# GHANA CIVIL AVIATION (AERODROMES) DIRECTIVES



# PART 25 -REGISTRTION OF AERODROMES

**NOVEMBER 2018** 

# Part 25

# REGISTRATION OF AERODROMES AND OPERATIONS OF CERTAIN OTHER AERODROMES

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#### SUBPART A - GENERAL

#### 25.1 APPLICABILITY

This part applies in respect of all aerodromes except certified airports, heliports and military aerodromes.

#### 25.2 DEFINITIONS

The following are definitions of terms used in this part:

**Accuracy.** A degree of conformance between the estimated or measured value and the true value.

a. Note - For measured positional data the accuracy is normally expressed in terms of a distance from a stated position within which there is a defined confidence of the true position falling.

**Aerodrome.** A defined area on land or water (including any buildings, installations, and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft.

**Aerodrome Authorization.** An authorisation issued by the Authority under part 32 of the GCAD for air operations into uncertified aerodrome or aerodromes that do not meet the full requirements for certification.

**Aerodrome beacon.** Aeronautical beacon used to indicate the location of an aerodrome from the air.

**Aerodrome Operating Certificate** means a certificate, issued under this part, for operation of a Class I, II, III, or IV airport.

**Aerodrome elevation.** The elevation of the highest point of the landing area.

**Aerodrome reference point.** The designated geographical location of an aerodrome.

# Aerodrome traffic density.

- (i) Light. Where the number of movements in the mean busy hour is not greater than 15 per runway or typically less than 20 total aerodrome movements.
- (ii) Medium. Where the number of movements in the mean busy hour is of the order of 16 to 25 per runway or typically between 20 to 35 total aerodrome movements.
- (iii) Heavy. Where the number of movements in the mean busy hour is of the order of 26 or more per runway or typically more than 35 total aerodrome movements
- Note 1 The number of movements in the mean busy hour is the arithmetic mean over the year of the number of movements in the daily busiest hour.
- Note 2 Either a take-off or a landing constitutes a movement.

**Aeronautical beacon.** 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.** Any light specially provided as an aid to air navigation, other than a light displayed on an aircraft.

**Aeroplane reference field length.** The minimum field length required for take-off at maximum certificated take-off mass, sea level, standard atmospheric conditions, still air and zero runway slope, as shown in the appropriate aeroplane flight manual prescribed by the certificating Authority or equivalent data from the aeroplane manufacturer. Field length means balanced field length for aeroplanes, if applicable, or take-off distance in other cases.

**Air Operator or Air carrier** means — a person who undertakes directly by lease, or other arrangement, to engage in air transportation. This includes an individual, firm, partnership, corporation, company, association, governmental entity, and a trustee, receiver, assignee, or similar representative of such entities

**Aircraft classification number (ACN).** A number expressing the relative effect of an aircraft on a pavement for a specified standard subgrade category.

Note - The aircraft classification number is calculated with respect to the centre of gravity (CG) position which yields the critical loading on the critical gear. Normally the aft most CG position appropriate to the maximum gross apron (ramp) mass is used to calculate the ACN. In exceptional cases the forward most CG position may result in the nose gear loading being more critical.

**Aircraft emergency.** A situation that could result in damage to an aircraft at an airport or aerodrome or injury to the persons on board the aircraft.

**Aircraft stand.** A designated area on an apron intended to be used for parking an aircraft.

**Air Operator Aircraft** — an aircraft that is being operated by an air carrier and is categorized, as determined by the aircraft type certificate issued by a competent civil aviation Authority, as;

- (a) large air operator aircraft if designed for at least 51 passenger seats or
- (b) **medium air operator aircraft** if designed for at least 31 passengers but less than 51 passengers
- (c) **small air operator aircraft** if designed for more than 9 passenger seats but less than 31 passenger seats.

**Air operations area (AOA)** means that portion of an airport property, specified as the restricted area consisting of taxiways and runways and property adjacent thereto now or hereafter posted or fenced with signs designating the boundaries of and warning against entry into such air operations area.

**Aircraft operation** means the take-off or landing of an aircraft and includes the period of time from 15 minutes before until 15 minutes after the take-off or landing.

**Airport** means an area of land or other hard surface, excluding water that is used or intended to be used for the landing and take-off of aircraft, including

any buildings and facilities. In this part "airport" and "aerodrome" are used interchangeably.

**Airport emergency.** Any occasion or instance, natural or man-made, that warrants action to save lives and protects property and public health.

**Airport Emergency Plan**. The Airport Emergency Plan (AEP) addresses those emergencies that occur on, or directly impact, an airport or adjacent property that:

- (a) is within the Authority and responsibility of the airport to respond; or
- (b) may present a threat to the airport because of the proximity of the emergency to the airport.

**Apron.** A defined area, on a land aerodrome, intended to accommodate air cr aft for purposes of loading or unloading passengers, mail or cargo, fuelling, parking or maintenance.

**Apron management service.** A service provided to regulate the activities and the movement of aircraft and vehicles on an apron

**Average daily departures** means the average number of scheduled departures per day of aircraft computed on the basis of the busiest 3 consecutive calendar months of the immediately preceding 12 consecutive calendar months. However, if the average daily departures are expected to increase, then "average daily departures" may be determined by planned rather than current activity, in a manner authorized by the Director - General.

**Category** means the type of rescue and firefighting equipment and quantity of fire extinguishing agent that an aerodrome operator shall provide in accordance with subpart E of this part.

**Certificate holder** means the holder of an Aerodrome Operating Certificate issued under this part.

**Certificated aerodrome means** an aerodrome which has successfully undergone aerodrome certification process and has been issued with Aerodrome Operating Certificate in accordance with GCAD Part 32. The certificate shall be in force at a defined time for the validity to be recognised.

# Class of Aerodrome

- (a) **Class I Aerodrome** an aerodrome certificated to serve all categories of aircraft engaged in scheduled and unscheduled passenger operations.
- (b) **Class II Aerodrome** an aerodrome certificated to serve scheduled passenger operations of up to medium aircraft and all categories of unscheduled passenger operations. Class II aerodrome cannot serve scheduled passenger operations of large aircraft.
- (c) **Class III Aerodrome** an aerodrome certificated to serve scheduled operations of small aircraft and unscheduled operations of medium aircraft. A Class III aerodrome cannot serve scheduled operations of medium aircraft or unscheduled large aircraft.
- (d) **Class IV Aerodrome** an aerodrome certificated to serve unscheduled large aircraft. A Class IV aerodrome cannot serve scheduled large or small aircraft.

**Certified aerodrome**. An aerodrome whose operator has been granted an aerodrome certificate.

Clean agent means an electrically non-conducting volatile or gaseous fire

extinguishing agent that does not leave a residue upon evaporation.

**Clearway.** A defined rectangular area on the ground or water under the control of the appropriate Authority, selected or prepared as a suitable area over which an aeroplane may make a portion of its initial climb to a specified height.

**Datum.** Any quantity or set of quantities that may serve as a reference or basis for the calculation of other quantities

#### Declared distances.

- (a) *Take-off run available (TORA)*. The length of runway declared available and suitable for the ground run of an aeroplane taking off.
- (b) *Take-off distance available (TODA).* The length of the take-off run available plus the length of the clearway, if provided.
- (c) *Accelerate-stop distance available (ASDA).* The length of the take-off run available plus the length of the stopway, if provided.
- (d) Landing distance available (LDA). The length of runway which is declared available and suitable for the ground run of an aeroplane landing.

**Firefighting category of** an aerodrome means its category worked out by the method set out in the Ghana civil Aviation (Aerodromes) Directives.

**Fixed base operator (FBO)** defines as a commercial business granted the right by the airport operator to operate on an airport and provide aeronautical services such as fueling, hangaring, tie-down and parking, aircraft rental, aircraft maintenance, flight instruction, etc.

**Frangible object.** An object of low mass designed to break, distort or yield on impact so as to present the minimum hazard to aircraft.

**Heliport** means an airport, or an area of an airport, used or intended to be used for the landing and take-off of helicopters

**Landing area.** That part of a movement area intended for the landing or take-off of aircraft.

**Low Visibility Procedures** means a set of procedures agreed between an aerodrome operators and ATC to support a desired movement rate in order that operations can continue safely.

**Manual of Standards refers** to Part 14 of the Ghana Civil Aviation Aerodromes Directives.

**Manoeuvring area.** That part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, excluding aprons.

**Movement area.** That part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, consisting of the manoeuvring area and the apron(s).

**Obstacle.** All fixed (whether temporary or permanent) and mobile objects, or parts thereof, that are located on an area intended for the surface movement of aircraft or that extend above a defined surface intended to protect aircraft in flight.

**RFFS operation** means an operation undertaken in carrying out a function mentioned in Part 32 of GCADs.

**RFFS provider** for an aerodrome means the person or organization that provides RFFS for the aerodrome.

**Runway.** A defined rectangular area on a land aerodrome prepared for the landing and take-off of aircraft.

**Runway end safety area (RESA).** An area symmetrical about the extended runway centre line and adjacent to the end of the strip primarily intended to reduce the risk of damage to an aeroplane undershooting or overrunning the runway.

**Safety area** means a defined area comprised of either a runway or taxiway and the surrounding surfaces that is prepared or suitable for reducing the risk of damage to aircraft in the event of an undershoot, overshoot, or excursion from a runway or the unintentional departure from a taxiway.

**Scheduled operation** means any passenger-carrying operation for compensation or hire conducted for which air operator or its representatives offers in advance the departure location, departure time, and arrival location. It does not include any operation that is conducted as a supplemental operation under GCAD part 10 or public charter operations.

Note: Special Statutory Requirement to Operate to or from a Certificated Aerodrome. Each air operator that provides—in an aircraft designed for more than 9 passenger seats—regularly scheduled charter air transportation for which the public is provided in advance a schedule containing the departure location, departure time, and arrival location of the flight shall operate to and from a Certificated aerodrome under this part of the GCAD.

**Unscheduled operation** means any passenger-carrying operation for compensation or hire, using aircraft designed for at least 31 passenger seats, conducted by an air operator for which the departure time, departure location, and arrival location are specifically negotiated with the customer or the customer's representative. It includes any passenger-carrying supplemental operation conducted under GCAD part 10 and any passenger-carrying public charter operation.

**Unserviceable area** means a part of the movement area that is unavailable for use by aircraft.

**Wildlife hazard** means a potential for a damaging aircraft collision with wildlife on or near an airport. As used in this part, `wildlife' includes feral animals and domestic animals out of the control of their owners

**Works area** means a part of the aerodrome in which maintenance or construction works are in progress that may endanger the safety of aircraft

#### 25.3 ACRONYMS

The following acronyms are used in this Part—

AGL - Above Ground Level

AOC - Aerodrome Operating Certificate

AOM - Aerodrome Operations Manual

ATC - Air Traffic Control

Authority- Ghana Civil Aviation Authority

CAT - Category

DGCA- Director - General of Ghana Civil Aviation Authority

Ft. - Feet

GCADs - Ghana Civil Aviation Directives

ICAO - International Civil Aviation Organisation

IFR - Instrument Flight Rules

IMC - Instrument Meteorological Conditions

LOC - Localizer

LVO - Low Visibility Operations

LVP - Low Visibility Procedures

Kph – Kilometres per Hour

Km - Kilometre

m - Meter

MOS - Manual of Standards

MSL - Mean Sea Level

Nm - Nautical Mile NOTAM

- Notice to Airmen

PBE - Protective Breathing Equipment

RVR - Runway Visibility Range

sm - Statute Miles

SMS - Safety Management System

VFR – Visual Flight Rules

VMC - Visual Meteorological Conditions

#### 25.4 INSPECTION AUTHORITY

- (1) The operator of an aerodrome shall, without charge, at the request of an Authority Aviation Safety Inspector, allow the AUTHORITY unlimited, unrestricted and unimpeded access and provide the equipment necessary to conduct any inspections, including unannounced inspections, or conduct tests of aerodrome facilities, equipment or operating procedures at the aerodrome to determine compliance with the Ghana Civil Aviation Act and applicable parts of the GCADs for the purpose of ensuring the safety of aircraft.
- (2) Each aerodrome operator shall allow the AUTHORITY access to any part of the aerodrome or any aerodrome facilities, equipment or records for the purposes of paragraph (1).
- (3) Each aerodrome operator shall allow the AUTHORITY to conduct special inspections to ensure aviation safety:
  - (a) As soon as practicable after any aircraft accident or incident within the meaning of these terms defined in GCADs Part 35.
  - (b) During the period of construction or repair of the aerodrome facilities or equipment that is critical to the safety of aerodrome operation; and
  - (c) At any other aerodrome conditions that could affect aviation safety.
- (4) Subject to (1) under this paragraph, the AUTHORITY shall delegate aviation safety inspectors to conduct safety inspections or authorise approved persons

To do so on its behalf.

- (5) The AUTHORITY;
  - (a) shall give reasonable notice of any tests to be conducted to the operator; and
  - (b) Shall carry out the tests at a reasonable time.
- (6) Where unannounced inspections are to be conducted by the AUTHORITY, subparagraph (5) (a) under this paragraph does not apply.

#### 25.5 EXEMPTIONS

- (1) An applicant or a certificate holder may petition the Authority for an exemption from any requirement of this part if deemed necessary for the operation of airport providing that equivalent safety measure is ensured.
- (2) The findings of the risk assessment shall indicate that the existing level of risk is within the acceptable levels or identify the appropriate practical solutions whereby an equivalent level of safety can be attained, bearing in mind the safety objective of the aerodrome certification Directives and the applicable standards so that the intent of the Directives is not circumvented.
- (3) Each petition filed under this section shall be submitted in duplicate to the Authority in the form and manner acceptable to the Director General.
- (4) The Authority may, by instrument, exempt an aerodrome operator from compliance with specified provisions of this Part or specified standards set out in the Part 14.
- (5) Before exempting an aerodrome operator, THE AUTHORITY shall take into account any relevant considerations relating to the interests of the safety of air navigation.
- (6) THE AUTHORITY's approval on an exemption shall not relieve the Aerodrome Operator from his full responsibility for providing safe operating environment for aircraft using the aerodrome and all other activities on the aerodrome.
- (7) An exemption is subject to the operator complying with any conditions and procedures that THE AUTHORITY specifies in the instrument as being necessary in the interests of the safety of air navigation and any such exemption may be granted subject to conditions and with or without limit of time and may be revoked by a certificate in writing at any time.
- (8) The operator shall comply with a condition specified in the instrument.
- (9) If the Authority gives the operator an exemption in accordance with paragraph (1) of this section relation to the aerodrome, the operator shall provide the following information in the Aerodrome Operations Manual:
  - (a) any identifying number given to the exemption by THE AUTHORITY; and
  - (b) the date on which the exemption came into effect; and
  - (c) Any condition subject to which the exemption is granted.
- (10) The Authority may exempt an applicant or a certificate holder that enplanes

annually less than 1 percent of the total number of passengers enplaned at all airports operating scheduled operations from all, or part, of the rescue and firefighting equipment requirements of this part on the grounds that compliance with those requirements is, or would be, unreasonably costly, burdensome, or impractical.

- (11) Each petition filed under this section shall -
  - (a) Be submitted in writing at least one hundred and twenty (120) working days before the proposed effective date of the exemption;
  - (b) Explain the interest of the certificate holder in the action requested, including the nature and extent of relief sought; and
  - (c) Contain information, views, or arguments that demonstrate that the requirements of a section of this part being sought would be unreasonably costly, burdensome, or impractical.
- (12)Information, views, or arguments provided under subparagraph (11)(c) of this section shall include the following information pertaining to the airport for which the Aerodrome Registration Certificate is held:
  - (a) An itemized cost to comply with the requirement from which the exemption is sought;
  - (b) Current staffing levels;
  - (c) The current annual financial report, such as a single audit report or Operating and Financial Summary;
  - (d) Annual passenger enplanement data for the previous 12 calendar months;
  - (e) The type and frequency of aircraft operations served;
  - (f) A history of air operator service;
  - (g) Anticipated changes to air operator service;

### 25.6 DEVIATIONS

- (1) This provision shall be applicable if a deviation is made from a procedure set out in the Aerodrome Operations Manual in emergency conditions requiring immediate action for the protection of life, property, or safety of aircraft, to the extent required to meet that emergency.
- (2) The operator of aerodrome who deviates from the procedure set out in the Aerodrome Operations Manual and the requirement under this section shall, within fourteen (14) working days after the deviation was made, notify the AUTHORITY, in writing, of the nature, extent, and duration of the deviation.
- (3) An offence against paragraph (2) is an offence of strict liability.

#### 25.7 PERSONNEL

The operator of an aerodrome shall:

- (a) Maintain sufficient qualified personnel to comply with the requirements of its Aerodrome Operations Manual and the applicable rules of this part.
- (b) Equip personnel with sufficient resources needed to comply with the requirements of this part.
- (c) Where the Director General, has prescribed a competency certification requirement for the personnel referred to in sub paragraph (a), the Aerodrome Registration Certificate holder shall employ only those persons possessing such certificates.

#### 25.8 EXPENSES

Any expense incurred by reason of anything done during the course of investigations, approval procedures, supervision, certification, inspections or any other reason which requires the intervention of the Ghana Civil Aviation Authority in connection with an airport, their personnel, any of their equipment, or any services performed there, shall be paid by and be recoverable from the holder of the respective Aerodrome Registration Certificate of approval.

# 25.9 CONFLICTING DIRECTIVES

Where there exists a conflict between any of the Directives or limitations prescribed in this part and any other Directives applicable to the same area, whether the conflict is with respect to the height of structure or trees, and the use of land, or any other matter, the more stringent limitation or requirement that ensures higher margin of safety shall govern and prevail.

# 25.10 AERODROMES WITH NON-PRECISION APPROACH RUNWAYS

- (1) A person shall not operate an aerodrome to which paragraph (3) applies if the aerodrome is not a certified aerodrome or a registered aerodrome.
- (2) An offence against paragraph (1) is an offence of strict liability.
- (3) This paragraph applies to an aerodrome that:
  - (a) is available for public use; and
  - (b) Has a non-precision approach runway.

#### 25.11 GENERAL STANDARDS, METHODS AND PROCEDURES FOR COMPLIANCE

- (1) Aerodrome operators affected by this part of the Aerodrome Directives shall comply with requirements prescribed by this part in a manner authorized by the Director General.
- (2) The standards for aerodromes are those set out in Part 14. Methods and procedures for compliance with this part that are acceptable to the Director-

General are contained in Part 14 and related Publications by the Authority.

#### SUBPART B - AERODROME REGISTRATION CERTIFICATE

#### 25.12 GENERAL REQUIREMENTS

- (1) A person shall not operate an aerodrome to which subparagraph (3) applies if the aerodrome is not a registered aerodrome.
- (2) An offence against subparagraph (1) is an offence of strict liability.
- (3) This paragraph applies to the following aerodrome:
  - (a) Aerodrome available for use by flights engaged in commercial operations but are not required to be certified under GCAD Part 24.
  - (b) Heliport available for use by flights engaged in private charter operations

Note: A person shall not operate an aerodrome that is available for public use and has a non-precision approach runway if the aerodrome is not a certified aerodrome or a registered aerodrome.

- (4) The requirement of this section does not apply in respect of:
  - (a) a military aerodrome; or
  - (b) a land aerodrome where the Director General has issued a written authorization for each air
  - (c) operator in accordance with Part 32 of Ghana Civil Aviation Aerodromes Directives, using the aerodrome to land at and take- off from the aerodrome.
  - (d) Military portion of a joint or shared use aerodrome.
  - (e) aerodrome that is solely available for ultralights operations
  - (f) Aerodromes engaged in private non-commercial operations.

# 25.13 APPLICATION FOR REGISTRATION OF AERODROME

(1) The operator of an aerodrome to which paragraph 25.5 applies shall apply to THE AUTHORITY for registration of the aerodrome.

Note: A person shall not operate an aerodrome that is available for public use and has a non-precision approach runway if the aerodrome is not a certified aerodrome or a registered aerodrome.

(2) Each applicant for an aerodrome registration certificate shall submit an

Expression of interest and formal application and in a manner acceptable by the Director - General, and submit withit:

- (i) Two copies of an Aerodrome Operations Manual, as appropriate, prepared in accordance with 25.14 of this part; and
- (ii) A payment of the appropriate application fee prescribed by related Directives;
- (iii) Evidence of lawful entitlement to use the place as an airport;
- (iv) A plan of the airport and its facilities certified by a registered surveyor.
- (v) Possessing a third party insurance policy acceptable to the Director General, or his designee.
- (vi) A written statement, signed by a person approved under paragraph 25.24 to the effect that:
  - i. the person has conducted a technical safety inspection of the aerodrome; and
  - ii. the aerodrome meets the applicable standards referred to in 25.11 for registered aerodromes and is safe for operation
- (vii) Two copies of Safety Management System Manual for acceptance prior to granting the Aerodrome Registration Certificate.

#### 25.14 AERODROME OPERATIONS MANUAL

- (1) The operator of a registered aerodrome shall have an Aerodrome Operations Manual, in accordance with 25.14 (2).
- (2) The Manual shall -
  - (a) have the approval of the Authority;
  - (b) be in printed form and signed by the certificate holder acknowledging the certificate holder's responsibility to operate the airport in compliance with the Aerodrome Operations Manual approved by the Authority; and
  - (c) be in a form that is easy to revise and organized in a manner helpful to the preparation, review, and approval processes, including a revision log. In addition, each page or attachment shall include the date of the Authority's initial approval or approval of the latest revision.
- (3) The manual shall contain -
  - (a) elements required under Appendix I of this part; and
  - (b) methods and procedures for complying with the requirement of this part
  - (c) any other information the Authority directs the operator to include in its manual
- (4) Each holder of an Aerodrome Registration Certificate shall—

- (a) Keep its Aerodrome Operations Manual current at all times;
- (b) Maintain at least one complete and current copy of its approved Aerodrome Operations Manual on the aerodrome, which will be available to authorized persons during normal business hours and also for inspection by the Authority; and
- (c) Furnish the applicable portions of the approved Aerodrome Operations Manual to airport personnel responsible for its implementation.
- (5) Each certificate holder shall ensure that the Authority is provided a complete copy of its most current approved Aerodrome Operations Manual, as specified under paragraph (4)(b) of this section, including any amendments approved by the Authority.
- (6) Strict liability applies to the physical element of an offence against paragraph (1) that the operator is required to have an Aerodrome Operations Manual for the aerodrome.
- (7) An offence against paragraph (4) or (5) is an offence of strict liability.

# 25.15 REFUSAL TO REGISTER AERODROME

- (1) The Director General may refuse to register an aerodrome where the Operator of the aerodrome does not meet the requirements of paragraphs 25.20 to 25.60 or where using the aerodrome is likely to be hazardous to aviation safety and, in such a case, shall not publish information with respect to that aerodrome.
- (2) If the Authority refuses to register an aerodrome, the Authority shall give the operator of the aerodrome written notice of the refusal and the reasons for it.

# 25.16 DURATION OF REGISTRATION

- (1) The registration of an aerodrome remains in force unless it is cancelled.
- (2) However, the registration is not in force during any period in which it is suspended.
- (3) Annual safety inspections shall be conducted by credentialed Aviation Safety Inspectors or an approved designated person (s) in accordance with 25.25.
- (4) Fees shall be charged annually for safety inspections.

# 25.17 CANCELLATION OF REGISTRATION ON REQUEST

- (1) If the operator of a registered aerodrome wishes the registration of the aerodrome to be cancelled, the operator shall give the Authority not less than thirty (30) working days' written notice of the date on which the operator wishes the registration to be cancelled.
- (2) The Authority shall cancel the registration on the date specified in the notice and arrange for:

- (a) the cancellation to be notified in NOTAMS; and
- (b) details of the registration and any other information about the aerodrome to be removed from AIP.

#### 25.18 SUSPENSION OR CANCELLATION OF REGISTRATION BY THE AUTHORITY

- (1) The Authority may, by written notice given to the operator of a registered aerodrome, suspend or cancel the registration of the aerodrome if there are reasonable grounds for believing that:
- (a) the aerodrome fails to meet any of the standards applicable to the aerodrome under paragraph 25.11; or
- (b) the operator of the aerodrome has failed to comply with Directive 25.4, 25.13, or 25.14; or
- (c) where conditions of paragraph 25.15 (1) exist.
- (2) Before suspending or cancelling the registration of an aerodrome, the Authority shall:
  - (a) give to the operator a show cause notice that:
    - (i) sets out the facts and circumstances that, in the opinion of the Authority, would justify the suspension or cancellation; and
    - (ii) invites the operator to show cause, in writing, within thirty (30) working days after the date of the notice, why the registration should not be suspended or cancelled; and
    - (iii) take into account any written submissions that the operator makes to the Authority within the time allowed under subparagraph (a)(ii).

#### 25.19 APPLICABLE STANDARDS FOR REGISTERED AERODROMES

The standards applicable to registered aerodromes are:

- (a) the standards applicable to certified aerodromes in relation to the following matters:
  - (i) physical characteristics of the movement area;
  - (ii) obstacle limitation surfaces;
  - (iii) aerodrome markings;
  - (iv) lighting;
  - (v) wind direction indicators;
  - (vi) Signal area, signal circle and ground signals; and
- (b) any other standards set out in the Directive that are applicable to registered aerodromes.

(c) any other matter referred to in Part 14

#### SUBPART C - OPERATIONS AND MAINTENANCE OF REGISTERED AERODROME

#### 25.20 GENERAL

The operator of a registered aerodrome shall ensure that the aerodrome is operated and maintained with a reasonable degree of care and diligence.

#### 25.21 REPORTING OFFICER

- (1) The operator of a registered aerodrome shall appoint one (1) or more reporting officers for the aerodrome.
- (2) The functions of a reporting officer are:
  - (a) monitor the serviceability of the aerodrome in accordance with Part 14;
     and
  - (b) report to the NOTAM Office and air traffic control any changes in conditions, or any other occurrences, at the aerodrome that shall be reported under 25.14.
- (3) The operator shall not appoint a person as a reporting officer if the person has not been trained, in accordance with Part 14, to perform the reporting officer's functions.

#### 25.22 NOTICE OF CHANGES IN PHYSICAL CONDITION OF AERODROME

- (1) The operator of a registered aerodrome shall, in accordance with Part 14, give notice to the NOTAM Office of:
  - (a) any temporary or permanent change in the physical condition of the aerodrome that may affect the safety of aircraft; or
  - (b) any other occurrence relating to the operation or maintenance of the aerodrome that may affect the safety of aircraft.
- (2) If the aerodrome is a controlled aerodrome, the notice shall also be given to air traffic control.

#### 25.23 NOTICE OF CHANGES IN INFORMATION PUBLISHED IN AIP

To maintain the accuracy of the information published in AIP in relation to a registered aerodrome, the operator of the aerodrome shall inform the AIS Unit in writing, as soon as practicable of any change required to that information (other than a change that is published in NOTAMS).

# 25.24 SAFETY INSPECTIONS

(1) This provision applies to a registered aerodrome that is used by an aircraft

that:

- (a) is engaged in regular public transport operations or charter operations; and
- (b) has a maximum passenger seating capacity of more than nine (9) seats.
- (2) The operator of the aerodrome shall arrange for a safety inspection of the aerodrome to be conducted at least once each year.
- (3) The safety inspection shall be conducted by a person approved under paragraph 25.16.
- (4) Such an approved person shall give the operator a written report that:
  - (a) deals with the matters set out in Appendix II to this paragraph; and
  - (b) specifies any remedial work that is necessary for the aerodrome to comply with the applicable standards.
- (5) Within thirty (30) working days after receiving the report, the operator shall give to the Authority:
  - (a) a copy of the report; and
  - (b) if the report specifies any remedial work as being necessary a statement as to when and how the operator intends to do the remedial work.

# 25.25APPROVAL OF PERSONS TO CONDUCT AERODROME SAFETY INSPECTIONS

- (1) A person may apply to the Authority for approval to conduct aerodrome safety inspections for this Subpart.
- (2) The Authority may approve the person if the person:
  - (a) has:
    - (i) recognised degree, diploma or certificate in civil engineering, surveying or a related field and a sound knowledge of the parts of these Directives and the standards, practices and procedures that are applicable to the operation and maintenance of aerodromes; or
    - (ii) other qualifications, knowledge and experience that the Authority considers suitable for conducting an aerodrome safety inspection; and
    - (iii) would, if the approval is given, be able to perform properly the aerodrome safety inspection function.

# 25.26 DURATION OF APPROVAL

- (1) Unless sooner cancelled, an approval under paragraph 25.17 remains in force until the end of 5 years after it is given.
- (2) An approval is not in force during any period in which it is suspended, but the period of suspension counts as part of the 5 year approval period.

#### 25.27 SUSPENSION OR CANCELLATION OF APPROVAL BY THE AUTHORITY

- (1) The Authority may suspend or cancel an approval of an operator under paragraph 25.18, by written notice given to the operator, if the operator has not properly coordinated the carrying out of the aerodrome safety inspection functions.
- (2) Before cancelling or suspending the approval, the Authority shall:
- (a) give the operator written notice:
  - (i) stating the reasons that, in the opinion of the Authority, would justify the cancellation or suspension; and
  - (ii) advising the operator that he or she may, within thirty (30) working days after the date of the notice, give the Authority written reasons why the approval should not be suspended or cancelled; and
  - (iii) take into account any written reasons given to it by the operator within the time allowed under subparagraph (a) (ii).

#### 25.28 OBSTRUCTIONS

## (1) Establishment of obstacle limitation surfaces

An aerodrome operator shall ensure that obstacle limitation surfaces are established for the aerodrome in accordance with the standards set out in Part 14.

# (2) Monitoring of Airspace

- (a) The operator of a registered aerodrome shall monitor the airspace around the aerodrome for infringement on the obstacle limitation surfaces by:
  - i. any object, building or structure; or
  - ii. any gaseous efflux having a velocity exceeding 4.3 metres per second.
- (b) The monitoring shall be in accordance with the standards set out in Part 14.

#### (3) Notice of Obstacles

- (a) If the operator becomes aware of the presence of an obstacle, the operator shall:
  - (i) tell the NOTAM Office immediately; and
  - (ii) give the NOTAM Office details of:
    - A. the height and location of the obstacle; and
    - B. amended declared distances and gradients, if applicable.
- (4) If the operator becomes aware of any development or proposed construction near the aerodrome that is likely to create an obstacle, the operator shall:

- (a) Inform the Authority as soon as practicable; and
- (b) give to the Authority details of the likely obstacle
- (5) Each Aerodrome Registration Certificate holder shall:
  - (a) Ensure that each object in each area within its Authority which exceeds any of the heights or penetrates the imaginary surfaces described in the Ghana Civil Aviation Directives is either removed, marked, or lighted. However, removal, marking, and lighting is not required if it is determined to be unnecessary by the Authority upon conducting aeronautical study.
  - (b) Management of obstructions on the airport shall be the responsibility of the airport operator and in accordance with the requirements prescribed in Part 14.

#### 25.29 PUBLIC PROTECTION

- (1) Each Aerodrome Operator shall establish procedures for public protection, including Fencing, Gates, Terminal gates, Public information, Lighting, Firearms, Access control, Aircraft blast protection and Crowd control.
- (2) Each Aerodrome Registration Certificate holder shall provide:
  - (a) Safeguards acceptable to the Director General to prevent inadvertent entry to the movement area by unauthorized persons or vehicles;
  - (b) Protection of persons and property from aircraft blast; and
  - (c) In the implementation of the requirement of paragraph (b) of this subsection, the provided fence shall meet the requirements of the National Security Programme.

#### 25.30 ACCESS CONTROL TO AERODROME OPERATIONS AREA

Each Aerodrome Operator shall:

- (a) Establish procedures for preventing the unauthorised entry of persons, vehicles, equipment, plant or animal, or other things that may endanger aircraft safety, into the airport operations area, and provide the names and roles of the persons who are responsible for controlling access to the movement area and the telephone numbers for contacting them during and after working hours;
- (b) Limit access to movement areas and safety areas only to those pedestrians and ground vehicles necessary for airport operations;
- (c) Establish and implement procedures for the safe and orderly access to, and operation in, movement areas and safety areas by pedestrians and ground vehicles, including provisions identifying the consequences of noncompliance with the procedures by an employee, tenant, or contractor;

#### 25.31 WARNING NOTICES

Where low-flying or taxiing aircraft at or in the vicinity of an aerodrome are likely to be hazardous to pedestrian or vehicular traffic, the operator of the aerodrome shall immediately;

- (a) post notices warning of the hazard on any public way that is adjacent to the manoeuvring area; or
- (b) where such a public way is not owned or controlled by the operator, inform the authorities responsible for placing markings on the public way that there is a hazard.

# 25.32 MARKERS AND MARKINGS

- (1) When an aerodrome is closed permanently, the operator of the aerodrome shall remove all of the markers and markings installed at the aerodrome.
- (2) The operator of an aerodrome, other than a water aerodrome, shall install red flags or red cones along the boundary of an unserviceable movement area.
- (3) Subparagraphs (4) to (8) do not apply in respect of any manoeuvring area or part thereof that is closed for 24 hours or less.
- (4) Where a runway or part of a runway is closed, the operator of the aerodrome shall place closed markings, as set out in Appendix III to this Part, on the runway as follows:
  - (a) where the runway is greater than 1 220 m (4,000 feet) in length, a closed marking shall be located at each end of the closed runway or part thereof and additional closed markings shall be located on the closed runway or part thereof at intervals not exceeding 300 m (1,000 feet);
  - (b) where the runway is greater than 450 m (1,500 feet) but not greater than 1 220 m (4,000 feet) in length, a closed marking of not less than half the dimensions set out in Appendix III shall be located at each end of the closed runway or part thereof and an additional closed marking of the same dimensions shall be located on the closed runway or part thereof at a point equidistant from the two markings; or
  - (c) where the runway is 450 m (1,500 feet) or less in length, a closed marking of not less than one-half the dimensions set out in that Appendix III shall be located at each end of the closed runway or part thereof.
- (5) Where a taxiway or part of a taxiway is closed, the operator of the aerodrome shall place on each end of the closed taxiway, or part thereof, a closed marking with the dimensions set out in Appendix III.
- (6) Where a helicopter take-off and landing area at an aerodrome is closed, the operator of the aerodrome shall;
  - (a) place a closed marking over the letter "H", where the letter "H" identifies the helicopter take-off and landing area, or, where no letter identifies the helicopter take-off and landing area, over the centre of the area; or
  - (b) comply with Subparagraph (4), where the helicopter take-off and landing area is a runway.

- (7) Where a manoeuvring area or part thereof is closed permanently, the operator of the aerodrome shall;
  - (a) obliterate all of the markings that indicate that the manoeuvring area or part thereof is open; and
  - (b) subject to Subparagraph (8), paint on the manoeuvring area or part thereof the markings required pursuant to Subparagraphs (4) to (6).
- (8) Where the surface of a manoeuvring area or part thereof is unsuitable for painting or where the closure is not permanent, closed markings may be applied by means of a conspicuously coloured dye or may be constructed from a suitable conspicuously coloured material or product.

#### 25.33 WIND DIRECTION INDICATOR

- (1) The operator of the aerodrome shall install and maintain at the aerodrome a wind direction indicator that is
  - (a) of a conspicuous colour or colours;
  - (b) in the shape of a truncated cone;
  - (c) visible from an aircraft flying at an altitude of 300 m (1,000 feet) above the wind direction indicator; and
  - (d) illuminated when the aerodrome is used at night.
- (2) When an aerodrome is closed permanently, the operator of the aerodrome shall immediately remove all of the wind direction indicators installed at the aerodrome.

# 25.34 SIGNAL AREA

- (1) The operator of a registered aerodrome that does not have a continuous air traffic service provided by air traffic control during the day shall provide a signal area in accordance with the standards set out in Part 14.
- (2) The operator shall display an appropriate signal in the signal area in any circumstances that require such a signal to be displayed.
- (3) The operator shall ensure that the signal area and any signal displayed in it are clearly visible to any aircraft intending to use the aerodrome.

#### 25.35 LIGHTING

- (1) Subject to Subparagraph (2), where a runway is used at night, the operator of the aerodrome shall indicate each side of the runway along its length with a line of fixed white lights that is visible in all directions from an aircraft in flight at a distance of not less than two nautical miles.
- (2) Where it is not practical to provide at an aerodrome the fixed white lights referred to in Subparagraph (1) for reasons such as the lack of an available electrical power source or insufficient air traffic, the operator of the aerodrome may, if a fixed white light is displayed at each end of the runway to indicate

runway alignment, use white retro-reflective markers that are capable of reflecting aircraft lights and that are visible at a distance of not less than two nautical miles from an aircraft in flight that is aligned with the centre line of the runway.

- (3) The lines of lights or retro-reflective markers required by Subparagraph (1) or (2) shall be arranged so that
  - (a) the lines of lights or markers are parallel and of equal length and the transverse distance between the lines is equal to the runway width in use during the day;
  - (b) the distance between adjacent lights or markers in each line is the same and is not more than 60 m (200 feet);
  - (c) each line of lights or markers is not less than 420 m (1,377 feet) in length and contains no fewer than eight lights or markers; and
  - (d) each light or marker in a line of lights or markers is situated opposite to a light or marker in the line of lights or markers on the other side of the runway, so that a line connecting them forms a right angle to the centre line of the runway.
- (4) Fixed white lights displayed at each end of a runway pursuant to Subparagraph (2) shall be placed so that they are not likely to cause a hazard that could endanger persons or property.
- (5) Where a taxiway is used at night, the operator of the aerodrome shall indicate each side of the taxiway with a line of fixed blue lights or blue retro-reflective markers placed so that the two lines of lights or markers are parallel and the distance between adjacent lights or markers in each line is not more than 60 m (200 feet).
- (6) Where a manoeuvring area or part thereof or a heliport is closed, the operator of the aerodrome shall not operate the lights or keep the retro-reflective markers thereon, except as required for maintenance of the lights and markers.
- (7) Where an aerodrome is used at night, the operator of the aerodrome shall indicate an unserviceable portion of the movement area with fixed red lights, red retroreflective markers or floodlighting.
- (8) Where an aircraft parking area at an aerodrome is used at night, the operator of the aerodrome shall indicate the boundary of the area with fixed blue lights or blue retro-reflective markers, placed at intervals not exceeding 60 m (200 feet), or with floodlighting.
- (9) Subject to Subparagraph (10), where a heliport is used at night for the take-off or landing of helicopters, the operator of the heliport shall illuminate the entire take-off and landing area with floodlights or
  - (a) where the take-off and landing area is rectangular, shall indicate the boundary with no fewer than eight fixed yellow lights, including one light at each corner, placed so that adjacent lights are not more than 13 m (42.5 feet) apart; or
  - (b) where the take-off and landing area is circular, shall indicate the boundary with no fewer than five fixed yellow lights placed so that

adjacent lights are not more than 13 m (42.5 feet) apart.

- (10) Where it is not practical to provide at a heliport the fixed yellow lights referred to in Subparagraph (9) for reasons such as lack of an available electrical power source or insufficient air traffic, the operator of the heliport may use yellow retro-reflective markers that are capable of reflecting aircraft lights and that are visible at a distance of not less than two nautical miles from an aircraft in flight that is aligned with the approach path, if
  - (a) a light source is provided to show the location of the heliport; or
  - (b) where there is only one path for approach and departure, two lights are used to show the approach orientation.
- (11) The operator of an aerodrome may display flare pots to provide temporary lighting for the landing or take- off of aircraft.

#### 25.36 PROHIBITIONS

No person shall;

- (a) walk, stand, drive a vehicle, park a vehicle or aircraft or cause an obstruction on the movement area of an aerodrome, except in accordance with permission given
  - (i) by the operator of the aerodrome, and
  - (ii) where applicable, by the appropriate air traffic control unit or NOTAM Office;
- (b) tow an aircraft on an active movement area at night unless the aircraft displays operating wingtip, tail and anti-collision lights or is illuminated by lights mounted on the towing vehicle and directed at the aircraft;
- (c) park or otherwise leave an aircraft on an active manoeuvring area at night unless the aircraft displays operating wingtip, tail and anti-collision lights or is illuminated by lanterns suspended from the wingtips, tail and nose of the aircraft;
- (d) operate any vessel, or cause any obstruction, on the surface of any part of a water area of an aerodrome that is to be kept clear of obstructions in the interest of aviation safety, when ordered, by signal or otherwise, to leave or not to approach that area by the appropriate air traffic control unit or by the operator of the aerodrome;
- (e) knowingly remove, deface, extinguish or interfere with a marker, marking, light or signal that is used at an aerodrome for the purpose of air navigation, except in accordance with permission given:
  - (i) by the operator of the aerodrome, and
  - (ii) where applicable, by the appropriate air traffic control unit or NOTAM Office;
- (f) at a place other than an aerodrome, knowingly display a marker, marking, light or signal that is likely to cause a person to believe that the place is an aerodrome;

- (g) knowingly display at or in the vicinity of an aerodrome a marker, marking, sign, light or signal that is likely to be hazardous to aviation safety by causing glare or by causing confusion with or preventing clear visual perception of a marker, marking, sign, light or signal that is required under this Subpart;
- (h) allow a bird or other animal that is owned by the person or that is in the person's custody or control to be unrestrained within the boundaries of an aerodrome except for the purpose of controlling other birds or animals at the aerodrome as permitted by the operator; or
- (i) discharge a firearm within or into an aerodrome without the permission of the operator of the aerodrome.

#### 25.37 FIRE PREVENTION

- (1) Subject to 25.35 (11) and Subparagraphs (b) and (c), no person shall, while at an aerodrome, smoke or display an open flame
  - (a) on an apron;
  - (b) on an aircraft loading bridge or on a gallery or balcony that is contiguous to or that overhangs an apron; or
  - (c) in an area where smoking or the presence of an open flame is likely to create a fire hazard that could endanger persons or property.
- (2) The operator of an aerodrome may, in writing, authorize maintenance or servicing operations on an apron that involve the use, production or potential development of an open flame or that involve the production or potential development of a spark where the operations are conducted in a manner that is not likely to create a fire hazard that could endanger persons or property.
- (3) The operator of an aerodrome may permit smoking in an enclosed building or shelter located on an apron where such smoking is not likely to create a fire hazard that could endanger persons or property.

#### 25.38 WILDLIFE HAZARD MANAGEMENT

- (1) Each Aerodrome Registration Certificate holder shall provide for the conduct of a wildlife hazard assessment, acceptable to the Director General, when any of the following events occurs on or near the airport:
  - (a) An aircraft experiences a multiple bird strike.
  - (b) An aircraft experiences substantial damage from striking wildlife. As used in this paragraph, substantial damage means damage or structural failure incurred by an aircraft that adversely affects the structural strength, performance, or flight characteristics of the aircraft and that would normally require major repair or replacement of the affected component.
  - (c) An aircraft experiences an engine ingestion of wildlife.
  - (d) Wildlife of a size or in numbers capable of causing an event described in

subparagraphs (1) (a), (2) or (3) of this section is observed to have access to any airport flight pattern or movement area.

- (2) The wildlife hazard assessment required in paragraph (a) of this section shall be conducted by a credentialed wildlife management biologist. The assessment shall contain at least the following:
  - (a) Analysis of the event or circumstances which prompted the study.
  - (b) Identification of the species, numbers, locations, local movements, and daily and seasonal occurrences of wildlife observed.
  - (c) Identification and location of features on and near the airport that attract wildlife.
  - (d) Description of the wildlife hazard to aircraft operations.
  - (e) Recommended actions for reducing identified wildlife hazards to aircraft operations.
- (3) The study required by paragraph (1) of this section shall be submitted to the Director-General for approval and determination on the need for a wildlife hazard management plan. In reaching this determination, the Director-General considers:
  - (a) The wildlife hazard assessment;
  - (b) Actions recommended in the wildlife hazard assessment to reduce wildlife hazards;
  - (c) The aeronautical activity at the airport, including the frequency and size of aircraft.
  - (d) The views of the certificate holder.
  - (e) The views of the airport users; and
  - (f) Any other factors bearing on the matter of which the Director-General is aware.
- (4) When the Director-General determines that a wildlife hazard management plan is needed, the certificate holder shall formulate and implement a plan using the wildlife hazard assessment as a basis. The plan shall:
  - (a) Be submitted to, and approved by, the Director-General prior to implementation; and
  - (b) Provide measures to alleviate or eliminate wildlife hazards to aircraft operations; and
  - (c) As authorized by the Director- General, become a part of the Aerodrome Operations Manual.
- (5) The plan shall include at least the following:
  - (a) The persons who have Authority and responsibility for implementing the plan.

- (b) Priorities for needed wildlife population management, habitat modification, and changes in land use identified in the wildlife hazard assessment, with target dates for initiation and completion.
- (c) Requirements for and, where applicable, copies of wildlife control permits.
- (d) Identification of resources to be provided by the certificate holder for implementation of the plan.
- (e) Procedures to be followed during aircraft operations, including at least:
  - (i) Designation of personnel responsible for implementing the procedures;
  - (ii) Provision to conduct physical inspections of the movement area and other areas critical to successfully manage known wildlife hazards sufficiently in advance of aircraft operations to allow time for wildlife controls to be effective;
  - (iii) Wildlife hazard control measures; and
  - (iv) Ways to communicate effectively between personnel conducting wildlife control or observing wildlife hazards and the air traffic control tower.
- (f) Procedures to review and evaluate the wildlife hazard management plan annually or following an event described in paragraphs (1)(a),(b) or (c) of this section, including:
  - (i) The plan's effectiveness in dealing with known wildlife hazards on, and in the vicinity of, the airport; and
  - (ii) Aspects of the wildlife hazards described in the wildlife hazard assessment that should be re- evaluated.
- (g) A training program to provide airport personnel with the knowledge and skills needed to carry out the wildlife hazard management plan required by paragraph (c) and (d) of this section.
- (h) Notwithstanding the other requirements of this section, each certificate holder shall take immediate measures to alleviate wildlife hazards whenever they are detected.

# 25.39ACCIDENT AND MANDATORY OCCURRENCE REPORTING AND INVESTIGATION

- (1) Each aerodrome Registration certificate holder shall establish procedure for:
  - (a) Reporting accidents or incidents at the airport premises.
  - (b) Remedial, investigation and corrective actions.
  - (c) Accidents or incidents recording.
- (2) Each aerodrome registration certificate holder shall report any accident or incident involving an aircraft, persons, navigational aids and ground facilities or equipment critical to operations of aircraft immediately after the occurrence.

- (3) Further to paragraph (2), each aerodrome registration certificate holder shall within 48 hours after the occurrence, notify the Authority, in writing, of the nature, extent, and duration of the occurrence.
- (4) An offence against paragraph (3) is an offence of strict liability.

#### 25.40 MEDICAL SERVICES

Each aerodrome registration certificate holder shall provide medical services, including the following:

- (a) First aid and medical arrangements.
- (b) Scales of medical services to be held at the airport.
- (c) First aid activities coordination with Rescue and firefighting.
- (d) Assistance with sick or disabled passengers.

#### 25.41 SAFETY MANAGEMENT SYSTEM

- (1) Each aerodrome registration certificate holder shall establish an SMS that will as a minimum include arrangements;
  - (a) For the identification of safety hazards;
  - (b) To ensure the implementation of remedial action necessary to address the safety risks of the consequences of hazards and maintain agreed safety performance;
  - (c) To provide for continuous monitoring and regular assessment of the safety performance; and
  - (d) That aim at continuous improvement of the overall performance of the safety management system.
- (2) The structure or organization of the SMS, shall include staffing and the assignment of individual and group responsibilities for safety issues. Safety management system shall clearly define the lines of safety accountability including direct accountability for safety on the part of senior management.
- (3) The implementation and maintenance of a safety management system (SMS) by an aerodrome registration certificate holder shall be based on the ICAO SMS implementation framework and shall be commensurate with the size of the organization and the complexity of the services provided.

# SUBPART D - REPORTING OFFICER AND SAFETY INSPECTION REQUIREMENTS FOR CERTAIN OTHER AERODROMES

#### 25.42 AERODROMES TO WHICH THIS SUBPART APPLIES

- (1) This Subpart applies to an aerodrome that:
  - (a) is not a certified aerodrome or a registered aerodrome; and
  - (b) is used at least once in a week by an aircraft that:
    - (i) is engaged in public transport operations or charter operations; and
    - (ii) has a maximum passenger seating capacity of more than 9 seats but not more than 30 seats.
- (2) To establish the applicability of this Subpart to an aerodrome, the Authority may direct the operator of the aerodrome to give to the Authority statistics about the number of movements at the aerodrome, in a specified period, of aircraft to which subparagraphs (1) (b) (i) and (ii) apply.
- (3) An aerodrome operator shall comply with a direction given to the operator under subparagraph (2).

# 25.43 REPORTING OFFICER

- (1) The operator of an aerodrome to which this Subpart applies shall appoint one (1) or more reporting officers for the aerodrome.
- (2) An offence against subparagraph (1) is an offence of strict liability.
- (3) The functions of a reporting officer are:
  - (a) to monitor the serviceability of the aerodrome in accordance with Part 14; and
  - (b) to report to the operators that use the aerodrome any changes in conditions, or any other occurrences, at the aerodrome that may affect the safety of aircraft operations.
- (4) The operator shall not appoint a person as a reporting officer if the person has not been trained, in accordance with Part 14, to perform the reporting officer's functions.

# 25.44 SAFETY INSPECTIONS

- (1) The operator of an aerodrome to which this Subpart applies shall arrange for a safety inspection of the aerodrome to be conducted at least once each year.
- (2) An offence against subparagraph (1) is an offence of strict liability.
- (3) The safety inspection shall be conducted by a person approved, under paragraph 25.25, to conduct safety inspections for registered aerodromes.

- (4) The approved person shall give the operator a written report that:
  - (a) deals with the matters set out in Appendix II to this paragraph; and
  - (b) specifies any remedial work that is necessary for the aerodrome to comply with the applicable standards.
- (5) Within thirty (30) working days after receiving the report, the operator shall give to the Authority:
  - (a) a copy of the report; and
  - (b) if the report specifies any remedial work as being necessary a statement as to when and how the operator intends to do the remedial work.

#### SUB-PART E - RESCUE AND FIRE FIGHTING SERVICES

# **SECTION I - GENERAL**

#### 25.45 DEFINITIONS

In this Subpart,

- (a) rescue and firefighting category means an aircraft category, determined in accordance with paragraph 25.49 for the purpose of fighting fires involving aircraft;
- (b) Firefighting standards means the Aerodrome Standards regarding Aircraft Fire Fighting at Aerodromes in accordance with Part 14.
- (c) **AFFF** means aqueous film forming foam agent.
- (d) **RFFS** means rescue and firefighting service.
- (e) **RFFS operation** means an operation undertaken in carrying out a function mentioned in Subpart D.
- (f) **RFFS provider** for an aerodrome means the person or organization that provides RFFS for the aerodrome.
- (g) Critical category for firefighting means the aircraft category that is specified for the aerodrome in the AIP and corresponds to the level of service for fighting fires involving aircraft at that aerodrome.
- (h) "In response posture" means, in respect of personnel, in a location at or near the aerodrome that will permit an operator to obtain a satisfactory result in a response test referred to in subparagraph 25.58 (d).
- (i) "Rescue" means the act of evacuating persons from an aircraft involved in an aircraft accident or incident at an airport by means of fire suppression and then, if circumstances permit, aircraft entry.

## 25.46 APPLICATION

This Subpart applies in respect of an aerodrome specified in paragraph 25.12 (c).

# 25.47 GENERAL REQUIREMENTS

The operator of a registered aerodrome shall provide the fire fighting vehicles and the personnel required pursuant to this Subpart that correspond to the critical category for firefighting published in the AIP to respond to an aircraft emergency at the aerodrome.

#### 25.48 HOURS OF OPERATION OF A FIRE FIGHTING SERVICE

The operator of a registered aerodrome shall establish the hours during which a fire fighting service is to be operated and shall ensure that the hours are published in the AIP and in a NOTAM, if the NOTAM is published earlier.

#### 25.49 RESCUE AND FIRE FIGHTING CATEGORY

(1) A rescue and firefighting category set out in column I of table 1 to this subparagraph shall be established for an aircraft based on the aircraft overall length set out in column II of the item and the aircraft maximum fuselage width set out in column III of that item.

(2) Where the fuselage width of an aircraft that has an overall length within the range set out in column II of table 1 is greater than the aircraft maximum fuselage width set out in column III of the item, the rescue and firefighting category for the aircraft shall be one category higher than the category set out in column I of that item.

Table 1 - Rescue and firefighting at Aerodromes

	Column I	Column II	Column III
Item	Rescue and firefighting category	Aircraft Overall Length	Aircraft Maximum Fuselage Width
1.	1	less than 9 m	2 m
2.	2	at least 9 m but less than 12 m	2 m
3.	3	at least 12 m but less than 18 m	3 m
4.	4	at least 18 m but less than 24 m	4 m
5.	5	at least 24 m but less than 28 m	4 m
6.	6	at least 28 m but less than 39 m	5 m
7.	7	at least 39 m but less than 49 m	5 m
8.	8	at least 49 m but less than 61 m	7 m
9.	9	at least 61 m but less than 76 m	7 m
10.	10	at least 76 m but less than 90m	8 m

# SECTION II - EXTINGUISHING AGENTS AND FIREFIGHTING VEHICLES

# 25.50 EXTINGUISHING AGENTS AND EQUIPMENT

The operator of a registered aerodrome shall provide its firefighting service with both the principal and the complementary extinguishing agents and the equipment delivering the agents that meet the requirements set out in Part 14.

25.51 **EXTINGUISHING AGENT AND FIREFIGHTING VEHICLE REQUIREMENTS** The operator of a registered aerodrome shall provide to the firefighting service at the aerodrome the quantities of water and complementary extinguishing agents set out in columns II and III of the item, and the minimum number of fire fighting vehicles set out in column IV of that item necessary to provide the total discharge capacity set out in column V of that item.

Column V Column I Column II Column III Column IV of Total Quantity Critical **Ouantity** Minimum Complementary Discharge Ite Category of Water Number of Extinguishing Capacity Fire fighting for Fire (in Agents (in (in litres Vehicles Fighting litres) kilograms) per minute) 1. 1 230 45 1 230 2. 2 670 90 1 550 3. 3 900 1 200 135 1 4. 4 2 400 1 1 800 135 5 400 5. 5 1 3 000 180 6. 6 7 900 225 2 4 000 7. 7 12 100 225 2 5 300 8. 8 18 200 450 3 7 200 9. 9 24 300 450 3 9 000 3 10. 10 32 300 11 200 450

Table 2 - Rescue and Firefighting at Aerodromes

## 25.52 TEMPORARY EXEMPTION

The operator of a registered aerodrome does not have to meet the requirements referred to in paragraph 25.51 where those requirements cannot be met because of a personnel shortage or unserviceable equipment at the aerodrome caused by circumstances beyond the control of its operator and a notification of the reduced level of firefighting service at the aerodrome has been given to the appropriate air traffic control unit or NOTAM office for publication in a NOTAM.

# **SECTION III - PERSONNEL REQUIREMENTS**

#### 25.53 MINIMUM PERSONNEL

During the hours of operation of the firefighting service, the operator of a registered aerodrome shall ensure that trained firefighting personnel are in response posture and in sufficient number to operate the fire fighting vehicles and apply the extinguishing agents required by paragraph 25.51.

#### 25.54 TRAINING OF PERSONNEL

The operator of a registered aerodrome shall ensure that all personnel assigned to firefighting duties are trained in accordance with Part 14.

#### 25.55 EQUIPMENT AND PROTECTIVE CLOTHING

The operator of a registered aerodrome shall provide all personnel assigned to firefighting duties with the equipment and protective clothing necessary to perform their duties.

## 25.56 FIREFIGHTER QUALIFICATIONS

- (1) No operator of a registered aerodrome shall permit a person to act and no person shall act as a firefighter at the aerodrome unless the person has, within the previous twelve (12) months, successfully completed the training specified in Part 14.
- (2) The operator of a registered aerodrome shall:
  - (a) maintain, for each firefighter, a training record containing the information specified in the firefighting standards;
  - (b) preserve the training record for three years after the aircraft firefighter leaves the service of the aerodrome; and
  - (c) at the request of the Director General, provides a copy of the training record.

#### **SECTION IV - RESPONSE READINESS**

### 25.57 PERSONNEL READINESS

The operator of a registered aerodrome shall ensure that, during the hours of operation of its firefighting service, the firefighting personnel required to be available pursuant to paragraph 25.53, the number of personnel capable of immediate response is sufficient to meet the requirements of the response test referred to in paragraph 25.58.

### 25.58 RESPONSE TEST

- (1) The operator of a registered aerodrome shall carry out a response test to evaluate the response time and effectiveness of the firefighting service required to be maintained during the hours of operation specified in paragraph 25.48.
  - (a) every twelve (12) months; and
  - (b) at any time at the request of the Director General, where the Director General has reasonable grounds to believe that the firefighting service at the aerodrome does not meet the requirements of this Subpart.
- (2) The operator of a registered aerodrome shall give the Director General at least four (4) weeks written notice of the date on which a response test is to be carried out.
- (3) The operator of a registered aerodrome shall provide the Director General with a copy of the results of a response test within fourteen (14) working days after the date of the test.

- (4) A response test at a registered aerodrome has a satisfactory result if;
  - (a) within two minutes after an alarm is sounded, fire fighting vehicles in a number sufficient for applying the principal extinguishing agent at 50 per cent of the total discharge capacity required by paragraph 25.51 are dispatched from their assigned positions and, under optimum surface and visibility conditions at the aerodrome, reach the midpoint of the farthest operational runway, or another predetermined point of comparable distance and terrain; and
  - (b) within three minutes after the alarm is sounded, any other fire fighting vehicle required by paragraph 25.51 reaches the location referred to in paragraph (a).
- (5) The operator of a registered aerodrome shall record the results of a response test and shall preserve the records for two (2) years after the date of the test.
- (6) If a response test does not have a satisfactory result, the operator of a registered aerodrome shall
  - (a) within six (6) hours after the test, identify the deficiencies that caused the result and notify the appropriate air traffic control unit or flight service of the critical category for firefighting that corresponds to the level of service that can be provided, for publication in a NOTAM; and
  - (b) within seven (7) working days after the test, if any deficiency is not corrected, submit a plan to the Director General specifying the measures necessary to obtain a satisfactory result and the dates by which they shall be taken, which shall be as early as practicable given the circumstances.
- (7) The operator of a registered aerodrome shall implement the submitted plan by the dates specified in the plan.

# SECTION V - COMMUNICATION AND ALERTING SYSTEM

# 25.59 REQUIREMENT

The operator of a registered aerodrome shall provide a communication and alerting system that meets the Manual of Standards.

# 25.60 TRANSITIONAL PROVISIONS

The operator of a registered aerodrome shall meet the requirements for a fire fighting service prescribed in paragraphs 25.47(2) and 25.48(4), paragraphs 25.50 and 25.51, subparagraph 25.52 and paragraphs 25.53 to 25.59.

#### **APPENDICES**

# APPENDIX I - DIAGRAM AND INFORMATION FOR APPLICATION FOR REGISTRATION OF AERODROME

- (1) The diagram of the aerodrome shall show the following:
  - (a) the layout of runways, their designations (runway numbers) and length in metres:
  - (b) the layout of taxiways and aprons;
  - (c) the location of the aerodrome reference point;
  - (d) the location of all wind direction indicators;
  - (e) the elevation of the aerodrome at the highest point of the landing surface;
  - (f) the magnetic bearing and distance to the nearest population centre, and what that centre is.
- (2) The information about the aerodrome shall include:
  - (a) **Aerodrome administration**. The following information about the aerodrome and its administration:
    - (i) the name of the aerodrome;
    - (ii) the name of the aerodrome operator and the address and telephone numbers at which the aerodrome operator may be contacted at all times:
    - (iii) the Region in which the aerodrome is located and the latitude and longitude for the location;
    - (iv) whether the aerodrome is a public or private aerodrome;
    - (v) the charges for use of the aerodrome;
    - (vi) the name and contact details for the persons who are to be the reporting officers for the aerodrome; and
  - (b) **Runways**. The following information for each runway at the aerodrome:
    - (i) the runway reference code number for the approach and take-off areas that have been surveyed;
    - (ii) runway width and slope;
    - (iii) runway strip width (grade and overall);
    - (iv) declared distances and supplementary take-off distances;
    - (v) pavement strength rating; and
    - (vi) procedures for pavement maintenance.
  - (c) **Aerodrome lighting**. For each runway at the aerodrome that may be used at night —the following information:
    - (i) whether the runway edge lights are low, medium or high intensity lights;
    - (ii) whether approach lighting is provided;
    - (iii) whether pilot-activated lighting is provided and, if pilot activated lighting is provided, its frequency;
    - (iv) whether T-VASIS or PAPI lighting systems are provided;
    - (v) whether there is an aerodrome beacon;
    - (vi) whether there is stand-by power or portable lighting;
    - (vii) information about any other lighting provided; and
  - (d) Ground services. The following information about ground services

available to visiting pilots:

- (i) the types of aviation fuel available and contact details for fuel suppliers;
- (ii) contact details for local weather information;
- (iii) details of the universal communication system; and
- (e) **Special procedures**. Information about any special procedures that pilots need to observe or follow; and
- (f) **Notices**. The following local safety information:
  - (i) the presence of obstacles or other hazards (including animals or birds);
  - (ii) restrictions on the use of taxiways or aprons;
  - (iii) other activities at the aerodrome (for example, sport aviation activities).

## (3) Aerodrome operating procedures

Except as otherwise authorized by the Director - General, each certificate holder shall include in the Aerodrome Operations Manual a description of operating procedures, facilities and equipment, responsibility assignments, and any other information needed by personnel concerned with operating the aerodrome in order to comply with applicable provisions.

In writing the procedure on each category, clear and precise information should be included on:

- (a) when, or in what circumstances, is an operating procedure to be activated;
- (b) how is an operating procedure activated;
- (c) actions to be taken;
- (d) to isolate, remove, tag or mark a deficient or unserviceable item to reduce or prevent the item from being hazardous in the period during which the item is deficient or unserviceable
- (e) to correct or restore a deficient item
- (f) the person(s) to carry out the actions; and
- (g) equipment, and access to such equipment, necessary for carrying out the actions.

If any of the procedures specific below is not relevant or applicable, the reason should be given. Where nonstandard procedures and or Modifications to Standards are in effect, include documentation that supports a level of safety equal to that described in Part 14 or any other related publications made by the Authority.

The Aerodrome Operations Manual should reflect the actual conditions, operations, and procedures in effect at the airport.

Particulars of aerodrome procedures should include:

#### (1) Maintenance of records

- (i) **Personnel training**. Twenty-four (24) consecutive calendar months for personnel training records of persons responsible for operational and safety and security responsibilities of the aerodromes.
- (ii) **Emergency personnel training**. Twenty-four (24) consecutive calendar months for rescue and firefighting and emergency medical service personnel training records.
- (iii) Fuelling personnel training. Twelve (12) consecutive calendar months for

- training records of fuelling personnel.
- (iv) **Aerodrome inspection**. Twelve (12) consecutive calendar months for self-inspection records, as required.
- (v) **Movement areas and safety areas training**. Twenty-four (24) consecutive calendar months for records of training given to pedestrians and ground vehicle operators with access to movement areas and safety areas.
- (vi) **Accident and incident.** Twelve (12) consecutive calendar months for each accident or incident in movement areas and safety areas involving an aircraft and/or ground vehicle.
- (vii) *Aerodrome condition*. Twelve (12) consecutive calendar months for records of airport condition information dissemination.
- (viii) Records of notices given to the NOTAM Office and AIS or to air transport operators;
  - (ix) Records of aerodrome works.
  - (x) Records of flight operations
    - aircraft arrivals and departures
    - aircraft types
    - \_ no. of passengers
- (2) **Aerodrome Inspections**. Arrangement for the conduct of aerodrome inspections including;
  - (a) Schedule of inspections, checklists
  - (b) Recording of inspections
  - (c) Reporting system and actions initiated to correct deficiencies and resolution of safety issues.
- (3) **Aerodrome Conditions Reporting.** Arrangements for reporting aerodrome conditions to the NOTAM Office and AIS or to air transport operators;
- (4) **Condition of Pavement and Safety Areas**. Arrangements, including schedules and checklists, for monitoring and reporting;
  - (a) pavement surface conditions for deteriorations, incorrect graded lips/edges, FODs, ponding and drainage problems).
  - (b) safety areas to ensure cleared and graded surface with no potential hazardous surface variations and free of hazardous objects
  - (c) vehicle traffic signs problems
  - (d) pavement marking problems
  - (e) functional unit and/or names of persons with the responsibility of initiating NOTAMS closing portions of the movement areas that are unsafe until the condition is corrected.
- (5) **Aerodrome Lighting Systems**. Particulars of the procedures for the inspection and maintenance of the aerodrome lighting (including obstacle lighting) and the supply of stand-by power (if any), including details of the following:
  - (a) the arrangements for carrying out inspections and the checklist for inspections;
  - (b) the arrangements for recording the results of inspections and for taking follow-up action to correct deficiencies;
  - (c) arrangement in place to isolate, remove, or restore deficient item
  - (d) the names and roles of the persons who are responsible for the inspection and maintenance of the lighting and the telephone numbers for contacting them during and after working hours;
- (6) Aerodrome Marking and Signs; Particulars of the procedures for the

inspection and maintenance of the aerodrome markings and signs, including details of the following:

- (a) the arrangements for carrying out inspections and the checklist for inspections;
- (b) the arrangements for recording the results of inspections and for taking follow-up action to correct deficiencies;
- (c) the names and roles of the persons who are responsible for the inspection and maintenance of the lighting and the telephone numbers for contacting them during and after working hours;

# (7) Wind direction indicators.

- (a) Arrangements to install and maintain wind direction indicator including:
  - (i) Number and locations of wind direction indicators
  - (ii) Lighting of the wind cones for night and low visibility operations.
- (b) The person responsible for maintaining wind direction indicators in accordance with standards acceptable to the Director General.

# (8) **Public Protection**; Arrangement in place for public protection, including:

- (a) Safeguards acceptable to the Director General to prevent inadvertent entry to the movement area by unauthorized persons or vehicles;
- (b) Protection of persons and property from aircraft blast; and

# (9) Obstacle Control

*Particulars of the following:* 

- (a) the procedures for monitoring the obstacle limitation surfaces;
- (b) controlling obstacles within the Authority of the operator;
- (c) the procedures for monitoring buildings or structure developments in relation to their height within the boundaries of the obstacle limitation surfaces:
- (d) if the aerodrome has instrument approach procedures the procedures for monitoring for new objects or building developments in any other areas nominated by the instrument procedure designers;
- (e) notifying the DGCA of the nature and location of obstacles and any subsequent addition or removal of obstacle for action as necessary, including amendment of the AIS publications.
- (f) the names, telephone numbers and roles of the persons responsible for planning and implementing obstacle control;

# (10) Access Control to Aerodrome Operations Area

Particulars of the procedure developed and to be followed in coordination with the agency responsible to prevent unlawful interference in civil aviation at the aerodrome, for prevention of unauthorized entry of persons, vehicles, equipment, animals or other things that may endanger aircraft safety, into the movement area including the details of the following:

- (a) the arrangements for controlling airside access;
- (b) the role of aerodrome operator, aircraft operator, aerodrome fixed-base operators, aerodrome security entity, the DGCA and other government departments, as applicable; and
- (c) the names and roles of the persons who are responsible for controlling access to the movement area and the telephone numbers for contacting them during and after working hours;

## (11) Wildlife Hazard Management

Particulars of the procedures to deal with danger to aircraft operations caused by the presence of birds or other animals in the aerodrome flight pattern or movement area, including details of the following:

- (a) the arrangements for assessing any bird or animal hazard;
- (b) the arrangements for the removal of any bird or animal hazard and implementing control programmes;
- (c) the names and roles of the persons responsible for dealing with bird or animal hazards, and the telephone numbers for contacting them during and after working hours;

# (12) Accident and Mandatory Occurrence reporting

Procedure in place for reporting accident and incident including the following:

- (a) Reporting accidents / incidents at the airport premises.
- (b) Remedial, investigation and corrective actions.
- (c) Accidents /incidents recording.

#### APPENDIX II - MATTERS TO BE DEALT WITH IN SAFETY INSPECTIONS

1) Details of aerodrome

Check that the following details relating to the aerodrome, published in AIP or given to air transport operators, are correct:

- (a) details of the location of the aerodrome;
- (b) the name and address of the aerodrome operator;
- (c) details of the movement area;
- (d) details of runway distances available;
- (e) details of the aerodrome lighting;
- (f) details of ground services;
- (g) notice of special conditions and procedures, if any.

#### 2) Aerodrome operating procedures

Check aerodrome operating procedures to ensure that the following matters are dealt with:

- (a) recording of aerodrome inspections;
- (b) recording of notices given to the NOTAM Office and AIS or to air transport operators;
- (c) recording of aerodrome works.
- (d) recording details of flight operations
  - (i) aircraft arrivals and departures
  - (ii) aircraft types
  - (iii) no. of passengers
- 3) Reporting officer(s). Check that each personnel appointed as a reporting officer (s) is competent to carry out the reporting officer's functions.
- 4) Details relating to movement area etc. Check the following:
  - (a) dimensions and surface conditions of runways, taxiways and aprons;
  - (b) aerodrome lighting, including back-up lighting and obstacle lighting;
  - (c) wind direction indicators and their illumination;
  - (d) aerodrome markings and signs;

- (e) obstacle limitation surfaces applicable to the aerodrome;
- (f) two-way radios (whether hand-held or installed in vehicles) used by the aerodrome operator on the movement area;
- (g) equipment used for dispersing birds;
- (h) aerodrome fencing.

# APPENDIX III CLOSED MARKINGS

