a) arrangements for assessing birds and wildlife hazards;
- (b) arrangements for implementing birds and wildlife control programmes; and
- (c) the names and roles of the persons responsible for dealing with birds and wildlife hazards, and their telephone numbers during and after working hours.

#### 13. Obstacle control

Particulars setting out the procedures for—

- (a) monitoring the obstacle limitation surfaces and type A chart for obstacles in the take-off surface;
- (b) controlling obstacles within the authority of the operator;
- (c) monitoring the height of buildings or structures within the boundaries of the obstacle limitation surfaces;
- (d) controlling new developments in the vicinity of aerodromes; and

(e) notifying the Authority of the nature and location of obstacles and subsequent addition of removal of obstacles for action as necessary, including amendment of the Aeronautical Information Services publications.

#### 14. Removal of disabled aircraft.

Particulars of the procedures for removing a disabled aircraft on or adjacent to the movement area, including the following—

- (a) the roles of the operator and the holder of the aircraft operator certificate.
- (b) arrangements for notifying the aircraft operator.
- (c) arrangements for liaising with the air traffic control unit;
- (d) arrangements for obtaining equipment and personnel to remove the disabled aircraft; and
- (e) role and telephone numbers of personnel responsible for arranging for the action as necessary, including amendment of the AIS publications.

# 15. Handling of hazardous materials

- (1) Particulars of the procedures for the safe handling and storage of hazardous materials on the aerodrome, including the following—
  - (a) arrangements for special areas of the aerodrome to be set up for the storage of inflammable liquids (including aviation fuels) and any other hazardous materials; and
  - (b) the method to be followed for the delivery storage, dispensing and handling of hazardous materials.
- (2) For the purposes of this paragraph "hazardous materials" include inflammable liquids and solids, corrosive liquids, compressed gases and magnetized or radioactive materials.

# 16. Low visibility operations

Particulars of procedures to be introduced for low-visibility operations, including the measurement and reporting of runway visual range as and when required, and the personnel, their telephone numbers, responsible for measuring the Runway Visual Range.

# 17. Protection of sites for radar and navigational aids

Particulars of the procedures for the protection of sites for radar and radio navigational aids located on the aerodrome to ensure that their performance will not be degraded, including the following-

- (a) arrangements for the control of activities in the vicinity of radar and navigational aids installations;
- (b) arrangements for ground maintenance in the vicinity of these installations; and
- (c) arrangements for the supply and installation of signs warning of hazardous microwave radiation.
  - *Note 1*. In writing the procedures for each category, clear and precise information should be included on
    - (i) when, or in what circumstances, an operating procedure is to be activated;
    - (ii) how an operating procedure is to be activated;
    - (iii) actions to be taken;
    - (iv) the equipment necessary for carrying out the actions, and access to such equipment.
      - *Note* 2. if any of the procedures specified above are not relevant or applicable, reasons should be given.

# PART 5: AERODROME ADMINISTRATION AND SAFETY MANAGEMENT SYSTEM

#### 1. Aerodrome administration

Particulars of the aerodrome administration, including the following—

(a) an aerodrome organizational chart showing the names and positions of key personnel, including their responsibilities;

- (b) the name, position and telephone number of the person who has overall responsibility for aerodrome safety; and
- (c) airport committees.

## 2. Safety Management System

Particulars of the safety management system established for ensuring compliance with all safety requirements and achieving continuous improvement in safety performance, the essential features being—

- (a) the safety policy, in so far as applicable, on the safety management process and its relation to the operational and maintenance process;
- (b) the structure or organization of the Safety Management System, including staffing and the assignment of individual and group responsibilities for safety issues;
- (c) Safety Management System strategy and planning, such as setting safety performance target, allocating priorities for implementing safety initiative and providing a framework for controlling the risks to as low a level as is reasonably practicable keeping always in view the requirements of the prescribed standards and recommended practice, and regulations;
- (d) Safety Management System implementation, including facilities, methods and procedures for the effective communication of safety messages and the enforcement of safety requirements;
- (e) a system for the implementation of, and action on, critical safety areas which require a higher level of safety management integrity (safety measures programme);
- (f) measures for safety promotion and accident prevention and a system for risk control involving analysis and handling of accidents, incidents, complaints, defects, faults, discrepancies and failures, and continuing safety monitoring;
- (g) the internal safety audit and review system detailing the systems and programmes for quality control of safety;

- (h) the system for documenting all safety-related aerodrome facilities as well as airport operational and maintenance records, including information on the design and construction of aircraft payments and aerodrome lighting. The system should enable easy retrieval of records including charts;
- (i) personnel training and competency, including the review and evaluation of the adequacy of training provided to personnel on safety-related duties and of the certification system for testing their competency; and
- (j) the incorporation and enforcement of safety-related clauses in the contract for construction work at the aerodrome.

#### THIRD SCHEDULE

Regulation 59

# PARTICULARS TO BE INCLUDED IN AN AERODROME MANUAL FOR AERODROMES IN CATEGORIES B AND C.

### PART I: GENERAL

General information, including the following—

- (a) purpose and scope of the aerodrome manual;
- (b) the legal requirement for an aerodrome licence and an aerodrome Handbook as prescribed in the national regulations;
- (c) conditions for use of the aerodrome a statement to indicate that the aerodrome shall at all times, when it is available for the take-off and landing of aircraft, be so available to all persons on equal terms and conditions;
- (d) the available aeronautical information system and procedures for its promulgation;
- (e) the system for recording aircraft movements; and
- (f) obligations of the aerodrome operator.

# PART 2: PARTICULARS OF THE AERODROME SITE

General information, including the following—

- (a) a plan of the aerodrome showing the main aerodrome facilities for the operation of the aerodrome including, particularly, the location of each wind direction indicator;
- (b) a plan of the aerodrome showing the aerodrome boundaries;
- (c) a plan showing the distance of the aerodrome from the nearest city, town or other populous area, and the location of any aerodrome facilities and equipment outside the boundaries of the aerodrome; and

# PART 3: PARTICULARS OF THE AERODROME REQUIRED TO BE REPORTED TO THE AERONAUTICAL INFORMATION SERVICE (AIS)

### 1. General Information

- (a) the name of the aerodrome;
- (b) the location of the aerodrome:
- (c) the geographical coordinates of the aerodrome reference point determined in terms of the World Geodetic System 1984 (WGS-84) reference datum;
- (d) the aerodrome elevation;
- (e) points along the runway, and the highest elevation of the touchdown zone of a precision approach runway;
- (f) the aerodrome reference temperature;
- (h) the name of the aerodrome operator and the address, telephone and facsimile numbers at which the aerodrome operator may be contacted at all times.

#### 2. Aerodrome dimensions and related information

General information, including the following –

- (a) runway true bearing, designation number, length, width, displaced threshold location, slope, surface type, type of runway and, for a precision approach runway, the existence of an obstacle free zone;
- (b) Length, width and surface type of strip;
- (c) apron surface type and aircraft stands;
- (d) one or more pre-flight altimeter check locations established on an apron and their elevation;
- (e) rescue and fire-fighting plan;
  - Note.- the accuracy of the information in this Part is critical to aircraft safety. Information requiring engineering survey and assessment should be gathered or verified by qualified technical persons.

# PART 4: PARTICULARS OF THE AERODROME OPERATING PROCEDURES AND SAFETY MEASURES

## 1. Aerodrome reporting

Particulars of the procedures for reporting any changes to the aerodrome information set out in the AIP and AIC and procedures for requesting the issue of NOTAMs, including the following—

- (a) arrangements for reporting any changes to the Authority and recording the reporting of changes during and outside the normal hours of aerodrome operations;
- (b) the names and roles of persons responsible for notifying the changes, and their telephone numbers during and outside the normal hours of aerodrome operations; and
- (c) the address and telephone and facsimile numbers, as provided by the Authority, of the place where changes are to be reported to the Authority.

### 2. Access to the aerodrome movement area

Particulars of the procedures that have been developed and are to be followed in coordination with the agency responsible for preventing unlawful interference in civil aviation at the aerodrome and for preventing unauthorized entry of persons, vehicles, equipment, animals or other things into the movement area, including the following—

- (a) the role of the aerodrome operator, the aircraft operator, aerodrome fixed-base operator, the aerodrome security entity, the Authority and other government departments, as applicable;
- (b) the personnel responsible for controlling access to the aerodrome, and the telephone numbers for contacting them during and after working hours;
- (c) inspection checklist;
- (d) arrangements for reporting the results of inspections and for taking prompt follow-up actions to ensure correction of unsafe conditions; and
- (e) the names and roles of persons responsible for carrying out inspections, and their telephone numbers during and after working hours.

#### 4. Maintenance of the movement area

Particulars of the facilities and procedures for the maintenance of the movement area, including—

- (a) arrangements for maintaining the unpaved runways and taxiways;
- (b) arrangements for maintaining the runway and taxiway strips; and
- (c) arrangements for the maintenance of aerodrome drainage.

# 5. Aerodrome works – safety

Particulars of the procedures for planning and carrying out construction and maintenance work safely (including work that may have to be carried out at short notice) on or in the vicinity of the movement area which may extend above an obstacle limitation surface, including the following—

- (a) the names, telephone numbers and roles of the persons and organizations responsible for planning and carrying out the work, and arrangements for contacting those persons and organizations at all times;
- (b) a distribution list for work plans, if required.

# 6. Birds and Wildlife Hazard Management

Particulars of the procedures to deal with the danger posed to aircraft operations by the presence of birds or mammals in the aerodrome flight pattern or movement area, including the following—

- (a) arrangements for assessing birds and wildlife hazards;
- (b) arrangements for implementing birds and wildlife control programmes; and
- (c) the names and roles of the persons responsible for dealing with birds and wildlife hazards, and their telephone numbers during and after working hours.

### 7. Obstacle Control

Particulars setting out the procedures for—

- (a) monitoring the obstacle limitation surfaces and Type A Chart for obstacles in the take-off surface:
- (b) controlling obstacles within the authority of the operator;
- (c) monitoring the height of buildings or structures within the boundaries of the obstacle limitation surfaces:
- (d) controlling new developments in the vicinity of aerodromes; and
- (e) notifying the Authority of the nature and location of obstacles and subsequent addition of removal of obstacles for action as necessary, including amendment of the AIS publications.

# 8. Handling of Hazardous Materials

- (1) Particulars of the procedures for the safe handling and storage of hazardous materials on the aerodrome, including the following—
  - (a) arrangements for special areas of the aerodrome to be set up for the storage of inflammable liquids (including aviation fuels) and any other hazardous materials; and
  - (b) the method to be followed for the delivery storage, dispensing and handling of hazardous materials.
- (2) For the purposes of regulation 15 (1) "hazardous materials" include inflammable liquids and solids, corrosive liquids, compressed gases and magnetized or radioactive materials.

# 9. Protection of Sites for Radar and Navigational Aids

Particulars of the procedures for the protection of sites for radar and radio navigational aids located on the aerodrome to ensure that their performance will not be degraded, including the following-

- (a) arrangements for the control of activities in the vicinity of radar and navigational aids installations;
- (b) arrangements for ground maintenance in the vicinity of these installations; and

- (c) arrangements for the supply and installation of signs warning of hazardous microwave radiation.
  - *Note 1.* In writing the procedures for each category, clear and precise information should be included on—
    - (a) when, or in what circumstances, an operating procedure is to be activated;
    - (b) how an operating procedure is to be activated;
    - (c) actions to be taken;
    - (d) the equipment necessary for carrying out the actions, and access to such equipment.
      - *Note* 2. if any of the procedures specified above are not relevant or applicable, the reason should be given.

#### FOURTH SCHEDULE

Regulation 59

# PARTICULARS TO BE INCLUDED IN AN AERODROME MANUAL FOR AERODROMES IN CATEGORY D

### PART I—GENERAL

General information, including the following—

- (a) purpose and scope of the aerodrome manual;
- (b) the legal requirement for an aerodrome licence and an aerodrome Handbook as prescribed in the national regulations;
- (c) conditions for use of the aerodrome a statement to indicate that the aerodrome shall at all times, when it is available for the take-off and landing of aircraft, be so available to all persons on equal terms and conditions;
- (d) the available aeronautical information system and procedures for its promulgation;
- (e) the system for recording aircraft movements; and
- (f) obligations of the aerodrome operator.

### PART 2—PARTICULARS OF THE AERODROME SITE

General information, including the following—

- (a) a plan of the aerodrome showing the main aerodrome facilities for the operation of the aerodrome including, particularly, the location of each wind direction indicator;
- (b) a plan of the aerodrome showing the aerodrome boundaries;
- (c) a plan showing the distance of the aerodrome from the nearest city, town or other populous area, and the location of any aerodrome facilities and equipment outside the boundaries of the aerodrome; and

# PART 3 - PARTICULARS OF THE AERODROME REQUIRED TO BE REPORTED TO THE AERONAUTICAL INFORMATION SERVICE (AIS)

### 1. General Information

- (a) the name of the aerodrome;
- (b) the location of the aerodrome:
- (c) the geographical coordinates of the aerodrome reference point determined in terms of the World Geodetic System 1984 (WGS-84) reference datum;
- (d) the heliport elevation of the touch down and lift off area (TLOF) and or the elevation and geoid undulation of each threshold of the final approach and take off area (FATO);
- (e) FATO type, true bearing, designation number, length, width, slope, surface type;
- (f) safety area: length, width and surface type;
- (g) apron: surface type, helicopter stands and geographical coordinates of specific points;
- (h) declared distances: take off distance available, rejected take off distance availa and landing distance available;
- (i) the aerodrome reference temperature;
- (j) the name of the aerodrome operator and the address, telephone and facsimile numbers at which the aerodrome operator may be contacted at all times;
- (k) maximum allowable mass;
- (l) visual aids available;
- (m) rescue and fire fighting surface and level of protection;
- (n) availability of PAPI, APAPI or helicopter approach PAPI indicator;

# 2. Aerodrome dimensions and related information

General information, including the following—

- (a) dimensions of safety areas, apron, clear way, FATO and TLOF, obstacle limitation surfaces, helideck obstacle-free sector, helideck obstacle limitation sector and approach surface;
- (b) helicopter ground taxiway, air taxiway and air transit route;
- (c) one or more pre-flight altimeter check locations established on an apron and their elevation;
  - Note.- the accuracy of the information in this Part is critical to aircraft safety. Information requiring engineering survey and assessment should be gathered or verified by qualified technical persons.

# PART 4—PARTICULARS OF THE AERODROME OPERATING PROCEDURES AND SAFETY MEASURES

## 1. Aerodrome reporting

Particulars of the procedures for reporting any changes to the aerodrome information set out in the AIP and AIC and procedures for requesting the issue of NOTAMs, including the following—

- (a) arrangements for reporting any changes to the Authority and recording the reporting of changes during and outside the normal hours of aerodrome operations;
- (b) the names and roles of persons responsible for notifying the changes, and their telephone numbers during and outside the normal hours of aerodrome operations; and
- (c) the address and telephone and facsimile numbers, as provided by the Authority, of the place where changes are to be reported to the Authority.

#### 2. Access to the aerodrome movement area

Particulars of the procedures that have been developed and are to be followed in coordination with the agency responsible for preventing unlawful interference in civil aviation at the aerodrome and for preventing unauthorized entry of persons, vehicles, equipment, animals or other things into the movement area, including the following—

(a) the role of the aerodrome operator, the aircraft operator, aerodrome fixed-base operator, the aerodrome security entity, the Authority and other government departments, as applicable;

- (b) the personnel responsible for controlling access to the aerodrome, and the telephone numbers for contacting them during and after working hours;
- (c) inspection checklist;
- (d) arrangements for reporting the results of inspections and for taking prompt follow-up actions to ensure correction of unsafe conditions;
   and
- (e) the names and roles of persons responsible for carrying out inspections, and their telephone numbers during and after working hours.

#### 4. Maintenance of the movement area

Particulars of the facilities and procedures for the maintenance of the movement area, including—

- (a) arrangements for maintaining the unpaved areas and taxiways;
- (b) arrangements for maintaining the FATO and TLOF; and
- (c) arrangements for the maintenance of aerodrome drainage.

# 5. Aerodrome works – safety

Particulars of the procedures for planning and carrying out construction and maintenance work safely (including work that may have to be carried out at short notice) on or in the vicinity of the movement area which may extend above an obstacle limitation surface, including the following—

- (a) the names, telephone numbers and roles of the persons and organizations responsible for planning and carrying out the work, and arrangements for contacting those persons and organizations at all times;
- (b) a distribution list for work plans, if required.

# 6. Obstacle Control

Particulars setting out the procedures for—

- (a) monitoring the obstacle limitation surfaces;
- (b) controlling obstacles within the authority of the operator;
- (c) monitoring the height of buildings or structures within the boundaries of the obstacle limitation surfaces;

- (d) controlling new developments in the vicinity of aerodromes; and
- (f) notifying the Authority of the nature and location of obstacles and subsequent addition of removal of obstacles for action as necessary, including amendment of the AIS publications.

# 7. Protection of Sites for Radar and Navigational Aids

Particulars of the procedures for the protection of sites for radar and radio navigational aids located on the aerodrome to ensure that their performance will not be degraded, including the following—

- (a) arrangements for the control of activities in the vicinity of radar and navigational aids installations;
- (b) arrangements for ground maintenance in the vicinity of these installations; and
- (c) arrangements for the supply and installation of signs warning of hazardous microwave radiation.
  - Note 1. In writing the procedures for each category, clear and precise information should be included on—
    - (a) when, or in what circumstances, an operating procedure is to be activated;
    - (b) how an operating procedure is to be activated;
    - (c) actions to be taken;
    - (d) the equipment necessary for carrying out the actions, and access to such equipment.
      - *Note* 2. if any of the procedures specified above are not relevant or applicable, the reason should be given.

#### FIFTH SCHEDULE

Regulation 120

### AERODROME DATA

# 1. Aerodrome geographical coordinates

Geographical coordinates indicating latitude and longitude for ground positions at aerodromes shall be determined and reported in World Geodetic System – 1984 geodetic reference datum.

# 2. Aerodrome reference point

- (1) An aerodrome reference point shall be established for an aerodrome.
- (2) The aerodrome reference point shall be located near the initial or planned geometric centre of the aerodrome and shall normally remain where first established.
- (3) The position of the aerodrome reference point shall be measured and reported in degrees, minutes and seconds.

# 3. Aerodrome and runway elevations

The aerodrome elevation and geoid undulation at the aerodrome shall be measured and reported in accordance with specifications prescribed in the Manual of Aerodrome Standards.

# 4. Aerodrome reference temperature

- (1) An aerodrome reference temperature shall be determined for an aerodrome in degrees Celsius.
- (2) The aerodrome reference temperature should be the monthly mean of the daily maximum temperatures for the hottest month of the year (the hottest month being, that which has the highest monthly mean temperature). This temperature should be averaged over a period of years.

### 5. Aerodrome dimensions and related information

- (1) The following data shall be measured or described, as appropriate, for each facility provided on an aerodrome—
  - (a) runway true bearing to one-hundredth of a degree, designation number, length, width, displaced threshold location to the nearest

- metre, slope, surface type, type of runway and, for a precision approach runway category I, the existence of an obstacle free zone when provided;
- (b) strip, runway end safety area, stopway length, width to the nearest metre, surface type;
- (c) taxiway designation, width, surface type;
- (d) apron surface type, aircraft stands;
- (e) the boundaries of the air traffic control service;
- (f) clearway length to the nearest metre, ground profile;
- (g) visual aids for approach procedures, marking and lighting of runways, taxiways and aprons, other visual guidance and control aids on taxiways and aprons, including runway-holding positions and stop bars, and location and type of visual docking guidance systems;
- (h) location and radio frequency of any VOR aerodrome check-point;
- (i) location and designation of standard taxi-routes; and
- (j) distances to the nearest metre of localizer and glide path elements comprising an instrument landing system or azimuth and elevation antenna of microwave landing system in relation to the associated runway extremities.
- (2) The geographical coordinates of each threshold, appropriate taxiway centre line points and each aircraft stand shall be measured and reported in degrees, minutes, seconds and hundredths of seconds.
- (3) The geographical coordinates of significant obstacles in the approach and take-off areas, in the circling area and in the vicinity of an aerodrome shall be measured and reported in degrees, minutes, seconds and tenths of seconds, and in addition, the top elevation rounded up to the nearest metre, type, marking and lighting (if any) of the significant obstacles shall be reported.

# 6. Strength of pavements

The bearing strength of a pavement at an aerodrome shall be determined and reported using guidelines prescribed by the Authority in the Manual of Aerodrome Standards.

# 7. Pre-flight altimeter check location

- (1) One or more pre-flight altimeter check locations shall be established for the aerodrome.
  - (2) A pre-flight check location shall be located on an apron.
    - Note 1— Locating a pre-flight altimeter location on an apron enables an altimeter check to be made prior to obtaining taxi clearance and eliminates the need for stopping for that purpose after leaving the apron.
    - Note 2– Normally an entire apron can serve as a satisfactory altimeter check location.
- (3) The elevation of a pre-flight altimeter check location shall be given as the average elevation, rounded to the nearest metre, of the area on which it is located. The elevation of any portion of a pre-flight altimeter check location shall be within 3m of the average elevation for that location.

#### 8. Declared distances

The following distances shall be calculated to the nearest metre for a runway intended for use by international commercial air transport—

- (a) take-off run available;
- (b) take-off distance available;
- (c) accelerate-stop distance available; and
- (d) landing distance available.

#### 9. Condition of the movement area and related facilities

- (1) An operator shall provide information on the condition of the movement area and the operational status of related facilities in accordance with the requirements specified in the Manual of Aerodrome Standards including information of operational significance to the air traffic service units without delay.
- (2) The condition of the movement area and the operational status of related facilities shall be monitored, and reports on matters of operational significance affecting aircraft and aerodrome operations shall be provided in order to take appropriate action, particularly in respect of the following—

- (a) construction or maintenance work;
- (b) rough or broken surfaces on a runway, taxiway or an apron;
- (c) water on a runway, a taxiway or an apron;
- (d) other temporary hazards, including parked aircraft;
- (e) failure or irregular operation of part of all of the aerodrome visual aids; and
- (f) failure of the normal or secondary power supply.
- (3) To facilitate compliance with rules (1) and (2), inspections of the movement area shall be carried out each day at least once where the aerodrome code number is 1 or 2 and at least twice where the aerodrome code number is 3 or 4.
- (4) The presence of water on a runway including a description of the runway surface conditions and the water depth, where applicable, shall be reported using the following terms—
  - (a) damp the surface shows a change of colour due to moisture.
  - (b) wet the surface is soaked but there is no stagnant water.
  - (c) 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. Note Guidance on determining and expressing the minimum friction level of a runway is provided in the Manual of Aerodrome Standards.

#### 10. Disabled aircraft removal

- (1) The telephone and fax number(s) of the officer of the aerodrome responsible for the coordination of operations for the removal of an aircraft disabled on or adjacent to the movement area shall be made available to aircraft operators.
- (2) The operator shall provide information concerning the capability to remove an aircraft disabled on or adjacent to the movement area.
- Note The capability to remove a disabled aircraft may be expressed in terms of the largest type of aircraft which the aerodrome is equipped to remove.

# 11. Rescue and fire fighting

- (1) Information concerning the level of protection provided for aircraft rescue and fire fighting purposes shall be made available.
- (2) The level of protection normally available at the aerodrome shall be expressed in terms of the category of the rescue and fire fighting services and in accordance with the types and amounts of extinguishing agents normally available at the aerodrome.
- (3) An operator shall notified to the air traffic services unit and the Aeronautical Information Services significant changes in the level of protection normally available at an aerodrome for rescue and fire fighting to enable those units to provide the necessary information to arriving and departing aircraft and shall advise those units when such a change has been corrected.
- Note A significant change in the level of protection is considered to be a change in the category of the rescue and fire fighting service from the category normally available at the aerodrome, resulting from a change in availability of extinguishing agents, equipment to deliver the agents or personnel to operate the equipment, etc. A report of a significant change should include the new category of the rescue and fire fighting service available at the aerodrome.

# 12. Visual approach slope indicator systems

An operator shall provide information concerning the status of the visual approach slope indicator system installed at the aerodrome including—

- (a) associated runway designation number;
- (b) type of system for an AT-VASIS, PAPI or APAPI installation, the side of the runway on which the lights are installed, i.e. left or right, shall be given;
- (c) where the axis of the system is not parallel to the runway centre line, the angle of displacement and the direction of displacement, i.e. left or right shall be indicated;
- (d) nominal approach slope angle(s). (For a T-VASIS or an ATVASIS this shall be angle? and for a PAPI and an APAPI this shall be angle (B+C)/2 and (A+B)/2, respectively); and

(e) minimum edge height(s) over the threshold of the on-slope signal(s). For a T-VASIS or an AT-VASIS this shall be the lowest height at which only the wing bar(s) are visible; however, the additional heights at which the wing bar(s) plus one, two or three fly down light units come into view may also be reported if such information would be of benefit of aircraft using the approach. For a PAPI, this shall be the setting angle of the third unit from the runway minus 2', i.e. angle B minus 2', and for an APAPI this shall be the setting angle of the unit farther from the runway minus 2', i.e. angle A minus 2'.

# 13. Coordination between the operator and the Aeronautical Information Services

- (1) To ensure that the Aeronautical Information Services obtain information to enable them to provide up-to-date pre-flight information and to meet the need for in-flight information, the operator shall establish arrangements with the Aeronautical Information Services to report, with a minimum of delay—
  - (a) information on aerodrome conditions;
  - (b) the operational status of associated facilities, services and navigation aids within their area of responsibility;
  - (c) any other information considered to be of operational significance.
- (2) Before introducing changes to the air navigation system, due account shall be taken by the operator of the time needed by the Aeronautical Information Services for the preparation, production and issue of relevant material for promulgation. To ensure timely provision of information to the Aeronautical Information Services, close coordination between those services concerned is therefore required.
- (3) Of a particular importance are changes to aeronautical information that affects charts and/or computer-based navigation systems which qualify to be notified by the aeronautical information regulation and control system. The pre-determined internationally agreed aeronautical information regulation and control effective dates in addition to fourteen days postage time shall be observed by the responsible operator when submitting the raw information/data to the Aeronautical Information Services.

(4) The operator responsible for the provision of raw aeronautical information/data to the Aeronautical Information Services shall do that while taking into account specified accuracy and integrity requirements for aeronautical data.

ABRAHAM BYANDALA, Minister of Works and Transport.