GHANA CIVIL AVIATION (AERODROMES) DIRECTIVES



PART 1 – GENERAL POLICIES, PROCEDURES & DEFINITIONS

IN EXERCISE OF THE POWERS CONFERRED ON THE DIRECTOR-GENERAL OF THE GHANA CIVIL AVIATION AUTHORITY BY SECTION 21(1) OF THE GHANA CIVIL AVIATION ACT, (ACT 678) THESE DIRECTIVES ARE MADE THIS 27^{TH} DAY OF NOVEMBER 2018.

THESE DIRECTIVES SHALL BE CITED AS **THE GHANA CIVIL AVIATION** (AERODROMES) DIRECTIVES.

INTRODUCTION TO THE GHANA CIVIL AVIATION (AERODROMES) DIRECTIVES

Ghana is a Signatory to the Convention on International Civil Aviation (Chicago Convention, signed at Chicago on 7 December 1944). Under Article 12 of the Convention, Ghana as a Contracting State is obliged to adopt measures to insure safety through conformity with international standards in its safety oversight obligations. The fundamental elements of national safety oversight are legislation establishing and empowering the civil aviation authority, and promulgation of specific operating Directives for civil aviation. Under Article 37 and 38 of the Chicago Convention, Ghana has agreed to conform to the Standards and Recommended Practices (SARP) presented by the International Civil Aviation Organisation (ICAO) in a series of ICAO Annexes.

The Ghana Civil Aviation (Aerodromes) Directives therefore present the regulatory requirements for Ghana by the incorporation of ICAO Annex Standards. Where applicable, ICAO Recommended Practices are also incorporated for completeness.

The Aerodromes Directives are presented in the following Parts:

Part 1, *General Policies, Procedures and Definitions*, sets forth the basic rules of construction and application of the Directives, definitions applicable to more than one Part, and the rules governing the administration of Aerodromes, Heliports, Helidecks, environmental considerations, as well as licences, certifications, investigative and enforcement procedures in aerodromes serving Civil Aviation in General. Of special interest are the Appendices that may accompany each Part. These Appendices provide detailed requirements that support the intent of the Directives presented in the Part.

Part 14, *Design and Technical Operation of Aerodromes*, contains Standards and specifications that prescribe the physical characteristics and obstacle limitation surfaces to be provided for at aerodromes, and certain facilitates and technical services normally provided at an aerodrome. It sets forth the minimum aerodrome specifications for aircrafts, which have the characteristics of those, which are currently operating, or for similar aircraft that are planned for introduction.

Part 16, *Environmental Protection*, contains the Standards and adopted Recommended Practices of the four Volumes of ICAO Annex 16 which specify the regulatory requirements for Noise Certification, Noise Monitoring, Aerodrome Environmental Standards and Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). This Part is replicated in the Flight Standards Directives.

Part 25, *Registration of Aerodromes*, applies in respect of all aerodromes except certified airports, heliports and military aerodromes.

Part 26, Section 1, *Surface and Elevated Heliports*, applies to all surface and elevated helicopter landing sites used for the landing and taking-off by civil helicopters but does not apply in respect of a military heliport.

Part 26, Section 2, *Helidecks*, deals with requirements and procedures for authorization of helidecks on installations and vessels. This part addresses the regulatory requirements and enforcement affecting offshore installation operators,

GHANA CIVIL AVIATION (AERODROMES) DIRECTIVES

Part 1 – General Policies, Procedures and Definitions mobile offshore drilling unit (MODU) owners and, where appropriate, vessel owners.

Part 27, Aerodrome, Development and Safeguarding, prescribes rules for persons proposing to construct, alter, activate, or deactivate a civil or joint-use (civil/military) aerodrome or to alter the status or use of such an aerodrome.

Part 30, *Design and Technical Operation of Heliports*, contains Standards and Practices (specifications) that prescribe the physical characteristics and obstacle limitation surfaces to be provided for at heliports, and certain facilities and technical services normally provided at a heliport.

Part 32, *Certification of Aerodromes*, deals with land aerodromes used for international operations and prescribes the rules and requirements that govern the operators of certified aerodromes, including obstacles and hazards at aerodromes, obligations of aerodrome operators in relation to rescue and firefighting services, establishment of safety management system at aerodromes and airport emergency planning.

Part 33, *Ground Handling Certification*, deals with the certification of ground handling operators and prescribes obligations to ensure compliance to requirements of accepted international best practices and standards at aerodromes in Ghana.

THE GHANA CIVIL AVIATION AUTHORITY HAS ADDITIONAL DIRECTIVES, NAMELY:

- GHANA CIVIL AVIATION (AIR NAVIGATION SERVICES) DIRECTIVES,
- GHANA CIVIL AVIATION (FLIGHT STANDARDS) DIRECTIVES,
- GHANA CIVIL AVIATION (SECURITY) DIRECTIVES,
- GHANA CIVIL AVIATION (REMOTELY PILOTED AIRCRAFT SYSTEMS) DIRECTIVES
- GHANA CIVIL AVIATION DIRECTIVES ON PERSONS WITH DISABILITY; AND
- GHANA CIVIL AVIATION (SAFETY MANAGEMENT) DIRECTIVES.

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PART 1 - GENERAL POLICIES, PROCEDURES AND DEFINITIONS

NOVEMBER 2018

1.1 GENERAL

1.1.1 RULES OF CONSTRUCTION

- (1) Throughout these Directives the following word usage applies:
 - (a) **Acceptable** means the Authority has reviewed the method, procedure, or policy and has neither objected to nor approved its proposed use or implementation.
 - (b) **Approved** means the Authority has reviewed the method, procedure, or policy in question and issued a formal written approval.
 - (c) **Includes** means "includes but is not limited to."
 - (d) **May** indicates that discretion can be used when performing an act described in a Directive.
 - (e) **Person** includes a body corporate, whether corporation aggregate or corporation sole and an unincorporated body of persons as well as an individual.
 - (f) **Prescribed** means the Authority has issued written policy or methodology which imposes either a mandatory requirement, if the written policy or methodology states "shall," or a discretionary requirement if the written policy or methodology states "may."
 - (g) **Shall** indicates a mandatory requirement.
 - (h) The words **"no person may..."** or **"a person may not..."**mean that no person is required, authorised, or permitted to do an act described in a Directive.
 - (i) **Will** indicates an action incumbent upon the Authority.
- (2) Words in this Directive importing;
 - (a) male persons include female persons; and
 - (b) female persons include male persons.
- (3) Words in this Directive importing 'persons' include male and female persons, corporations, whether aggregate or sole, and unincorporated bodies of persons.
- (4) A reference in this Directive to a party aggrieved includes a reference to a body corporate in a case where that body corporate is a party aggrieved.

1.1.2 APPLICABILITY

- (1) These Directives shall apply to the following:
 - (a) Airport or Aerodrome Operators
 - (b) Air Navigation Service Providers
 - (c) Meteorological Service Providers
 - (d) Air Operators/Air carriers
 - (e) Air Operator personnel/ Air Carrier Personnel
 - (f) Groundhandling Organisations
 - (g) Aircraft Maintenance Organisations
 - (h) Aviation Training Organisations
 - (i) General Aviation Owners, Operators, Mechanics, Agencies, and non-licenced persons
 - (j) Operations within Aerodromes
 - (k) Aviation Support Services
 - (l) All other Civil Aviation related operations
- (2) Provisions addressing persons certificated under any Part of these Directives also apply to any person who engages in an operation governed by any Part of the Ghana Civil Aviation Directives without the appropriate certificate, licence, operations specification, or similar document required as part of the certification.
- (3) Directives addressing general matters establish minimum standards for all aerodromes for civil aviation operated in Ghana. Specific standards applicable to the holder of a certificate or authorisation shall apply if they conflict with a more general directive.

1.1.3 ORGANISATION OF DIRECTIVES

- (1) These Directives are subdivided into five hierarchical categories:
 - (a) **Part** refers to the primary subject area.
 - (b) **Subpart** refers to any subdivision of a Part.
 - (c) **Section** refers to any subdivision of a Subpart.
 - (d) **Subsection** refers to the title of a regulation and can be a subdivision of a Subpart or Section,
 - (e) **Paragraph** refers to the text describing the regulations. All paragraphs are outlined alphanumerically in the following hierarchical order: (1), (a), (i), (A).
- (2) Abbreviations or acronyms used within each Part are defined at the beginning of those Parts, and if a definition is supplied, a note will indicate the Part where the definition is located.

- (3) Notes appear in subsections to provide exceptions, explanations, and examples to individual requirements.
- (4) Directives may refer to Implementing Standards, which provide additional detailed requirements that support the purpose of the subsection, and unless otherwise indicated, have the legal force and effect of the referring Directive. The rules of construction, Subsection 1.1.1 apply to these Implementing Standards.

1.1.4 DATE AND TIME FORMAT

- (1) The abbreviated date format to be used in all correspondence, records and documents should be DAY/MONTH/YEAR (DD/MM/YY). eg. 01/03/18 means 1st March 2018.
- (2) All times are in Greenwich Mean Time (GMT)/ Universal Coordinated Time (UTC).

1.2 GENERAL ADMINISTRATIVE RULES GOVERNING CIVIL AVIATION

1.2.1 DELEGATION OF POWERS AND DUTIES

- (1) The Director-General may delegate, in accordance with the provisions of section 9 of the Ghana Civil Aviation Act 2004, Act 678, any of his safety oversight functions, powers or duties to an Aviation Safety or Security Inspector, any other person, technical unit or administrative unit of the Authority as well as to designees or other persons or entities with whom the Authority may have any agreement for the specific function of safety oversight.
- (2) The Authority shall have a Department responsible for aviation safety regulation. The Department shall have sections or units which shall be responsible for Aviation Flight Standards, Aerodrome Safety and Standards, Aviation Security, Air Navigation Services and such other areas of oversight as may be prescribed by the Authority.
- (3) Delegated powers under 1.2.1 (1) may include the power to prohibit or prevent a person from exercising privileges granted to such person under a licence or certificate, to prevent flying in circumstances specified in these Directives and such other issues of a safety or security import.

1.2.2 ACCESS TO DOCUMENTS AND FACILITIES

The Director General shall have unlimited, unrestricted and unimpeded access to aircraft factories, aircraft cabin and flight deck, hangars, workshops, aerodromes, ramps, fuel storage farms, operators offices, all other aviation service providers offices, groundhandling organisations, as well as unlimited, unimpeded and unrestricted access and inspection of all aviation related documentation, for the purpose of determining compliance with the Ghana Civil Aviation Act 2004, Act 678, The Ghana Civil Aviation Directives and the Technical Directives or Orders issued by the Director-General.

1.2.3 COMPLIANCE WITH GHANA CIVIL AVIATION ACT 2004, ACT 678 GHANA CIVIL AVIATION DIRECTIVES, TECHNICAL INSTRUCTIONS AND CIRCULARS

1.2.3.1 PUBLIC COMPLIANCE

(1) It shall be the duty of every person (along with any agents and employees thereof in the case of entities other than individuals) subject to the Ghana Civil Aviation Act 2004, Act

678 and the Ghana Civil Aviation Directives, to comply with any Directive, Instruction, Circular, licence or certificate.

(2) Any violation of the Ghana Civil Aviation Act 2004, Act 678 and the Ghana Civil Aviation Directives or any Technical Instructions, Circular issued thereunder shall be subject to such administrative action and penalties as may be determined by the Authority or a court of competent jurisdiction in accordance with the provisions of the Ghana Civil Aviation Act and these Directives.

1.2.3.2 NOTICE AND OPPORTUNITY TO BE HEARD

Unless safety in air transport requires immediate action, prior to a final determination, the Authority shall provide a person with an opportunity to be heard as to why sanctions for any violation under the Ghana Civil Aviation Act and the Ghana Civil Aviation Directives should not be applied in accordance with the Act, Directives, Instructions or Circulars.

1.2.3.3 CIVIL PENALTIES

- (1) Any person, other than a person conducting an operation in commercial air transport or international commercial air transport, who violates any provision of the Act, these Directives, or any Instruction or Circular issued thereunder, is subject to a civil penalty imposed by the Authority.
- (2) Any person conducting an operation in commercial air transport or international commercial air transport, who violates any provision of the Act, these Aviation Flight Standards Directives, or any order issued thereunder, is subject to a civil penalty imposed by the Authority.
- (3) Civil penalties may be assessed instead of or in addition to any licence or certificate action.
- (4) The Authority may also impose administrative penalties in the first instance in respect of offences specified under the Act.
- (5) IS:1.2.3.3(5) of this |Part, contains a sanction guidance table that conforms to the penalty provisions in the Act and reflects the Authority's enforcement policy.

1.2.3.4 CRIMINAL PENALTIES

The Ghana Civil Aviation Act and the Criminal and Other Offences Act, 1960, Act 29, establishes criminal penalties for any person who knowingly and willfully violates specified provisions of that Act, or any Directive or Instruction issued thereunder.

1.2.3.5 POWER TO PREVENT A PERSON FROM EXERCISING PRIVILEGES

(1) The Director –General may, by delegated powers prohibit or prevent a person from exercising any privileges granted to such person under a licence or certificate.

(2) Foreign air operators with whom Ghanaian registered Carriers have entered into commercial agreements ie. leasing, code share franchising, and shall be governed by the provisions of the Ghana Civil Aviation Directives.

1.2.3.6 ADMINISTRATIVE ACTION

- (1) If it is determined that a violation or an alleged violation of the Act, a Directive, Instruction or Circular has occurred for which an appropriate administrative action is to be taken, the Authority may take one of the following actions:
 - (a) A "*Warning Notice*" that shall recite available facts and information about the incident or condition and indicate that it may have been a violation; or
 - (b) A "*Letter of Correction*" which confirms the Authority's decision in the matter and states the necessary corrective action the alleged violator has taken or agreed to take. If the agreed corrective action is not fully completed, formal certificate action may be taken in accordance with 1.2.3.7.
- (2) An administrative action under this section does not constitute a formal adjudication of the matter.

1.2.3.7 CERTIFICATE ACTION

1.2.3.7.1 SUSPENSION OR REVOCATION OF A LICENCE OR CERTIFICATE FOR VIOLATION OF THE DIRECTIVES.

- (1) The Authority may suspend any aviation instrument issued or impose conditions in respect of any such instrument if
 - (a) the Authority considers such action necessary to ensure compliance with the Act or the Ghana Civil Aviation Directives;
 - (b) the Authority is satisfied that the holder of the aviation safety instrument or certificate has failed to comply with any condition of the aviation safety instrument or certificate, any provisions of the Act or the Ghana Civil Aviation Directives, or any applicable Instructions, Circulars or aviation safety approval;
 - (c) the Authority considers that the privileges or duties for which the aviation safety instrument has been granted are being carried out by the holder in a careless or incompetent manner; or
 - (d) in the case of an aviation safety instrument or certificate relating to the use of any aircraft, aeronautical product or the provision of any service, the Authority considers that there is reasonable doubt as to the airworthiness of the aircraft or as to the quality or safety of the aeronautical product or service to which the aviation safety instrument relates and the Authority considers that suspending the aviation safety instrument or certificate or imposing conditions in respect of the instrument or certificate is necessary in the interest of safety.
- (2) The holder of any licence or certificate issued under these Directives who violates any provision of the Ghana Civil Aviation Act, as amended, or any Directive or order issued thereunder, is subject to suspension or revocation of the licence or certificate, in accordance with the provisions of the Ghana Civil Aviation Act.

- (3) Any licence or certificate issued under these Directives ceases to be effective, if it is surrendered, suspended, or revoked.
- (4) The holder of any licence or certificate issued under these Directives that has been suspended or revoked shall return that licence to the Authority when requested to do so by the Authority.

1.2.3.7.2 SURRENDER, SUSPENSION, OR REVOCATION OF LICENCE OR CERTIFICATE

- (1) Any licence or certificate issued under these Directives ceases to be effective if it is surrendered, suspended, or revoked.
- (2) The holder of any licence or certificate issued under these Directives that has been suspended or revoked shall return that licence or certificate to the Authority when requested to do so by the Authority.

1.2.3.7.3 REAPPLICATION AFTER REVOCATION

Unless otherwise authorised by the Authority, a person whose licence, certificate, rating, or authorisation has been revoked may not apply for any licence, certificate, rating, or authorisation for one (1) year after the date of revocation.

1.2.3.7.4 REAPPLICATION AFTER SUSPENSION

Unless otherwise authorised by the Authority, a person whose licence has been suspended may not apply for any licence, rating, or authorisation during the period of suspension.

1.2.3.7.5 VOLUNTARY SURRENDER OR EXCHANGE OF LICENCE

- (1) The holder of a licence, certificate or authorisation issued under these Directives may voluntarily surrender it for:
 - (a) Cancellation;
 - (b) Issuance of a lower grade licence; or
 - (c) Another licence with specific ratings deleted.
- (2) An applicant requesting voluntary surrender of a licence shall include the following signed statement or its equivalent: "This request is made for my own reasons, with full knowledge that my (insert name of licence or rating, as appropriate) may not be reissued to me unless I again pass the tests prescribed for its issuance."

1.2.4 USE OF PSYCHOACTIVE SUBSTANCES

(1) No person who holds a licence, rating or a certificate issued under these Directives shall exercise the privileges of the licence, rating or certificate while under the influence of any psychoactive substance, which might render them unable to safely and properly exercise these privileges.

- (2) A Post Holder or person whose function is critical to the safety of aviation (safety-sensitive personnel) shall not undertake that function while under the influence of any psychoactive substance, by reason of which human performance is impaired.
- (3) The Post Holder or person referred to in sub-directives (1) and (2) shall not engage in any kind of problematic use of substances.
- (4) The Authority may identify and remove from a safety-critical function a licence or certificate Post holder who engages in any kind of problematic use of substances. Return to the safety-critical functions may be considered after successful treatment or, in cases where no treatment is necessary, after cessation of the problematic use of substances and upon determination that the person's continued performance of the function is unlikely to jeopardize safety.
- (5) Any Post Holder or person subject to these Directives who is convicted for the violation of any statute relating to the growing, processing, manufacture, sale, disposition, possession, transportation, or importation of narcotic drugs, marijuana, or depressant or stimulant drugs or substances, may—
 - (a) Be denied any licence, certificate, rating, qualification, or authorisation issued under these directives; or
 - (b) Have his or her licence, certificate, rating, qualification, or authorisation issued under these directives suspended or revoked.

1.3 EXEMPTIONS

1.3.1 APPLICABILITY

This subpart prescribes procedures for the request, review, and denial or issuance of exemptions from the Directives of these Parts.

1.3.2 GENERAL

- (1) Any interested person may apply to the Authority for an exemption from these Directives.
- (2) Only the Authority may issue exemptions, and no person may take or cause to be taken any action not in compliance with these Directives unless the Authority has issued an applicable exemption to the person.
- (3) Exemptions will only be granted in extraordinary circumstances and shall not be deemed to be an alternative means of compliance to the Directives where so granted.
- (4) No person may apply for an exemption for the application of these Directives with the sole intent to avoid compliance with the Directives.

1.3.3 REQUIREMENTS FOR APPLICATION

1.3.3.1 GENERAL

- (1) Applications for an exemption should be submitted at least 60 days in advance of the proposed effective date, to obtain timely review.
- (2) The request must contain the applicant's

- (a) Name
- (b) Street address and mailing address, if different.
- (c) Telephone number
- (d) Fax number if available
- (e) Email address if available; and
- (f) Agent for all purposes related to the application.
- (3) If the applicant is not a citizen or legal resident of Ghana, the application must specify a Ghana agent for service.

1.3.3.2 REQUEST FOR EXEMPTION BY AN OPERATOR

- (1) An Operator may apply for an exemption where the Operator is not able to comply with the provisions of these Directives.
- (2) Such an application shall be made in writing and supported by cogent reasons including an aeronautical study or risk assessment conducted and their associated results.
- (3) The Director-General may determine any procedure necessary to ensure that the aerodrome attains a level of safety equivalent to that established by the provisions of the Directives that the Operator is not able to comply with.

1.3.3.3 SUBSTANCE OF THE REQUEST FOR EXEMPTION

- (1) Applications must contain the following:
 - (a) A citation of the specific requirement from which the applicant seeks relief;
 - (b) Description of the type of operations to be conducted under the proposed exemption;
 - (c) The proposed duration of the exemption;
 - (d) An explanation of how the exemption would be in the public interest, that is, benefit the public as a whole.
 - (e) A detailed description of the alternative means by which the applicant will ensure a level of safety equivalent to that established by the Directive in question.
 - (f) A safety risk assessment or aeronautical study or review and discussion of any known safety concerns with the requirement, including information about any relevant accidents or incidents of which the applicant is aware.
 - (g) If the applicant seeks to operate under the proposed exemption outside of Ghana airspace, the application must also indicate whether the exemption would contravene any provision of the Standards and Recommended Practices of the International Civil Aviation Organization (ICAO).
- (2) If the applicant seeks emergency processing, the application must contain supporting facts and reasons that the application was not timely filed, and the reasons it is an

emergency. The Authority may deny an application if the Authority finds that the applicant has not justified the failure to apply in a timely fashion.

1.3.4 REVIEW, PUBLICATION, AND ISSUE OR DENIAL OF THE EXEMPTION

1.3.4.1 INITIAL REVIEW BY THE AUTHORITY.

- (1) The Authority will review the application for accuracy and compliance with the requirements of these Directives.
- (2) If the application appears on its face to satisfy the provisions of these Directives and the Authority determines that a review of its merits is justified, the Authority will publish a detailed summary of the application for comment and specify the date by which comments must be received by the Authority for consideration.
- (3) If the requirements of this Part have not been met, the Authority will notify the applicant and take no further action until the applicant complies with the requirements of this Part.

1.3.4.2 EVALUATION OF THE REQUEST.

After initial review, if the filing requirements have been satisfied, the Authority shall conduct an evaluation of the request to include:

- (a) A determination of whether an exemption would be in the public interest;
- (b) A determination, after a technical evaluation, of whether the applicant's proposal would provide a level of safety equivalent to that established by the Directive;
- (c) If it appears to the Authority that a technical evaluation of the request would impose a significant burden on the Authority's technical resources, the Authority may deny the exemption on that basis.
- (d) A determination, if the applicant seeks to operate under the exemption outside of Ghana airspace, of whether a grant of the exemption would contravene the applicable ICAO Standards and Recommended Practices.
- (e) An evaluation of comments received from interested parties concerning the proposed exemption.
- (f) A recommendation, based on the preceding elements, of whether the request should be granted or denied, and of any conditions or limitations that should be part of the exemption.

1.3.4.3 NOTIFICATION OF DETERMINATION

- (1) The Authority shall notify the applicant by letter and publish a detailed summary of its evaluation and decision to grant or deny the request. The summary shall specify the duration of the exemption and any conditions or limitations to the exemption.
- (2) If the request is for emergency relief, the Authority will publish the application and the Authority's decision as soon as possible after processing the application.
- (3) If the exemption affects a significant population of the aviation community of Ghana

the Authority shall also publish the summary in its aeronautical information publications.

1.3.4.4 EXTENSION OF THE EXEMPTION TO OTHER INTERESTED PARTIES

- (1) If the Authority determines that an exemption should be granted, other persons or organizations may apply to the Authority to be included in the relief granted.
- (2) Such applications shall be in accordance with the requirements of 1.3.2.
- (3) If the Authority determines that the request merits extension of the exemption to the applicant, it shall notify the applicant by letter, specifying the duration of the exemption, and listing any additional conditions that may pertain to the applicant that are not addressed in the underlying exemption.

1.4 **DEFINITIONS**

For the purpose of these Directives, the following definitions shall apply:

Acceptable. A rule of construction in Part 1.1.1(1)(a) that means the Authority has reviewed the method, procedure, or policy and has neither objected to nor approved its proposed use or implementation.

Acceptance checklist. A document used to assist in carrying out a check on the external appearance of packages of dangerous goods and their associated documents to determine that all appropriate requirements have been met.

Accountable manager (Maintenance). The manager who has corporate authority for ensuring that all maintenance, preventive maintenance, and modification required by the aircraft owner/operator can be financed and carried out to the standard required by the Authority. The accountable manager may delegate to another person in the organisation, in writing, to become the accountable manager, when authorised by the Authority.

Accountable Manager. The person acceptable to the Authority who has corporate authority for ensuring that all operations and maintenance activities can be financed and carried out to the standard required by the Authority, and any additional requirements defined by the operator.

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

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.

Advisory airspace. An airspace of defined dimensions, or designated route, within which air traffic advisory service is available.

Aerial Work. An aircraft operation in which an aircraft is used for specialised services such as agriculture, construction, photography, surveying, observation and patrol, search and rescue, aerial advertisement, etc.

Aerobatic flight. Manoeuvres intentionally performed by an aircraft involving an abrupt change in its attitude, an abnormal attitude, abnormal acceleration,

or an abnormal variation in speed not necessary for normal flight.

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

Aerodrome certificate. A certificate issued by the appropriate authority under applicable directives for the operation of an aerodrome.

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

Aerodrome identification sign. A sign placed on an aerodrome to aid in identifying the aerodrome from the air.

Aerodrome mapping data (AMD). Data collected for the purpose of compiling aerodrome mapping information for aeronautical uses.

Note.— Aerodrome mapping data are collected for purposes that include the improvement of the user's situational awareness, surface navigation operations, training, charting and planning.

Aerodrome mapping database (AMDB). A collection of aerodrome mapping data organized and arranged as a structured data set.

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

- (a) 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.
- (b) 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.
- (c) 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 experience. Pilot time obtained in an aircraft, approved flight simulator, or approved flight-training device for meeting the training and flight

time requirements of these directives.

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

Aeronautical product. Any aircraft, aircraft engine, propeller, or subassembly, appliance, material, part, or component to be installed thereon.

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.

Note.— Attachment A, Section 2, provides information on the concept of balanced field length and the Airworthiness Manual (Doc 9760) contains detailed guidance on matters related to take-off distance.

Aeroplane: A power-driven heavier-than-air aircraft, deriving its lift in flight chiefly from aerodynamic reactions on surfaces, which remain fixed under given conditions of flight.

Agricultural aircraft operation. The operation of an aircraft for the purpose of-

- i. Dispensing any economic poison,
- ii. Dispensing any other substance intended for plant nourishment, soil treatment, propagation of plant life, or pest control, or
- iii. Engaging in dispensing activities directly affecting agriculture, horticulture, or forest preservation, but not including the dispensing of live insects.

Air navigation facility. Any facility used in, available for use in, or designed for use in aid of air navigation, including aerodromes, landing areas, lights, any apparatus or equipment for disseminating weather information, for signalling, for radio directional finding, or for radio or other electrical communication, and any other structure or mechanism having a similar purpose for guiding or controlling flight in the air or the landing and take-off of aircraft.

Air Operator Certificate (AOC). A certificate authorising an operator to carry out specified commercial air transport operations.

Air Operator. Any organisation which undertakes to engage in domestic commercial air transport or international commercial air transport, whether directly or indirectly or by a lease or any other arrangement.

Air Traffic Control (ATC) facility. A building holding the persons and equipment responsible for providing ATC services (e.g., airport tower, approach control, centre).

Air Traffic Control. A service that promotes the safe, orderly, and expeditious flow of air traffic at aerodromes and during the approach, departure, and en route environments.

Aircraft. Any machine that can derive support in the atmosphere from the

reactions of the air other than the reactions of the air against the earth's surface.

Aircraft category. Classification of aircraft according to specified basic characteristics (e.g., aeroplane, helicopter, glider, free balloon).

Aircraft certificated for multi-pilot operation. A type of aircraft which the State of Registry has determined, during the certification process, can be operated safely with a minimum crew of two pilots.

Aircraft certificated for single-pilot operation. A type of aircraft which the State of Registry has determined, during the certification process, can be operated safely with a minimum crew of one pilot.

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 aftmost CG position appropriate to the maximum gross apron (ramp) mass is used to calculate the ACN. In exceptional cases the forwardmost CG position may result in the nose gear loading being more critical.

Aircraft component. Any component part of an aircraft up to and including a complete powerplant and/or any operational/ emergency equipment.

Aircraft engine. Any engine used, or intended to be used, for propulsion of aircraft and includes all parts, appurtenances, and accessories thereof other than propellers.

Aircraft piracy. Any actual or attempted seizure or exercise of control, by force or violence, or by any other form of intimidation, with wrongful intent, of an aircraft within the jurisdiction of Ghana.

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

Aircraft Technical Log. A document attached to an aircraft for recording defects and malfunctions discovered during operation and for recording details of all maintenance carried out whilst the aircraft is operating between scheduled visits to the base maintenance facility. It also contains operating information relevant to flight safety and maintenance data that the operating crew need to know.

Aircraft type. All aircraft of the same basic design.

Airframe. The fuselage, booms, nacelles, cowlings, fairings, airfoil surfaces (including rotors but excluding propellers and rotating airfoils of a powerplant), and landing gear of an aircraft and their accessories and controls.

Airman. This term refers to—

- Any individual who engages, as the person in command or as pilot, mechanic, or member of the crew, or who navigates an aircraft while the aircraft is underway;
- (ii) Any individual in charge of the inspection, maintenance, overhauling, or repair of aircraft, and any individual in charge of the inspection, maintenance,

overhauling, or repair of aircraft, aircraft engines, propellers, or appliances; or

(iii) Any individual who serves in the capacity of flight operations officer;

Airworthiness data. Any information necessary to ensure that an aircraft or aircraft component can be maintained in a condition such that airworthiness of the aircraft, or serviceability of operational and emergency equipment, as appropriate, is assured.

Airworthiness release. A certification signed by a licensed mechanic authorised by the AOC holder indicating that work was performed in accordance with the AOC holder's maintenance manual, was inspected by a licensed mechanic, and the aircraft was found satisfactory for safe operation.

Annexes to the Chicago Convention. The documents issued by the International Civil Aviation Organisation (ICAO) containing the Standards and Recommended Practices applicable to civil aviation.

Appliance. Any instrument, mechanism, equipment, part, apparatus, appurtenance, or accessory, including communications equipment, that is used or intended to be used in operating or controlling an aircraft in flight, is installed in or attached to the aircraft, and is not part of an airframe, powerplant, or propeller.

Appliances. Instruments, equipment, apparatus, parts, appurtenances, or accessories, of whatever description, which are used, or are capable of being or intended to be used, in the navigation, operation, or control of aircraft in flight (including parachutes and including communication equipment and any other mechanism or mechanisms installed in or attached to aircraft during flight), and which are not part or parts of aircraft, aircraft engines, or propellers.

Approval for return to service. A certification by an approved maintenance organisation representative that the maintenance, preventive maintenance, or modification performed on an aircraft, airframe, aircraft engine, propeller, appliance, or component part thereof was accomplished using the methods, techniques, and practices, prescribed in the current manufacturer's maintenance manual or instructions for continued airworthiness prepared by its manufacturer, or by using other methods, techniques, and practices acceptable to the Authority.

Approved by the Authority. Approved by the Authority directly or in accordance with a procedure approved by the Authority.

Approved continuous maintenance program. A maintenance program approved by the State of Registry.

Approved data. Technical information approved by the Authority.

Approved Maintenance Organisation (AMO). An organisation approved to perform specific aircraft maintenance activities by the Authority. These activities may include the inspection, overhaul, maintenance, repair and/or modification and release to service of aircraft or aeronautical products.

Approved standard. A manufacturing, design, maintenance, or quality standard approved by the Authority.

Approved training. Training carried out under special curricula and supervision approved by the Authority.

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GHANA CIVIL AVIATION (AERODROMES) DIRECTIVES Part 1 – General Policies, Procedures and Definitions

Approved. A rule of construction in Part 1.1.1(1)(b) that means the Authority has reviewed the method, procedure, or policy in question and issued a formal written approval.

Apron. A defined area, on a land aerodrome, intended to accommodate aircraft 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.

Arresting system. A system designed to decelerate an aeroplane overrunning the runway.

Autonomous runway incursion warning system (ARIWS). A system which provides autonomous detection of a potential incursion or of the occupancy of an active runway and a direct warning to a flight crew or a vehicle operator.

Article. Any item, including but not limited to, an aircraft, airframe, aircraft engine, propeller, appliance, accessory, assembly, subassembly, system, subsystem, component, unit, product, or part.

Authorised instructor. A person who—

- (i) Holds a valid ground instructor certificate issued under Part 2 when conducting ground training;
- (ii) Holds a current flight instructor certificate issued under Part 2 when conducting ground training or flight training; or

(iii) Is authorised by the Authority to provide ground training or flight training under Part 2 and Part 3 of the Ghana Civil Aviation (Flight Standards) Directives

Authority. The Ghana Civil Aviation Authority.

Balked landing. A landing manoeuvre that is unexpectedly discontinued at any point below the obstacle clearance altitude/height (OCA/H).

Balloon. A non-power-driven lighter-than-air aircraft.

Banner. An advertising medium supported by a temporary framework attached externally to the aircraft and towed behind the aircraft.

Barrette. Three or more aeronautical ground lights closely spaced in a transverse line so that from a distance they appear as a short bar of light.

Calendar day. The period of elapsed time, using Co-ordinated Universal Time or local time, that begins at midnight and ends 24 hours later in the next midnight.

Calendar month. A period of a month beginning and ending with the dates that are conventionally accepted as marking the beginning and end of a numbered year (as January 1 through January 31 in the Gregorian calendar).

Calendar year. A period of a year beginning and ending with the dates that are conventionally accepted as marking the beginning and end of a numbered year (as January 1 through December 31 in the Gregorian calendar).

Calendar. Discrete temporal reference system that provides the basis for defining temporal position to a resolution of one day (ISO 19108).

Cargo aircraft. Any aircraft carrying goods or property but not passengers. In this context the following are not considered to be passengers:

- (i) A crewmember.
- (ii) An operator's employee permitted by, and carried in accordance with, the instructions contained in the Operations Manual.
- (iii) An authorised representative of an Authority.
- (iv) A person with duties in respect of a particular shipment on board.

Category II (CAT II) operations. With respect to the operation of aircraft, means a straight-in ILS approach to the runway of an airport under a Category II ILS instrument approach procedure issued by the Authority or other appropriate authority.

Category III (CAT III) operations. With respect to the operation of aircraft, means an ILS approach to, and landing on, the runway of an airport using a Category III ILS instrument approach procedure issued by the Authority or other appropriate authority.

Certificated Approved Maintenance Organisation. Means approved by the Authority.

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

Certify as airworthy. The required maintenance record entry completed by a properly authorised person after the modification, overhaul, repair, or the inspection of an aircraft, or aeronautical product required by the Authority.

Certifying staff. Those personnel who are authorised by the Approved Maintenance Organisation in accordance with a procedure acceptable to the Authority to certify aircraft or aircraft components for release to service.

Check airman (aeroplane). A person who is qualified, and permitted, to conduct an evaluation in an aeroplane, in a flight simulator, or in a flight training device for a particular type aeroplane, for a particular AOC holder.

Check airman (simulator). A person who is qualified to conduct an evaluation, but only in a flight simulator or in a flight training device for a particular type aircraft, for a particular AOC holder.

Chicago Convention. ("Convention") The Convention on International Civil Aviation concluded in Chicago, U.S.A. in 1944, in effect, 1947. The Articles of the

Chicago Convention govern the actions of the contracting States in matters of international civil aviation safety directly and through the Annexes to the Convention, which set forth ICAO Standards and Recommended Practices.

Citizen of Ghana. This term refers to one of the following:

- (i) An individual who is a citizen of Ghana; or
- (ii) A corporation or association created or organised and authorised under the laws of Ghana.

Civil aircraft. Any aircraft other than a state or public aircraft.

Civil aviation. The operation of any civil aircraft for the purpose of general aviation operations, aerial work or commercial air transport operations.

Co-pilot. A licenced pilot serving in any piloting capacity other than as pilot-incommand but excluding a pilot who is on board the aircraft for the sole purpose of receiving flight instruction.

Note: Co-pilot as here defined is synonymous with the term "second-incommand" or "SIC"

Commercial air transport operation. An aircraft operation involving the transport of passengers, cargo or mail for remuneration or hire.

Commercial air transport. An aircraft operation involving the transport of passengers, cargo, or mail for remuneration or hire.

Composite. Structural materials made of substances, including, but not limited to, wood, metal, ceramic, plastic, fibre-reinforced materials, graphite, boron, or epoxy, with built-in strengthening agents that may by in the form of filaments, foils, powders, or flakes, of a different material.

Computer system. Any electronic or automated system capable of receiving, storing, and processing external data, and transmitting and presenting such data in a usable form for the accomplishment of a specific function.

Contracting States. All States that are signatories to the Convention on International Civil Aviation (Chicago Convention).

Controlled flight. Any flight which is subject to an air traffic control clearance.

Conversion. Conversion is the action taken by Ghana in issuing its own licence on the basis of a licence issued by another Contracting State for use on aircraft registered in Ghana.

Course. A program of instruction to obtain an airman licence, rating, qualification, authorisation, or currency.

Courseware. Instructional material developed for each course or curriculum, including lesson plans, flight event descriptions, computer software programs, audio-visual programs, workbooks, and handouts.

Crew Member. A person assigned by an Operator to duty on an aircraft in during a flight duty period.

Crew Resource Management. A program designed to improve the safety of flight operations by optimising the safe, efficient, and effective use of human resources, hardware, and information through improved crew communication and co-ordination.

Critical engine. The engine whose failure would most adversely affect the performance or handling qualities of an aircraft.

Critical phases of flight. Those portions of operations involving taxiing, takeoff and landing, and all flight operations below 10,000 feet, except cruise flight.

Cross country. A flight between a point of departure and a point of arrival following a pre- planned route using standard navigation procedures.

Cross-country time. That time a pilot spends in flight in an aircraft which includes a landing at a point other than the point of departure and, for the purpose of meeting the cross-country time requirements for a private pilot licence (except with a rotorcraft rating), commercial pilot licence, or an instrument rating, includes a landing at an aerodrome which must be a straight-line distance of more than 50 nautical miles from the original point of departure.

Cyclic redundancy check (CRC). A mathematical algorithm applied to the digital expression of data that provides a level of assurance against loss or alteration of data.

Dangerous goods accident. An occurrence associated with and related to the transport of dangerous goods which results in fatal or serious injury to a person or major property damage.

Dangerous goods incident. An occurrence, other than a dangerous goods accident, associated with and related to the transport of dangerous goods, not necessarily occurring on board an aircraft, which results in injury to a person, property damage, fire, breakage, spillage, leakage of fluid or radiation or other evidence that the integrity of the packaging has not been maintained. Any occurrence relating to the transport of dangerous goods which seriously jeopardises an aircraft or its occupants is deemed to constitute a dangerous goods incident.

Dangerous goods transport document. A document specified by the ICAO Technical Instructions for the Safe Transportation of Dangerous Goods by Air (See definition, below). It is completed by the person who offers dangerous goods for air transport and contains information about those dangerous goods. The document bears a signed declaration indicating that the dangerous goods are fully and accurately described by their proper shipping names and UN numbers (if assigned) and that they are correctly classified, packed, marked, labelled and in a proper condition for transport.

Dangerous goods. Articles or substances which are capable of posing a risk to health, safety, property or the environment and which are shown in the list of dangerous goods in the Technical Instructions or which are classified as such according to those instructions.

Data quality. A degree or level of confidence that the data provided meet the requirements of the data user in terms of accuracy, resolution and integrity

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 takeoff 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.

Deadhead Transportation. Time spent in transportation on aircraft (at the insistence of the AOC holder) to or from a crew member's home station.

Defined point after takeoff. The point, within the takeoff and initial climb phase, before which the Class 2 helicopter's ability to continue the flight safely, with one engine inoperative, is not assured and a forced landing may be required.

Defined point before landing. The point, within the approach and landing phase, after which the Class 2 helicopter's ability to continue the flight safely, with one engine inoperative, is not assured and a forced landing may be required.

Dependent parallel approaches. Simultaneous approaches to parallel or nearparallel instrument runways where radar separation minima between aircraft on adjacent extended runway centre lines are prescribed.

Directly in Charge. A person assigned to a position in which he or she is responsible for the work of a shop or station that performed maintenance, preventive maintenance, or modifications, or other functions affecting aircraft airworthiness.

Displaced threshold. A threshold not located at the extremity of a runway.

Dry lease. The lease of an aircraft without the crew.

Dual instruction time. Flight time during which a person is receiving flight instruction from a properly authorised pilot on board the aircraft.

Duty time. The total time from the moment a person identified in this Part begins, immediately after a rest period, any work on behalf of the AOC holder until that person is free from all restraint associated with that work.

Economic poison. Any substance or mixture of substances intended for-

- Preventing, destroying, repelling, or mitigating any insects, rodents, nematodes, fungi, weeds, and other forms of plant or animal life or viruses, except viruses on or in living human beings or other animals, which the Republic of Ghana may declare to be a pest, and
- (ii) Use as a plant regulator, defoliant or desiccant.

Effective intensity. The effective intensity of a flashing light is equal to the intensity of a fixed light of the same colour, which will produce the same visual range under identical conditions of observation.

Effective length of the runway. The distance for landing from the point at which the obstruction clearance plane associated with the approach end of the runway intersects the centreline of the runway to the far end.

Ellipsoid height (Geodetic height). The height related to the reference ellipsoid, measured along the ellipsoidal outer normal through the point in question.

Equivalent system of maintenance. An AOC holder may conduct maintenance activities through an arrangement with an AMO or may conduct its own maintenance, preventive maintenance, or alterations, so long as the AOC holder's maintenance system is approved by the Authority and is equivalent to that of an AMO, except that the approval for return to service of an aircraft/ aeronautical product shall be made by an appropriately licenced aviation maintenance engineer or aviation repair specialists in accordance with Part 2, as appropriate.

Evaluator. A person employed by a certified Aviation Training Organisation who performs tests for licensing, added ratings, authorisations, and proficiency checks that are authorised by the certificate holder's training specification, and who is authorised by the Authority to administer such checks and tests.

Examiner. Any person authorised by the Authority to conduct a pilot proficiency test, a practical test for an airman licence or rating, or a knowledge test under these directives.

Exemptions. This includes exceptions and deviations.

Extended overwater operation. With respect to aircraft other than helicopters, an operation over water at a horizontal distance of more than 50 nm from the nearest shoreline; and to helicopters, an operation over water at a horizontal distance of more than 50 nm from the nearest shoreline and more than 50 nm from an offshore heliport structure.

Facility. A physical plant, including land, buildings, and equipment, which provide the means for the performance of maintenance, preventive maintenance, or modifications of any article.

Fireproof material. A material capable of withstanding heat as well as or better than steel when the dimensions in both cases are appropriate for the specific purpose.

Fixed light. A light having constant luminous intensity when observed from a fixed point. Foreign object debris (FOD). An inanimate object within the movement area which has no operational or aeronautical function and which has the potential to be a hazard to aircraft operations.

Flight crewmember. A licenced crewmember charged with duties essential to the operation of an aircraft during a flight duty period.

Flight Duty Period. The total time from the moment a flight crewmember commences duty, immediately subsequent to a rest period and prior to making a flight or a series of flights, to the moment the flight crewmember is relieved of all duties having completed such flight or series of flights.

Flight plan. Specified information provided to air traffic services units, relative to an intended flight or portion of a flight of an aircraft. The term "flight plan" is used to mean variously, full information on all items comprised in the flight plan description, covering the whole route of a flight, or limited information required when the purpose is to obtain a clearance for a minor portion of a flight such as to cross an airway, to take off from, or to land at a controlled aerodrome.

Flight simulation training device. Any one of the following three types of apparatus in which flight conditions are simulated on the ground:

- (i) A flight simulator, which provides an accurate representation of the flight deck of a particular aircraft type to the extent that the mechanical, electrical, electronic, etc. aircraft systems control functions, the normal environment of flight crew members, and the performance and flight characteristics of that type of aircraft are realistically simulated
- (ii) A *flight procedures trainer*, which provides a realistic flight deck environment, and which simulates instrument responses, simple control functions of mechanical, electrical, electronic, etc. aircraft systems, and the performance and flight characteristics of aircraft of a particular class.
- (iii) A *basic instrument flight trainer*, which is equipped with appropriate instruments and which simulates the flight deck environment of an aircraft in flight in instrument flight conditions.

Flight simulator. A device that—

- (i) Is a full-size aircraft cockpit replica of a specific type of aircraft, or make, model, and series of aircraft;
- (ii) Includes the hardware and software necessary to represent the aircraft in ground operations and flight operations;
- (iii) Uses a force cueing system that provides cues at least equivalent to those cues provided by a 3 degree freedom of motion system;
- (iv) Uses a visual system that provides at least a 45 degree horizontal field of view and a 30 degree vertical field of view simultaneously for each pilot; and
- (v) Has been evaluated, qualified, and approved by the Authority.

Flight time. The period of time that the aircraft moves under its own power for the purpose of flight and ends when the aircraft comes to rest after it is parked with engine(s) shut down.

Note: Flight time as here defined is synonymous with the term "block-to-block" time or "chock-to-chock" time in general usage, which is measured from the time an aircraft moves from the loading point until it stops at the unloading point.

Flight training device. A device that

- Is a full-size replica of the instruments, equipment, panels, and controls of an aircraft, or set of aircraft, open or in an enclosed cockpit, including the hardware and software for the systems installed, that is necessary to simulate the aircraft in ground and flight operations,
- (ii) Need not have a force (motion) cueing or visual system; and
- (iii) Has been evaluated, qualified, and approved by the Authority.

Note: A set of aircraft are those that share similar performance characteristics, such as similar airspeed and altitude operating envelops, similar handling characteristics, and the same number and type of propulsion systems.

Flight training. Training, other than ground training, received from an authorised

instructor in flight in an aircraft.

Flight(s). The period from takeoff to landing.

Foreign air operator. Any operator, not being a Ghana air operator, which undertakes, whether directly or indirectly or by lease or any other arrangement, to engage in commercial air transport operations within borders or airspace of Ghana, whether on a scheduled or charter basis.

Foreign Authority. The civil aviation authority that issues and oversees the Air Operator Certificate of the foreign operator.

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

Note.— Guidance on design for frangibility is contained in the Aerodrome Design Manual (Doc 9157), Part 6

Freight container. A freight container is an article of transport equipment for radioactive materials, designed to facilitate the transport of such materials, either packaged or unpackaged, by one or more modes of transport.

General aviation operation. An aircraft operation other than a commercial air transport operation or an aerial work operation.

Geodetic datum. A minimum set of parameters required to define location and orientation of the local reference system with respect to the global reference system/frame.

Geoid undulation. The distance of the geoid above (positive) or below (negative) the mathematical reference ellipsoid.

Note.— In respect to the World Geodetic System — 1984 (WGS-84) defined ellipsoid, the difference between the WGS-84 ellipsoidal height and orthometric height represents WGS-84 geoid undulation.

Geoid. The equipotential surface in the gravity field of the Earth which coincides with the undisturbed mean sea level (MSL) extended continuously through the continents.

Note.— The geoid is irregular in shape because of local gravitational disturbances (wind tides, salinity, current, etc.) and the direction of gravity is perpendicular to the geoid at every point.

Glider. A non-power-driven heavier-than-air aircraft, deriving its lift in flight chiefly from aerodynamic reactions on surfaces, which remain, fixed under given conditions of flight.

Gregorian calendar. Calendar in general use; first introduced in 1582 to define a year that more closely approximates the tropical year than the Julian calendar (ISO 19108***).

Note.— In the Gregorian calendar, common years have 365 days and leap years 366 days divided into twelve sequential months.

Handling agent. An agency, which performs on behalf of the operator some or all

of the latter's functions including receiving, loading, unloading, transferring or other processing of passengers or cargo.

Hazard beacon. An aeronautical beacon used to designate a danger to air navigation.

Heliport. An aerodrome or a defined area on a structure intended to be used wholly or in part for the arrival, departure and surface movement of helicopters.

Heavier-than-air aircraft. Any aircraft deriving its lift in flight chiefly from aerodynamic forces.

Helicopter. A heavier-than-air aircraft supported in flight chiefly by the reactions of the air on one or more power-driven rotors on substantially vertical axis.

- (i) **Class 1 helicopter**. A helicopter with performance such that, in case of critical engine failure, it is able to land on the rejected take-off area or safely continue the flight to an appropriate landing area, depending on when the failure occurs.
- (ii) **Class 2 helicopter**. A helicopter with performance such that, in case of critical engine failure, it is able to safely continue the flight, except when the failure occurs prior to a defined point after takeoff or after a defined point before landing, in which case a forced landing may be required.
- (iii) **Class 3 helicopter**. A helicopter with performance such that, in case of engine failure at any point in the flight profile, a forced landing must be performed.

Helideck. A heliport located on a floating or fixed offshore structure.

Heliport. An aerodrome or defined area on a structure intended to be used wholly or in part for the arrival, departure, and surface movement of helicopters.

Holding bay. A defined area where aircraft can be held, or bypassed, to facilitate efficient surface movement of aircraft.

Hot spot. A location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary.

Housing. Buildings, hangers, and other structures to accommodate the necessary equipment and materials of a maintenance organisation that—

- i. Provide working space for the performance of maintenance, preventive maintenance, or modifications for which the maintenance organisation is certificated and rated; and
- ii. Provide structures for the proper protection of aircraft, airframes, aircraft engines, propellers, appliances, components, parts, and subassemblies thereof during disassembly, cleaning, inspection, repair, modification, assembly, and testing; and
- iii. Provide for the proper storage, segregation, and protection of materials, parts, and supplies.

Human Factors principles. 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. Human capabilities and limitations, which have an impact on the safety and efficiency of aeronautical operations.

ICAO. This is an abbreviation for the International Civil Aviation Organisation.

Identification beacon. An aeronautical beacon emitting a coded signal by means of which a particular point of reference can be identified.

Includes. A rule of construction in Part 1.1.1(1)(c) that means "includes but is not limited to."

Independent parallel approaches. Simultaneous approaches to parallel or nearparallel instrument runways where radar separation minima between aircraft on adjacent extended runway centre lines are not prescribed.

Independent parallel departures. Simultaneous departures from parallel or nearparallel instrument runways.

Instrument runway. One of the following types of runways intended for the operation of aircraft using instrument approach procedures:

- a) Non-precision approach runway. A runway served by visual aids and non-visual aid(s) intended for landing operations following an instrument approach operation type A and a visibility not less than 1 000 m.
- b) Precision approach runway, category I. A runway served by visual aids and non-visual aid(s) intended for landing operations following an instrument approach operation type B with a decision height (DH) not lower than 60 m (200 ft) and either a visibility not less than 800 m or a runway visual range not less than 550 m.
- c) Precision approach runway, category II. A runway served by visual aids and non-visual aid(s) intended for landing operations following an instrument approach operation type B with a decision height (DH) lower than 60 m (200 ft) but not lower than 30 m (100 ft) and a runway visual range not less than 300 m.
- d) Precision approach runway, category III. A runway served by visual aids and non-visual aid(s) intended for landing operations following an instrument approach operation type B to and along the surface of the runway and:

A— intended for operations with a decision height (DH) lower than 30 m (100 ft), or no decision height and a runway visual range not less than 175 m. $\frac{110}{\text{MP}}$

B— intended for operations with a decision height (DH) lower than 15 m (50 ft), or no decision height and a runway visual range less than 175 m but not less than 50 m. \square

C— intended for operations with no decision height (DH) and no runway visual range limitations. []

Note 1.— Visual aids need not necessarily be matched to the scale of nonvisual aids provided. The criterion for the selection of visual aids is the conditions in which operations are intended to be conducted. Note 2.— Refer to Annex 6 — Operation of Aircraft for instrument approach operation types. Integrity (aeronautical data). A degree of assurance that an aeronautical data and its value has not been lost nor altered since the data origination or authorized amendment.

Inspection. The examination of an aircraft or aeronautical product to establish conformity with a standard approved by the Authority.

Instrument approach. An approach procedure prescribed by the Authority having jurisdiction over the aerodrome.

Instrument flight time. Time during which a pilot is piloting an aircraft solely by reference to instruments and without external reference points.

Instrument ground time. Time during which a pilot is practising, on the ground, simulated instrument flight in a synthetic flight trainer approved by the Authority.

Instrument time. Time in which cockpit instruments are used as the sole means for navigation and control, which may be instrument flight time or instrument ground time.

Instrument training. Training which is received from an authorised instructor under actual or simulated instrument meteorological conditions.

Integrity classification (aeronautical data). 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.

Interchange agreement. A leasing agreement which permits an air carrier to dry lease and take or relinquish operational control of an aircraft at an airport.

Intermediate holding position. A designated position intended for traffic control at which taxiing aircraft and vehicles shall stop and hold until further cleared to proceed, when so instructed by the aerodrome control tower.

International commercial air transport. The carriage by aircraft of persons or property for remuneration or hire or the carriage of mail between any two or more countries.

Journey log. A form signed by the PIC of each flight that records the aeroplane's registration, crew member names and duty assignments, the type of flight, and the date, place, and time of arrival and departure.

Knowledge test. A test on the aeronautical knowledge areas required for an airman licence or rating that can be administered in written form or by a computer.

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

Landing decision point. The point used in determining landing performance from which, an engine failure occurring at this point, the landing may be safely continued or a balked landing initiated.

Landing direction indicator. A device to indicate visually the direction currently designated for landing and for take-off.

Large aeroplane. An aeroplane of a maximum certified take-off mass of over 5,700 kg. (12,500 lbs.).

Laser-beam critical flight zone (LCFZ). Airspace in the proximity of an aerodrome but beyond the LFFZ where the irradiance is restricted to a level unlikely to cause glare effects.

Laser-beam free flight zone (LFFZ). Airspace in the immediate proximity of the aerodrome where the irradiance is restricted to a level unlikely to cause any visual disruption.

Laser-beam sensitive flight zone (LSFZ). Airspace outside, and not necessarily contiguous with, the LFFZ and LCFZ where the irradiance is restricted to a level unlikely to cause flash-blindness or after-image effects.

Licensing Section. The Personnel Licensing Section of the Ghana Civil Aviation Authority.

Lighter-than-air aircraft. Any aircraft supported chiefly by its buoyancy in the air.

Lighting system reliability. The probability that the complete installation operates within the specified tolerances and that the system is operationally usable.

Line operating flight time. Flight time recorded by the PIC or Co-Pilot while in revenue service for an AOC holder.

Long Range Overwater Flights. Routes on which an aeroplane may be over water and at more than a distance corresponding to 120 minutes at cruising speed or 740 km (400 NM), whichever is the lesser, away from land suitable for making an emergency landing.

Maintenance Control Manual. A document which describes the operator's procedures necessary to ensure that all scheduled and unscheduled maintenance is performed on the operator's aircraft on time and in a controlled and satisfactory manner.

Maintenance release. A document which contains a certification confirming that the maintenance work to which it relates has been completed in a satisfactory manner, either in accordance with the approved data and the procedures described in the maintenance organisation's procedures annual or under an equivalent system.

Maintenance. The performance of tasks required to ensure the continuing airworthiness of an aircraft, including any one combination of overhaul, repair, inspection, replacement, modification, defect rectification and the embodiments of

a modification or repair.

Major modification. Major modification means an alteration not listed in the aircraft, aircraft engine, or propeller specifications – (1) that might appreciably affect weight, balance, structural strength, performance, powerplant, operations, flight characteristics, or other qualities affecting airworthiness; or (2) that is not done according to accepted practices or cannot be done by elementary operations.

Major repair. Major repair means a repair:

- (1) that if improperly done might appreciably affect weight, balance, structural strength, performance, powerplant, operations, flight characteristics, or other qualities affecting airworthiness; or
- (2) that is not done according to accepted practices or cannot be done by elementary operations.

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

Marker. An object displayed above ground level in order to indicate an obstacle or delineate a boundary.

Marking. A symbol or group of symbols displayed on the surface of the movement area in order to convey aeronautical information.

Master minimum equipment list (MMEL). A list established for a particular aircraft type by the organisation responsible for the Type Design with the approval of the State of Design containing items, one or more of which is permitted to be unserviceable at the commencement of a flight. The MMEL may be associated with special operating conditions, limitations or procedures. The MMEL provides the basis for development, review, and approval by the Authority of an individual operator's MEL.

May. A rule of construction in Part 1.1.1(1)(d) that indicates that discretion can be used when performing an act described in a directive.

Medical certificate. The evidence issued by the Authority that the licence holder meets specific requirements of medical fitness. It is issued following an evaluation by the Licensing Section of the report submitted by the designated medical examiner who conducted the examination of the applicant for the licence.

Minimum equipment list (MEL). A list which provides for the operation of aircraft, subject to specified conditions, with particular equipment inoperative, prepared by an operator in conformity with, or more restrictive than, the Master Minimum Equipment List established for the aircraft type.

Minister. This term means the person responsible for civil aviation in Ghana.

Modification. The alteration of an aircraft/aeronautical product in conformity with an approved standard.

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).

Navigable airspace. The airspace above the minimum altitudes of flight prescribed by directives under this Act and includes airspace needed to insure safety in the takeoff and landing of aircraft.

Navigation of aircraft. A function, which includes the piloting of aircraft.

Near-parallel runways. Non-intersecting runways whose extended centre lines have an angle of convergence/divergence of 15 degrees or less.

Night. The hours between the end of evening civil twilight and the beginning of morning civil twilight or such other period between sunset and sunrise.

Non-instrument runway. A runway intended for the operation of aircraft using visual approach procedures or an instrument approach procedure to a point beyond which the approach may continue in visual meteorological conditions.

Note: Civil twilight ends in the evening when the centre of the sun's disc is 6 degrees below the horizon and begins in the morning when the centre of the sun's disc is 6 degrees below the horizon.

Note. — Visual meteorological conditions (VMC) are described in Chapter 3 of Annex 2 — Rules of the Air. Provide the Air (NFZ). Airspace not defined as LFFZ, LCFZ or LSFZ but which must be protected from laser radiation capable of causing biological damage to the eye.

Obstacle free zone (OFZ). The airspace above the inner approach surface, inner transitional surfaces, and 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. All fixed (whether temporary or permanent) and mobile objects, or parts thereof, that:

- a) are located on an area intended for the surface movement of aircraft; or
- b) extend above a defined surface intended to protect aircraft in flight; or
- c) stand outside those defined surfaces and that have been assessed as being a hazard to air navigation.

Obstruction clearance plane. A plane sloping upward from the runway at a slope of 1:20 to the horizontal, and tangent to or clearing all obstructions within a specified area surrounding the runway as shown in a profile view of that area. In the plane view, the centreline of the specified area coincides with the centreline of the runway, beginning at the point where the obstruction clearance plane intersects the centreline of the runway and proceeding to a point at least 1,500 feet from the beginning point. Thereafter, the centreline coincides with the takeoff path over the ground for the runway (in the case of takeoffs) or with the instrument approach counterpart (for landings), or where the applicable one of these paths has not been established, it proceeds consistent with turns of at least 4,000 foot radius until a point is reached beyond which the obstruction clearance plane clears all obstructions. This area extends laterally 200 feet on each side of the centreline at the point where the obstruction clearance plane intersects the runway and continues at this width to the end of the runway; then it increases uniformly to 500 feet on each side of the centreline at a point 1,500 feet from the intersection of the obstruction clearance plane with the runway; thereafter, it extends laterally 500 feet on each side of the centreline.

Operational control. The exercise of authority over the initiation, continuation, diversion or termination of a flight in the interest of the safety of the aircraft and the regularity and efficiency of the flight.

Operational flight plan. The operator's plan for the safe conduct of the flight based on considerations of aircraft performance, other operating limitations, and relevant expected conditions on the route to be followed and at the aerodromes or heliports concerned.
Operations manual. A manual containing procedures, instructions and guidance for use by operational personnel in the execution of their duties.

Operator. A person, organisation or enterprise engaged in or offering to engage in an aircraft operation.

Orthometric height. Height of a point related to the geoid, generally presented as an MSL elevation.

Pavement classification number (PCN). A number expressing the bearing strength of a pavement for unrestricted operations.

Precision approach runway, see Instrument runway.

Primary runway(s). Runway(s) used in preference to others whenever conditions permit.

Protected flight zones. Airspace specifically designated to mitigate the hazardous effects of laser radiation.

Road. An established surface route on the movement area meant for the exclusive use of vehicles.

Road-holding position. A designated position at which vehicles may be required to hold.

Overhaul. The restoration of an aircraft/aeronautical product using methods, techniques, and practices acceptable to the Authority, including disassembly, cleaning, and inspection as permitted, repair as necessary, and reassembly; and tested in accordance with approved standards and technical data, or in accordance with current standards and technical data acceptable to the Authority, which have been developed and documented by the State of Design, holder of the type certificate, supplemental type certificate, or a material, part, process, or appliance approval under Parts Manufacturing Authorisation (PMA) or Technical Standard Order (TSO).

Overpack. An enclosure used by a single shipper to contain one or more packages and to form one handling unit for convenience of handling and stowage.

Package. The complete product of the packing operation consisting of the packaging and its contents prepared for transport.

Packaging. Receptacles and any other components or materials necessary for the receptacle to perform its containment function and to ensure compliance with the packing requirements.

Passenger exit seats. Those seats having direct access to an exit, and those seats in a row of seats through which passengers would have to pass to gain access to an exit, from the first seat inboard of the exit to the first aisle inboard of the exit. A passenger seat having "direct access" means a seat from which a passenger can proceed directly to the exit without entering an aisle or passing around an obstruction.

Person. Any individual, firm, partnership, corporation, company, association, jointstock association, or body politic, and includes any trustee, receiver, assignee, or other similar representative of these entities.

Pilot (to). To manipulate the flight controls of an aircraft during flight time.

Pilot in command. The pilot designated by the operator, or in the case of general aviation, the owner, as being in command and charged with the safe conduct of the flight.

Pilot time. That time a person—

- (i) Serves as a required pilot;
- (ii) Receives training from an authorised instructor in an aircraft, approved flight simulator, or approved flight training device; or
- (iii) Gives training as an authorised instructor in an aircraft, approved flight simulator, or approved flight-training device.

Powered-lift. A heavier-than-air aircraft capable of vertical takeoff, vertical landing, and low speed flight that depends principally on engine-driven lift devices or engine thrust for lift during these flight regimes and on nonrotating airfoil(s) for lift during horizontal flight.

Powerplant. An engine that is used or intended to be used for propelling aircraft. It includes turbo superchargers, appurtenances, and accessories necessary for its functioning, but does not include propellers.

Practical/Skill test. A competency test on the areas of operations for a licence, certificate, rating, or authorisation that is conducted by having the applicant respond to questions and demonstrate manoeuvres in flight, in an approved flight simulator, or in an approved flight training device, or in a combination of these.

Pre-flight inspection. The inspection carried out before flight to insure that the aircraft is fit for the intended flight.

Prescribed. a rule of construction in Part 1.1.1(1)(f) that means the Authority has issued written policy or methodology which imposes either a mandatory requirement, if the written policy or methodology states "shall," or a discretionary requirement if the written policy or methodology states "may."

Pressurised aircraft. For airman-licensing purposes, means an aircraft that has a service ceiling or maximum operating altitude, whichever is lower, above 25,000 feet MSL.

Preventative maintenance. Simple or minor preservation operations and the replacement of small standard parts not involving complex assembly operations.

Problematic use of substances. The use of one or more psychoactive substances by aviation personnel in a way that

- (i) Constitutes a direct hazard to the user or endangers the lives, health or welfare of others; and/or
- (ii) Causes or worsens an occupational, social, mental or physical problem or disorder.

Propeller. A device for propelling an aircraft that has blades on a powerplant driven shaft and that, when rotated, produces by its action on the air, a thrust approximately perpendicular to its plane of rotation. It includes control components normally supplied by its manufacturer, but does not include main and auxiliary rotors or rotating airfoils of powerplants.

Proper shipping name. The name to be used to describe a particular article or substance in all shipping documents and notifications and, where appropriate, on packaging.

Psychoactive substances. Alcohol, opiods, canabinoids, sedatives and hypnotics,

cocaine, other psychostimulants, hallucinogens, and volatile solvents, whereas coffee and tobacco are excluded.

Public aircraft. An aircraft used exclusively in the service of any government or of any political jurisdiction thereof, including the Government of Ghana but not including any government owned aircraft engaged in operations which meet the definition of commercial air transport operations.

Rated air traffic controller. An air traffic controller holding a licence and valid ratings appropriate to the privileges to be exercised.

Rating. An authorisation entered on or associated with a licence or certificate and forming part thereof, stating special conditions, privileges or limitations pertaining to such licence or certificate.

Re-issue of a licence, rating, authorization or certificate. The administrative action taken after a licence, rating, authorization or certificate has lapsed that re-issues the privileges of the licence, rating, authorization or certificate for a further specified period consequent upon the fulfilment of specified requirements.

Rebuild. The restoration of an aircraft/aeronautical product by using methods, techniques, and practices acceptable to the Authority, when it has been disassembled, cleaned, inspected as permitted, repaired as necessary, reassembled, and tested to the same tolerances and limits as a new item, using either new parts or used parts that conform to new part tolerances and limits. This work will be performed by only the manufacturer or an organisation approved by the manufacturer, and authorised by the State of Registry.

Renewal of licence, rating, authorization or certificate. The administrative action taken within the period of validity of a licence, rating, authorization or certificate that allows the holder to continue to exercise the privileges of a licence, rating, authorization or certificate for a further specified period consequent upon the fulfilment of specified requirements.

Repair. The restoration of an aircraft/aeronautical product to a serviceable condition in conformity with an approved standard.

Required inspection items. Maintenance items and/or alterations that must be inspected by a person other than the one performing the work, and include at least those that could result in a failure, malfunction, or defect endangering the safe operation of the aircraft, if not properly performed or if improper parts or materials are used.

Rest period. A period free of all restraint, duty or responsibility for an AOC holder conducting commercial air transport operations.

Rotorcraft load combinations. Configurations for external loads carried by rotorcraft—

- (i) Class A external load fixed to the rotorcraft, cannot be jettisoned, and does not extend below the landing gear, used to transport cargo. (ii)
- (ii) Class B external load suspended from the rotorcraft, which can be jettisoned, and is transported free of land or water during rotorcraft operations.
- (iii) Class C external load suspended from the rotorcraft, which can be jettisoned, but remains in contact with land or water during rotorcraft operation
- (iv) Class D external load suspended from the rotorcraft for the carriage

of persons.

Rotorcraft. A power-driven heavier-than-air aircraft supported in flight by the reactions of the air on one or more rotors.

Route sector. A flight comprising take off, departure, cruise of not less than 15 minutes, arrival approach and landing phases.

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.

Runway guard lights. A light system intended to caution pilots or vehicle drivers that they are about to enter an active runway.

Runway strip. 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 turn pad. A defined area on a land aerodrome adjacent to a runway for the purpose of completing a 180-degree turn on a runway.

Runway visual range (RVR). The range over which the 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.

Runway-holding position. A designated position intended to protect a runway, an obstacle limitation surface, or an ILS/MLS critical/sensitive area at which taxiing aircraft and vehicles shall stop and hold, unless otherwise authorized by the aerodrome control tower.

Note.— In radiotelephony phraseologies, the expression "holding point" is used to designate the runway-holding position.

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

Safety management system (SMS). A systematic approach to managing safety including the necessary organizational structure, accountabilities, policies and procedures.

Segregated parallel operations. Simultaneous operations on parallel or nearparallel instrument runways in which one runway is used exclusively for approaches and the other runway is used exclusively for departures.

Serious injury. An injury which is sustained by a person in an accident and which:

(i) Requires hospitalisation for more than 48 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); or
- (iii) Involves lacerations which cause severe haemorrhage, nerve, muscle or tendon damage; or
- (iv) Involves injury to any internal organ; or
- (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.

Shall. A rule of construction in Part 1.1.1(1)(a) that indicates a mandatory requirement.

Shoulder. An area adjacent to the edge of a pavement so prepared as to provide a transition between the pavement and the adjacent surface.

Sign.

a) Fixed message sign. A sign presenting only one message.

b) Variable message sign. A sign capable of presenting several predetermined messages or no message, as applicable.

Signal area. An area on an aerodrome used for the display of ground signals.

Signature. An individual's unique identification used as a means of authenticating a maintenance record entry or maintenance record. A signature may be hand-written, electronic, or any other form acceptable to the Authority.

Small aeroplane. An aeroplane having a maximum certified take-off mass of less than 5,700 kg. (12,500 lbs.)

Solo flight. Flight time during which a student pilot is the sole occupant of the aircraft, or that flight time during which the student acts as a PIC of a gas balloon or an airship requiring more than one flight crewmember.

Spare parts. Any parts, appurtenances, and accessories of aircraft (other than aircraft engines and propellers), of aircraft engines (other than propellers), of propellers, and of appliances, maintained for installation or use in an aircraft, aircraft engine, propeller, or appliance, but which at the time are not installed therein or attached thereto.

Special aircraft jurisdiction of Ghana. This includes:

- (i) Civil aircraft of Ghana; and
- (ii) Any other aircraft within the jurisdiction of Ghana, while the aircraft is in flight, which is from the moment when all external doors are closed following embarkation until the moment when one such door is opened for disembarkation or, in case of a forced landing, until the competent authorities take over the responsibility of the aircraft and the persons and property aboard.

Specialised maintenance. Any maintenance not normally performed by an AMO (e.g., tire retreating, plating, etc.)

Specific operating provisions. The Specific Operating Provisions describe the ratings (Class and/or Limited) in detail and will contain or reference material and process specifications used in performing repair work, along with any limitations applied to the maintenance organisation. The accountable manager and the Authority sign this document.

State of Design. The Contracting State having jurisdiction over the organization responsible for the type design and which approved the original type certificate and any subsequent supplemental type certificates for an aircraft, or which approved the design of an aeronautical product or appliance. ICAO Annex 8, Part 1, Section 1.

State of Manufacture. The Contracting State having jurisdiction over the organization responsible for the type design, and under whose authority an aircraft was assembled, approved for compliance with the type certificate and all extant supplemental type certificates, test flown and approved for operation. The state of manufacture may or may not also be the state of design.

State of Origin. The State in which dangerous goods were first loaded on an aircraft.

State of Registry. The Contracting State on whose registry an aircraft is entered.

State of the Operator. The State in which the operator's principal place of business is located, or, if there is no such place, of business, the operator's permanent residence.

Station declination. An alignment variation between the zero degree radial of a VOR and true north, determined at the time the VOR station is calibrated.

Stopway. A defined rectangular area on the ground at the end of take-off run available prepared as a suitable area in which an aircraft can be stopped in the case of an abandoned take-off.

Switch-over time (light). The time required for the actual intensity of a light measured in a given direction to fall from 50 per cent and recover to 50 per cent during a power supply changeover, when the light is being operated at intensities of 25 per cent or above.

Take-off runway. A runway intended for take-off only.

Taxiway. 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) Aircraft stand taxilane. A portion of an apron designated as a taxiway and intended to provide access to aircraft stands only.

b) Apron taxiway. 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. A taxiway connected to a runway at an acute angle and designed to allow landing aeroplanes to turn off at higher speeds than are achieved on other exit taxiways thereby minimizing runway occupancy times. **Takeoff decision point.** The point used in determining takeoff performance of a Class 1 helicopter from which, an engine failure occurring at this point, either a rejected takeoff may be made or a takeoff safely continued.

Taxiway intersection. A junction of two or more taxiways.

Taxiway strip. An area including a taxiway intended to protect an aircraft operating on the taxiway and to reduce the risk of damage to an aircraft accidentally running off the taxiway.

Technical instructions. The latest effective edition of the Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc. 9284-AN/905), including the supplement and any addendum, approved and published by decision of the Council of the ICAO.

Technical log. A document carried on an aircraft that contains information to meet ICAO requirements; a technical log contains two independent sections: a journey record section and an aircraft maintenance record section.

Threshold. The beginning of that portion of the runway usable for landing.

Touchdown zone. The portion of a runway, beyond the threshold, where it is intended landing aeroplanes first contact the runway.

Training program. Program that consists of courses, courseware, facilities, flight training equipment, and personnel necessary to accomplish a specific training objective. It may include a core curriculum and a specialty curriculum.

Training time. The time spent receiving from an authorised instructor flight training, ground training, or simulated flight training in an approved flight simulator or approved flight-training device.

Training to proficiency. The process of the check airman administering each prescribed manoeuvre and procedure to a pilot as necessary until it is performed successfully during the training period.

UN number. The four-digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods to identify a substance or a particular group of substances.

Unit load device. Any type of aircraft container, aircraft pallet with a net, or aircraft pallet with a net over an igloo.

Usability factor. The percentage of time during which the use of a runway or system of runways is not restricted because of the crosswind component.

Note.— *Crosswind component means the surface wind component at right angles to the runway centre line.*

Validation. The action taken by the Authority as an alternative to issuing its own licence, in accepting a licence issued by another Contracting State as the equivalent of its own licence for use on aircraft registered in Ghana.

Wet Lease. The lease of an aircraft with crew and other back-up.

Will. A rule of construction in Part 1.1.1(1)(i) that indicates an action incumbent upon the Authority.

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GHANA CIVIL AVIATION (AERODROMES) DIRECTIVES



PART 1 -IMPLEMENTING STANDARDS

For ease of reference, the number assigned to each implementing standard corresponds to its associated Directive. For example, IS: 1.2.15 would reflect a standard required in subsection 1.2.15.

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IS 1.2.3.3(d) SANCTION GUIDANCE TABLES

This table provides the sanctions for violations of these Directives.

Introduction. The Sanction Guidance Table describes civil penalties as minimum, moderate, or maximum for a single violation of a particular Directive, in accordance with the Ghana Civil Aviation Act. These terms are defined as follows:

TABLE 1. RANGE OF CIVIL PENALTIES

De etce O e es es itti	Amount of Oisil Doubles (in Double II it)
Party Committing	Amount of Civil Penalty (in Penalty Units)
Air Operators/Carriers	Maximum: 150,000 – 300,000
	Moderate: 100,000 - 149,999
	Minimum: 50,000 – 99,999
Aerodrome/ Heliport	Maximum: 150,000 – 300,000
Operators	Moderate: 100,000 - 149,999
-	Minimum: 50,000 – 99,999
Air Navigation Service	Maximum: 150,000 – 300,000
Providers	Moderate: 100,000 - 149,999
	Minimum: 50,000 – 99,999
Air Operator/Carrier Personnel	Maximum: 10,000 – 12,000
	Moderate: 8,000 – 9,999
	Minimum: 5,000 – 7,999
ANS Operator Personnel	Maximum: 50,000 – 250,000
-	Moderate: 15,000 - 49,999
	Minimum: 5000 – 14,999
Aerodrome Operator Personnel	Maximum: 10,000 – 30,000
	Moderate: 8,000 – 9,999
	Minimum: 5,000 – 7,999
Service Providers, Agencies, and	Maximum: 10,000 – 12,000
Non-licensed Persons	Moderate: 8,000 – 9,999
	Minimum: 5,000 – 7,999
Service Providers Personnel	Maximum: 10,000 – 12,000
	Moderate: 8,000 – 9,999
	Minimum: 5,000 – 7,999
Approved Training	Maximum: 130,000 – 200,000
Organisations	Moderate: 70,000 – 129,999

TABLE 2. SANCTIONS

Violation	Recommended Sanction per Violation
1 CERTIFICATION	Civil Penalty
Operation without a required certificate	Maximum civil penalty: Injunction relief
Operation in violation of an issued certificate	Moderate to maximum civil penalty
Failure to permit GCAA Inspector to conduct inspection	Maximum civil penalty
2. CERTIFICATION MANUAL	
Failure to comply with an Approved Airport certification manual	Moderate to maximum
Failure to include all required information in an Airport Certification manual	Minimum to moderate
Failure to maintain current Airport Certification manual on the airport	Moderate to maximum
Failure to make Current Airport certification manual available to the Authority for inspection	Moderate to maximum
3 OPERATIONS	
1. Failure to maintain sufficient qualified personnel to comply with requirements of the airport certification manual and GCADs	Moderate to maximum
2.Failure to maintain and repair the pavement of each runway, taxiway, loading ramp and parking area on the airport	Moderate to maximum
3.Failure to maintain and repair each gravel turf, or other unpaved runway taxiway or loading ramp and parking area of the airport	Moderate to maximum
4. failure to provide and maintain an airport safety area	Moderate to maximum

5. failure to provide and maintain the	Maximum	
required marking and signing systems		

for air carrier operations	
6. failure to provide and maintain lighting systems for air carrier operations when the airport is open during hours of darkness or during conditions below VFR minimums	Moderate to maximum
7. failure to provide and maintain required rescue and fire fighting capacity and equipment during air carrier operations	Maximum
8. Failure to maintain rescue and fire fighting vehicles	Maximum
9. failure to respond to an emergency during air carrier operations or demonstrate compliance with response requirements	Maximum
10.failure to respond within the required performance response times	Maximum
11. Failure to ensure that rescue and fire fighting personnel are equipped in an acceptable manner	Moderate to maximum
12. failure to ensure that rescue and fire fighting personnel are properly trained	Moderate to maximum
13. failure to ensure that sufficient rescue and fire fighting personnel are available during all air carrier operations	Moderate
14. failure to ensure that procedures are established and equipment is maintained for alerting rescue and fire fighting personnel to any existing or impending emergency	Moderate to maximum
15. failure to establish and maintain standards for protecting against fire and explosions in storing, dispensing and otherwise handling fuel, lubricants, and oxygen on the airport	Moderate to Maximum
16. failure to perform surveillance of a fuelling activity by fuelling agent on the airport	Moderate to maximum
17. failure to ensure and maintain a record of the inspection of the physical facilities of each airport tenant fuelling	Minimum to moderate

agent.	
18. failure to ensure that a fuelling agent and its employees are properly trained	Moderate to minimum
19. failure to require a tenant fuelling agent to take corrective action for noncompliance with a fuelling standard	Moderate to Maximum
20. failure to ensure that the airport emergency plan is reviewed with all parties under the plan and that all information in the plan is correct.	Minimum to moderate
21. failure to establish and maintain procedures for the protection of persons and property on the airport during the handling and storing of hazardous materials	Moderate to maximum
22. failure to provide traffic and wind direction indicators	Moderate
23. failure to develop and maintain an airport emergency plan	Maximum
24. failure to conduct self-inspections of the airport as required	Maximum
25. failure to provide equipment and procedures for carrying out an inspections	Moderate to maximum
26. failure to prepare, keep, and make available a record of self-inspections	Moderate to maximum
27. failure to limit access by ground vehicles to movement areas and safety areas	Moderate
28. failure to establish and implement procedures for access to and operation on, the movement area and safety areas by ground vehicles	Moderate
29.Failure to ensure that ground vehicles operating on the movement area are controlled by two-way radio communication or other acceptable means	Moderate

30. failure to ensure that each person operating a ground vehicle with access to the movement area is familiar with airport procedures for operation of ground vehicles.	Minimum to moderate
31. failure to ensure that obstructions are removed, marked , or lighted	Moderate to maximum
32. failure to prevent the construction of facilities on the airport that would derogate the operation of an electronic or visual navaid and air traffic control facilities on the airport	Moderate to maximum
33. failure to take immediate measures to alleviate wildlife hazards	Moderate to maximum
34. failure to prevent the inadvertent entry to the movement area by unauthorised persons or vehicles	Moderate
35. failure to provide for the collection and dissemination of airport condition information to air carriers	Moderate to maximum
36. failure to mark and if appropriate light construction areas and unserviceable areas, construction equipment and each construction roadway	Moderate to maximum
37. failure to provide procedures for avoiding damage to existing utilities, cables, wires, conduits, pipelines or other underground facilities	Minimum to moderate
38. failure to restrict air carrier operations to safe portions of the airport	Maximum
39. failure to take action to conduct wildlife assessment	Moderate to maximum
40. failure to implement wildlife assessment or the GCAA approved wildlife Hazard Management Plan	Moderate to maximum
4. Aerodrome / Heliport Operators	

a.	Failure to provide information for use by Air Operators	a.	Moderate to Maximum civil penalty
b.	Failure to comply with Automated Information System	b.	Moderate to Maximum civil penalty