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## **INTRODUCTION TO PART 12**

Part 12 of the Civil Aviation Regulations sets forth the requirements applicable to the provision Air Navigation Services in Zambia. Air Navigation Services include inter- alia Air Traffic Services, Aeronautical Search and Rescue, Aeronautical Information Services, Aeronautical Telecommunication Services and Aeronautical Meteorological Services. The regulations in the part address the standards in ICAO Annexes 3, 4, 5, 10, 11, 12 and 15 to the Chicago Convention.

These regulations set out requirements necessary for the safe conduct of flight, prevention of collision between aircraft in the air and at airports, as well maintenance of safe and orderly flow of air traffic. These regulations also cover areas such as aeronautical information service provision, aeronautical search and rescue, instrument procedures design and aeronautical meteorology services, which are all an integral part of enhancement of safety and rapid response to aircraft emergencies and distress situations.

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**PART 12 AIR NAVIGATION SERVICES REGULATION**

CONTENTS

<b>12.1</b>	<b>DEFINITIONS AND APPLICABILITY.....</b>	<b>12- 9</b>
12.1.1	Definitions.....	12 -9
12.1.2	Applicability.....	12 -12
<b>12.2</b>	<b>CERTIFICATION OF AIR NAVIGATION SERVICE PROVIDER.....</b>	<b>12-12</b>
12.2.1	Requirement for the provision of Air navigation services.....	12 -12
12.2.2	Application for certificate .....	12 -12
12.2.3	Issuance of certificate.....	12 - 12
12.2.4	Contents of the certificate.....	12 - 13
12.2.5	Validity of a certificate.....	12 -14
12.2.6	Renewal of certificate.....	12 - 14
12.2.7	Surrender of certificate.....	12 -14
12.2.8	Amendment of certificate.....	12 - 14
12.2.9	Display of certificate.....	12 -15
12.2.10	Transfer of certificate.....	12 - 15
12.2.11	Suspension, cancellation and revocation of certificate.....	12 - 15
12.2.12	Register of Certificate Holders.....	12 -16
<b>12.3</b>	<b>MANUAL OF AIR NAVIGATION SERVICES OPERATIONS.....</b>	<b>12 - 16</b>
12.3.1	Requirements for the manual of air navigation service operations.....	2 - 16
12.3.2	Contents of the manual of air navigation service operations.....	12 - 17
12.3.3	Amendment of the manual of air navigation service operations.....	12 - 18
<b>12.4</b>	<b>AIR NAVIGATION SERVICES.....</b>	<b>12 -18</b>
12.4.1	Air navigation facilities and standard systems.....	12 - 18
12.4.2	Approval of air navigation service facilities .....	12 - 18
12.4.3	Safety inspection and audits on Air Navigation Services.....	12 - 19
12.4.4	Production of documents.....	12 - 19
12.4.5	Air navigation service contingency plan.....	12 - 19
12.4.6	Alternative service provider.....	12 - 20
<b>12.5</b>	<b>AIR TRAFFIC SERVICES.....</b>	<b>12 -21</b>
12.5.1	Designation of airspace.....	12 - 21
12.5.2	Provision of Air Traffic Services.....	12- 21
12.5.3	Co-ordination in Air Traffic Services.....	12 - 21
12.5.4	Responsibility for control.....	12 - 21
12.5.5	Communication requirements.....	12 - 21
12.5.6	Air traffic incidents.....	12 - 22
12.5.7	Aircraft in distress.....	12 - 22
12.5.8	Automatic recording of surveillance data and communications .....	12 -22

12.5.9	Safety management system.....	12 - 22
<b>12.6</b>	<b>COMMUNICATION, NAVIGATION AND SURVEILLANCE.....</b>	<b>12 - 22</b>
12.6.1	Installation, operation and maintenance of Communication, Navigation and Surveillance systems.....	12 - 22
12.6.2	Facility approval and flight inspection.....	12 - 23
<b>12.7</b>	<b>AERONAUTICAL INFORMATION SERVICES AND AERONAUTICAL CHARTS.....</b>	<b>12 - 23</b>
12.7.1	Provision of aeronautical information services.....	12 - 23
12.7.2	Production of aeronautical charts.....	12 - 24
12.7.3	Telecommunication requirements.....	12 - 24
12.7.4	Quality system.....	12 - 25
<b>12.8</b>	<b>AERONAUTICAL SEARCH AND RESCUE SERVICES.....</b>	<b>12 - 26</b>
12.8.1	Search and Rescue Service Establishment.....	12 - 26
12.8.2	Search and Rescue Action.....	12 - 27
12.8.3	Communication and Equipment of Rescue Units.....	12 - 28
12.8.4	Co-operation with Other Contacting States.....	12 - 29
12.8.5	Co-operation with other Agencies.....	12 - 29
12.8.6	Information Concerning Emergencies.....	12 - 29
12.8.7	Aeronautical Search and Rescue Training.....	12 - 30
<b>12.9</b>	<b>METEOROLOGICAL SERVICES FOR AIR NAVIGATION.....</b>	<b>12 - 30</b>
12.9.1	Provision of Meteorological service for Air Navigation.....	12 - 30
<b>12.10</b>	<b>CONSTRUCTION OF VISUAL AND INSTRUMENT FLIGHT PROCEDURE.....</b>	<b>12 - 31</b>
12.10.1	Construction of flight procedures.....	12 - 31
12.10.2	Approval as a Procedures Designer for Air Navigation Services....	12 - 31
12.10.3	Responsibilities of a certificate holder.....	12 - 31
<b>12.11</b>	<b>EXEMPTIONS.....</b>	<b>12 - 31</b>
12.11.1	Requirements for application.....	12 - 31
12.11.2	Review and publication.....	12 - 33
12.11.3	Evaluation of the request.....	12 - 33
<b>12.12</b>	<b>GENERAL PROVISIONS.....</b>	<b>12 - 34</b>

PART 12 – AIR NAVIGATION SERVICES REGULATIONS

12.12.1 Drug and alcohol testing and reporting.....12 - 34  
12.12.2 Change of name.....12 - 35  
12.12.3 Change of address.....12 - 35  
12.12.4 Replacement of documents.....12 - 36  
12.12.5 Use and retention of documents and records.....12 - 36  
12.12.6 Reports of violation.....12 -37  
12.12.7 Enforcement of directions.....12 - 37  
12.12.8 Aeronautical user fees.....12 - 37

**12.1.1 DEFINITIONS**

(a). In these Regulations unless the context otherwise requires:

The following terms are defined as:

- (1) **Accident.** An occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked;
- (i) a person is fatally or seriously injured as a result of:
    - being in the aircraft, or
    - direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or
    - direct exposure to jet blast,*except* when the injuries are from natural causes, self inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew; or
  - (ii) the aircraft sustains damage or structural failure which:
    - adversely affects the structural strength, performance or flight characteristics of the aircraft, and
    - would normally require major repair or replacement of the affected component,*except* for engine failure or damage, when the damage is limited to the engine, its cowlings or accessories; or for damage limited to propellers, wing tips, antennas, tires, brakes, fairings, small dents or puncture holes in the aircraft skin; or
  - (iii) the aircraft is missing or is completely inaccessible;
- (2) **Accuracy.** Degree of conformance between the estimated or measured value and the true value;
- (3) **Act.** Aviation Act, Cap 444,
- (4) **Aeronautical data.** A representation of aeronautical facts, concepts or instructions in a formalized manner suitable for communication, interpretation or processing;
- (5) **Aeronautical information.** Information resulting from the assembly, analysis and formatting of aeronautical data;
- (6) **Aeronautical Information Circular (AIC).** A notice containing information that does not qualify for the origination of a NOTAM or for inclusion in the AIP, but which relates to flight safety, air navigation, technical, administrative or legislative matters;
- (7) **AIP Amendment.** Permanent change to information contained in the AIP;
- (8) **AIP Supplement.** Temporary changes to the information contained in the AIP which are published by means of special pages;
- (9) **AIRAC.** an acronym meaning, aeronautical information regulation and control signifying a system aimed at advance notification based on common effective dates, of circumstances that necessitate significant changes in operating practices;
- (10) **Assemble.** A process of merging data from multiple sources into a database and establishing a baseline for subsequent processing;
- (11) **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;

- (12) **Aeronautical fixed service (AFS).** A telecommunication service between specified fixed points provided primarily for the safety of air navigation and for the regular, efficient and economical operation of air services;
- (13) **Aeronautical Information Publication (AIP).** A publication issued by or with the authority of a State and containing aeronautical information of a lasting character essential to air navigation;
- (14) **Aircraft.** 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;
- (15) **Air Navigation Services.** Includes air traffic management, communication, navigation and surveillance, meteorological services for air navigation, search and rescue and aeronautical information services;
- (16) **Air Navigation services facility.** Any facility used, available for use, or designed for use in aid of navigation of aircraft, including airports, landing fields, any structures, mechanisms, lights, beacons, marks, communicating systems, or other instruments or devices used or useful as an aid to the safe taking off, navigation, and landing of aircraft and any combination of such facilities;
- (17) **Air navigation services provider.** An independent entity established for the purpose of operating and managing air navigation services and empowered to manage and use the revenues it generated to cover its costs;
- (18) **Air traffic.** All aircraft in flight or operating on the manoeuvring area of an aerodrome;
- (19) **Air traffic service.** A generic term meaning variously, flight information service, alerting service, air traffic control service (area control service, approach control service or aerodrome control service);
- (20) **Air traffic control service.** A service provided for the purpose of:
- a) preventing collisions:
    - i) between aircraft, and
    - ii) on the manoeuvring area between aircraft and obstructions; and
  - b) expediting and maintaining an orderly flow of air traffic;
- (22) **Authority.** Department of Civil Aviation;
- (23) **Authorised person.** Any person authorized by the Authority either generally or in relation to a particular case or class of cases and any reference to an authorized person includes reference to the holder for the time being of an office designated by the Authority;
- (24) **Certificate.** The certificate for the provision of Air Navigation Services issued by the Authority 12.2 of these Regulations;
- (24) **Contracting States.** States that are party and signatory to the Chicago Convention on Civil Aviation of 1944
- (25) **Control area.** a controlled airspace extending upwards from a specified limit above the earth;
- (26) **Controlled aerodrome.** An aerodrome at which air traffic control service is provided to aerodrome traffic;
- (27) **Controlled flight.** Any flight which is subject to an air traffic control clearance;
- (28) **Control zone.** A controlled airspace extending upwards from the surface of the earth to a specified

upper limit;

- (29) Cyclic redundancy checks (CRC).** A mathematical algorithm applied to the digital expression of data that provides a level of assurance against loss or alteration of data;
- (29) Data link communications.** A form of communication intended for the exchange of messages via a data link;
- (30) Data quality.** A degree or level of confidence that the data provided meets the requirements of the data user in terms of accuracy, resolution and integrity;
- (31) Flight crew member.** A licensed crew member charged with duties essential to the operation of an aircraft during a flight duty period;
- (32) Flight information centre.** A unit established to provide flight information service and alerting service;
- (33) Flight information region.** Airspace of defined dimensions within which flight information service and alerting service are provided;
- (34) Flight information service.** A service provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights;
- (35) Forecast.** A statement of expected meteorological conditions for a specified time or period, and for a specified area or portion of airspace;
- (36) Incident.** an occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation;
- (37) Integrated Aeronautical Information Package.** A package which of the following elements:
- AIP, including amendment service;
  - Supplements to the AIP;
  - NOTAM and PIB;
  - AIC; and
  - checklists and lists of valid NOTAM;
- (38) 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;
- (39) International NOTAM office.** An office designated by a State for the exchange of NOTAM internationally;
- (40) Meteorological office.** An office designated to provide meteorological service for international air navigation;
- (41) NOTAM.** A notice distributed by means of telecommunication containing information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations;
- (42) Operator.** A person, organization or enterprise engaged in or offering to engage in an aircraft operation;
- (43) Printed communications.** Communications which automatically provide a permanent printed record at each terminal of a circuit of all messages which pass over such circuit;
- (44) Runway.** A defined rectangular area on a land aerodrome prepared for the landing and take-off of aircraft;

- (45) Runway visual range (RVR).** The range over which the pilot of an aircraft on the centre line of a centre line;
- (46) Rescue.** An operation to retrieve persons in distress, provide for their initial medical or other needs, and deliver them to a place of safety;
- (47) Search.** An operation normally co-coordinated by a rescue co-ordination centre or rescue sub-centre using available personnel and facilities to locate persons in distress;
- (48) Search and Rescue Service.** The performance of distress monitoring, communication, co-ordination and search and rescue functions, initial medical assistance or medical evacuation, through the use of public and private resources, including cooperating aircraft, vessels and other craft and installations;
- (49) Traceability.** The ability to trace the history, application or location of that which is under consideration;
- (50) Validation.** The confirmation, through the provision of objective evidence, that the requirements for a specific intended use or application have been fulfilled; and
- (51) Verification.** The confirmation, through the provision of objective evidence, that specified requirements have been fulfilled.

#### 12.1.2 APPLICABILITY

- (a) These Regulations shall apply to a person who wants to become, or is, an air

navigation service provider.

- (b) These Regulations do not apply to:
  - (1) a person who is providing an air navigation service in the course of his or her duties for the Military; or
  - (2) Any air navigation service provided by the Military.

## **12.2 CERTIFICATION OF AIR NAVIGATION SERVICE PROVIDER**

### **12.2.1 REQUIREMENTS FOR THE PROVISION OF AIR NAVIGATION SERVICES**

- (a) A person shall not provide air navigation services in the designated airspace, aerodromes and portions of the airspace over the high seas that lie within the designated airspace unless, –
  - (1) he holds a certificate issued under these Regulations; and
  - (2) the services are provided in accordance with the requirements specified in the Manual of Air Navigation Service Operations (MANSOPs).

### **12.2.2 APPLICATION FOR CERTIFICATE**

- (a) A person applying for a certificate shall make an application in a form prescribed by the Authority and such form shall be accompanied by –
  - (1) the applicant's Manual of Air Navigation Service Operations (MANSOPs) provided under Regulation 12.3(1), for approval;
  - (2) a written statement setting out the services and locations at which they shall be provided; and
  - (3) fees as prescribed by the Authority.

### **12.2.3 ISSUANCE OF CERTIFICATE**

- (a) The Authority shall, before issuing a certificate, be satisfied that-

- (1) the personnel of the applicant are adequate in number and have the necessary competency and experience to provide the service;
  - (2) the MANSOPs prepared and submitted with the application contains all the relevant information;
  - (3) the facilities, services and equipment are established in accordance with these Regulations;
  - (4) the operating procedures make satisfactory provision for the safety of aircraft;
  - (5) an approved safety management system is in place;
  - (6) the applicant has approved procedures to meet the requirements of the Civil Aviation (Security) Regulations;
  - (7) the applicant has financial capability to provide the service; and
  - (8) the applicant has insurance policy in force in relation to the services provided.
- (b) Subject to sub regulation (1), the Authority may set any other conditions as may be deemed necessary.
- (c) The issuance of a certificate shall be subject to compliance with these Regulations and any other condition as may be specified or notified by the Authority in accordance with safety audit and inspection.
- (d) The Authority may refuse to grant a certificate to an applicant and where the Authority refuses, it shall notify the applicant in writing, of the reasons for the refusal, not later than fourteen days after making that decision.

#### **12.2.4 CONTENTS OF THE CERTIFICATE**

**(a)** A certificate issued under these Regulations shall include among others, the following information :

(1) the holder's name and physical address of its principal place of business;

(i) a list of services covered by the holder's certificate; and

(ii) for each air traffic service:

(A) the location from which the service will be provided;

- (B) if the service is to be provided within a particular airspace or controlled aerodrome designated to the provider by the Authority.

**12.2.5 VALIDITY OF A CERTIFICATE**

- (a) A certificate shall be valid for a period of two years from the date of issuance, unless suspended, cancelled or revoked in accordance with these Regulations.

**12.2.6 RENEWAL OF CERTIFICATE**

- (a) An applicant for the renewal of a certificate shall submit an application in a form and the fee as prescribed by the Authority.
- (b) The application shall be submitted to the Authority not less than 60 days before the expiry of the certificate.
- (c) The renewal of a certificate shall be subject to compliance with these Regulations and any other conditions as may be specified or notified by the Authority.

**12.2.7 SURRENDER OF CERTIFICATE**

- (a) Subject to sub-regulation (b) and any conditions prescribed by the Authority, a holder of a certificate may surrender the certificate to the Authority at any time.
- (b) A holder of a certificate who wishes to surrender the certificate shall give the Authority not less than one hundred eighty days notice in writing, before the date on which the certificate is to be surrendered.
- (c) Upon expiry of the period in sub-regulation (b), air navigation service provider shall not provide the services unless authorised to do so by the Authority.

**12.2.8 AMENDMENT OF CERTIFICATE**

- (a) The Authority may amend a certificate upon-
  - (1) application made by a holder of a certificate in a form prescribed by the Authority; or
  - (2) the Authority's initiative, where the Authority deems necessary.
- (b) A holder of a certificate applying to the Authority for amendment of a certificate under sub-regulation (1) (a) shall be required to-

- (1) attach to the application form two copies of proposed amendments in the MANSOPs; and
  - (2) pay such a fee as may be prescribed by the Authority.
- (c) Where the Authority initiates amendments under sub- regulation (1)(b) the holder of a certificate shall be required to make amendments in the MANSOPs accordingly.

#### **12.2.9 DISPLAY OF CERTIFICATE**

- (a) The holder of a certificate shall display the certificate, or a copy of it, in a conspicuous place, generally accessible to the public at the holder's principal place of business.
- (b) Where a copy of the certificate is displayed under sub regulation (a), the holder of the certificate shall produce the original certificate to the Authority for inspection if requested to do so.

#### **12.2.10 TRANSFER OF CERTIFICATE**

A certificate issued under these Regulations shall not be transferable.

#### **12.2.11 SUSPENSION AND REVOCATIONS OF CERTIFICATES.**

- (a) The Authority may, suspend provisionally, pending further investigation, any certificate issued under these Regulations, if it considers that-
  - (1) a relevant provision of the Act or these Regulations, or a condition in the certificate, has not been, or is not being, complied with;
  - (2) false or materially incorrect information was given to the Authority in the application for the certificate; or
  - (3) it is in the public interest to do so.
- (b) The Authority may, upon the completion of an investigation which has shown sufficient ground to the Authority's satisfaction suspend, vary or revoke any certificate issued under these Regulations.
- (c) A holder or any person having the possession or custody of any certificate which has been suspended, revoked or varied under these Regulations shall surrender the certificate to the Authority within 14 days from the date of suspension, revocation or variation.

**12.2.12 REGISTER OF CERTIFICATE HOLDERS**

- (a) The Authority shall keep and maintain a register showing –
  - (1) name of the holder of the certificate;
  - (2) date of issue or renewal of the certificate;
  - (3) type of service offered by the holder of the certificate;
  - (4) expiry date of the certificate;
  - (5) date of revocation or suspension of the certificate, if any;
  - (6) physical and postal address of the holder of the certificate; and.
  - (7) any other particulars as may be prescribed by the Authority.
- (b) Any changes in the particulars recorded under sub-regulation (1) shall be entered in the register by the Authority.
- (c) The register shall be a public document and any particular entered may be obtained upon payment of such a fee as may be prescribed by the Authority.

**12.3 MANUAL OF AIR NAVIGATION SERVICES OPERATIONS**

**12.3.1 REQUIREMENTS FOR THE MANUAL OF ANS OPERATIONS**

- (a) type written;
  - (1) signed by the operator;
  - (2) in a format that is easy to revise;
  - (3) organized in a manner that facilitates the preparation, review and approval processes; and

- (4) in a system that records the current pages and any amendments, including a page for logging revisions.
- (b) A holder of a certificate shall keep at least one approved copy of the manual at the principal place of business.

### 12.3.2 CONTENTS OF THE MANUAL OF ANS OPERATIONS

A Manual of Air Navigation Service Operations shall contain all information and instructions necessary to enable the personnel of air navigation service provider perform their duties and in particular shall include-

- (1) services to be provided;
- (2) Personnel requirements and their responsibilities;
- (3) training and performance assessment of staff and how that information is tracked;
- (4) Safety Management System and Quality Assurance;
- (5) contingency plans developed for part or total system failure;
- (6) compliance with the Civil Aviation (Security) Regulations as required;
- (7) facilities and equipment and how they are installed and maintained;
- (8) fault and defect reporting;
- (9) maintenance of documents and records;
- (10) search and rescue responsibilities and co-ordination; facility operations and maintenance plan and procedure;
- (11) schedule of the proposed hours of service for the first 12 months of operation;
- (12) a summary of safety factors considered before seeking certification;

## PART 12 – AIR NAVIGATION SERVICES REGULATIONS

- (13) systems and procedures to ensure separation between controlled flights and active special use airspace; and
- (14) any other information requested by the Authority.

### **12.3.3 AMENDMENT OF THE MANUAL OF ANS OPERATIONS**

- (a) For the purpose of maintaining the accuracy of the information in MANSOPs, the: –
  - (1) holder of a certificate shall whenever necessary, amend the manual; or
  - (2) Authority may issue a written directive requiring the holder of a certificate to alter or amend the manual.
- (b) Notwithstanding sub-regulation (1), the holder of a certificate shall submit the proposed amendment to the Authority for approval, before the manual is amended.

## **12.4 AIR NAVIGATION SERVICES**

### **12.4.1 AIR NAVIGATION SERVICES FACILITIES AND STANDARD SYSTEMS**

- (a) The Authority shall in accordance with these Regulations, designate a service provider, to:
  - (1) provide in the designated portion of Airspace, facilities for the provision of air navigation services;
  - (2) adopt and put into operation the appropriate standard systems of communications procedures, codes, markings, signals, lighting and other operational practices and rules;
  - (3) publish aeronautical maps and charts.

### **12.4.2 APPROVAL OF ANS FACILITIES**

A person shall not install and use air navigation service facilities in the designated airspaces and aerodromes without approval of the Authority.

**12.4.3 SAFETY INSPECTIONS AND AUDIT ON ANS FACILITIES**

- (a) The Authority shall carry out safety inspections and audits on air navigation facilities, services, documents and records of the air navigation service provider which may be necessary to determine compliance to these Regulations.
- (b) An inspector of the Authority shall have unrestricted access to the facilities, installations, records and documents of the air navigation services and the air navigation meteorological service provider to determine compliance with these regulations.
- (c) The safety inspections and audits shall be carried out as prescribed by the Authority.

**12.4.4 PRODUCTION OF DOCUMENTS**

A holder of a certificate shall produce any relevant documents under his possession if requested by an authorised person within seventy two hours of such request.

**12.4.5 ANS CONTINGENCY PLAN**

- (a) A holder of a certificate shall develop and maintain contingency plans for implementation in the event of disruption or potential disruption, of air navigation services in the airspace for which he is responsible.
- (b) The holder of a certificate shall liaise with other air navigation service providers in adjacent or contiguous airspaces while developing contingency plans.
- (c) The contingency plan shall include:
  - (i) the actions to be taken by the certificate holder's personnel responsible for providing the service;
  - (ii) possible alternative arrangements for providing the service; and
  - (iii) the arrangements for resuming normal operations for the service.

#### **12.4.6 ALTERNATIVE DESIGNATED SERVICE PROVIDER**

The Authority may, when it considers necessary in the public interest, appoint an alternative designated service provider to provide service in respect of a certificate suspended by the Authority, for the duration of such suspension.

### **12.5 AIR TRAFFIC SERVICES**

#### **12.5.1 Designation of Airspace**

- (a) The Authority shall designate portions of the airspace or particular aerodromes for the provision of air traffic services.
- (b) The designation of the particular portions of the airspace or the particular aerodromes shall be-
  - (1) flight information region;
  - (2) control area;
  - (3) control zone;
  - (4) controlled aerodromes.
- (b) In determining the need for the provision of air traffic services the Authority shall take into consideration:
  - (1) the types of air traffic involved;
  - (2) the density of air traffic;
  - (3) the meteorological conditions; and
  - (4) any other factors which may be relevant.
- (c) Upon application by the service provider for air traffic services to be provided, the Authority shall designate the service provider responsible for providing such services.
- (d) The Authority shall publish the designation of a particular portion of the airspace in the relevant aeronautical publications.

### **12.5.2 PROVISION OF AIR TRAFFIC SERVICES**

The holder of a certificate shall-

- (1) make application for the portions of the airspace and the aerodromes which shall be provided with air traffic services;
- (3) provide air traffic services as prescribed by the Authority.

### **12.5.3 COORDINATION IN AIR TRAFFIC SERVICES**

An air traffic service provider shall in carrying out its objectives, establish procedures for the coordination with air operators, military authorities, meteorological service providers and aeronautical information service providers by:

- (1) making available to the air operators information to enable them meet their obligations;
- (2) establishing coordination with the military authorities responsible for activities that may affect civil flights;
- (3) providing the most up to date meteorological information for aircraft operations;
- (4) providing timely and up to date information to meet the need for in-flight information.
- (4) exchanging and coordinating aeronautical information relating to the safety of air navigation between adjacent air traffic service units.

### **12.5.4 RESPONSIBILITY FOR CONTROL**

A holder of a certificate shall establish procedures to ensure responsibility of control of an aircraft and transfer of such responsibility as prescribed by the Authority.

### **12.5.5 COMMUNICATION REQUIREMENTS**

A holder of a certificate shall establish communication requirements as prescribed by the Authority.

**12.5.6 AIR TRAFFIC INCIDENTS**

A holder of a certificate shall establish procedures for the notification, investigation, and reporting of the air traffic incidents, which shall be made in a prescribed incident report form.

**12.5.7 AIRCRAFT IN DISTRESS**

Collaborate in coordinated measures when undertaking search and rescue for aircraft in distress in accordance with the Civil Aviation Regulations made under the Act.

**12.5.8 AUTOMATIC RECORDING OF ATS DATA AND COMMUNICATIONS**

- (a) A holder of a certificate shall make provision for the automatic recording of air traffic service data and communications; and
  - (1) retain the recorded air traffic service data and communications for a period of at least thirty days.
  - (2) Subject to sub regulation (1), the recorded air traffic service data and communications, if pertinent to accident and incident investigations, shall be retained for longer periods until it is evident that it is no longer required.

**12.5.9 SAFETY MANAGEMENT SYSTEM**

A holder of a certificate shall have a safety management system that complies with the requirements prescribed by the Authority.

**12.6 COMMUNICATION, NAVIGATION AND SURVEILLANCE**

**12.6.1 INSTALLATION, OPERATION AND MAINTENANCE OF CNS SYSTEMS**

- (a) The holder of a certificate shall ensure that the Communication, Navigation and Surveillance systems are installed, operated, maintained, available and reliable in accordance with the requirements prescribed by the Authority.

- (b) A person shall not perform a function related to the installation, operation or maintenance of any Communication, navigation and a surveillance system unless:
  - (1) that person has successfully completed training in the performance of that function; and
  - (2) the holder of a certificate is satisfied that the technical person is competent in performing that function.

#### **12.6.2 FACILITY APPROVAL AND FLIGHT INSPECTION**

- (a) The Authority shall approve all the Communication, Navigation and Surveillance facilities before their installation, use, decommissioning, upgrading or relocation, in the designated airspace and aerodromes.
- (b) A holder of a certificate shall ensure that the radio navigation aids prescribed by the Authority are available for use by aircraft engaged in air navigation and are subjected to periodic ground and flight inspection.

### **12.7 AERONAUTICAL INFORMATION SERVICES AND AERONAUTICAL CHARTS**

#### **12.7.1 PROVISION OF AERONAUTICAL INFORMATION SERVICES**

- (a) A holder of a certificate shall :
  - (1) receive, originate, collate, assemble, edit, format, publish, store and distribute aeronautical information concerning the designated airspace;
  - (2) publish the aeronautical information as an integrated Aeronautical Information Package;
  - (3) ensure that the aeronautical information provided is adequate, of required quality and timely;
  - (4) make available to aeronautical information services of other States any information necessary for the safety, regularity or efficiency of air navigation;
  - (5) designate the office to which all elements of Integrated Aeronautical Information

Package originated by other states is addressed.

- (b) The holder of a certificate shall on request, by other agencies provide, all information relating to the designated airspace.
- (c) The conditions, requirements, rules, procedures and standards for the publication of the aeronautical information in the -
  - (1) Aeronautical Information Circular;
  - (2) Aeronautical Information Publication and its amendments;
  - (3) Aeronautical Information Publication Supplements;
  - (4) Notice to Airmen (NOTAM), as the case may be, shall be in accordance with the requirements of these Regulations.
- (d) The aeronautical information publication amendments and Supplements issued under the Aeronautical Information Regulation and Control (AIRAC) system shall be as prescribed by the Authority.

#### **12.7.2 PRODUCTION OF AERONAUTICAL CHARTS**

- (a) A holder of certificate shall ensure the availability of the required charts containing accurate, adequate information including information relevant to the phase of flight.
- (b) The aeronautical charts produced shall be maintained in a form prescribed by the Authority.
- (c) The units of measurements used shall be as prescribed by the Authority.

#### **12.7.3 TELECOMMUNICATION REQUIREMENTS**

- (a) Each international NOTAM office shall be connected, through the aeronautical fixed service (AFS), within the airspace for which it provides service, to:
  - (1) area control centres and flight information centres;
  - (2) aerodrome or heliport at which an information service is provided with pre-flight briefing and post-flight information.

- (b) The connections shall provide for printed communications.
- (c) AFS shall comprise the systems and applications that are used for ground-ground communications in the international telecommunication service in accordance with the requirements of these regulations.
- (d) For exchange of messages over the teleprinter circuits, the signals of the appropriate international Telegraphic Alphabet permitted shall be in accordance with the requirements of these regulations.
- (e) For the purpose of sub regulation (c) “*ground-ground*” means point to point or point to multiple points.

#### **12.7.4 QUALITY SYSTEM**

- (a) A holder of a certificate shall
  - (1) establish and maintain a quality system of procedures, processes and resources in its aeronautical information services to implement quality management at each function stage; and
  - (2) receive, originate, collate, assemble, edit, format, publish, store and distribute aeronautical information and data concerning the designated airspace responsible for air traffic services in accordance with its quality system.
- (b) Quality system established shall take into consideration that:
  - (1) personnel are trained to acquire the skills, knowledge and competencies required to perform those functions;
  - (2) procedures exist for traceability to its origin of data anomalies or errors, detected and corrected;
  - (3) procedures exist for assurance and confidence that distributed aeronautical information or data satisfy stated requirements for data quality, traceability and timeliness;
  - (4) publication resolution of aeronautical data shall be as prescribed by the Authority;

## PART 12 – AIR NAVIGATION SERVICES REGULATIONS

- (5) confidence level and integrity as prescribed by the Authority;
  - (6) the procedures for protection of electronic aeronautical data stored or in transit is monitored by the cyclic redundancy check (CRC) to assure integrity of data;
  - (7) material issued as part of the Integrated Aeronautical Information Package is checked and coordinated with the responsible services before it is published;
  - (8) procedures exist for validation and verification to ensure quality requirements and traceability of aeronautical data;
  - (9) procedures exist for the audit and remedial action for the compliance of the quality system.
- (c) For the purpose of sub regulation 12.4.9.4 (a)(1) “*function stage*” means receiving, originating, collating, assembling, editing, formatting, publishing, storing and distribution of aeronautical information and data.

### 12.8 AERONAUTICAL SEARCH AND RESCUE SERVICES

#### 12.8.1 AERONAUTICAL SEARCH AND RESCUE SERVICE ESTABLISHMENT

- (a) The Government of the Republic of Zambia through the Department of Civil Aviation here after know as “the Authority” shall be responsible for the application of the International Conventions binding on the Republic regarding Aeronautical Search and rescue operations.
- (b) The Authority shall designate the search and rescue region within which search and rescue services shall be provided in the Zambian Airspace on a 24 hour basis;
- (c) The Authority shall set up the Zambia Search and Rescue Organisation which shall be headed by the Director and composed of representatives from those government departments and commercial and voluntary organisations which are signatories to the Zambia Search and Rescue Agreement based on the National Search and Rescue Manual, and which are able to contribute services and facilities for use by the SAR Organisation.

- (d) The composition of the ZASARO shall include:
- (1) Department of Civil Aviation.
  - (2) National airports Corporation Limited.
  - (3) Zambia Air Force.
  - (4) Zambia Army.
  - (5) Zambia Police.
  - (6) Office of the Vice President Disaster Management and Mitigation Unit.
  - (7) Ministry of Health.
  - (8) Ministry of Local Government.
  - (9) Zambia Telecommunications Corporation.
  - (10) Zambia National Broadcasting Corporation.
  - (11) Zambia Immigration Department.
  - (12) Zambia Revenue Authority.
  - (13) Department of Maritime and Inland Waters.
  - (14) Locally based Airlines.
  - (15) Zambia Wildlife Authority.
  - (16) Zambia Flying Doctor Service
  - (17) BP/Mobil.
  - (18) Zambia Red Cross Society.
  - (19) Any other organisations that the Director may request to render assistance.
- (b) The Authority shall designate an agency to coordinate and direct the prompt provision of search and rescue services within the designated airspace on a 24 hour basis.
- (c) The designated Air traffic Services provider shall designate a rescue coordination centre for the search and rescue region.
- (d) The designated service provider shall have in place a Search and Rescue Manual approved by the Authority.

**12.8.2 SEARCH AND RESCUE ACTION**

- (a) Search and rescue action shall be instituted by Air Traffic Services provider when indications exist that the flight may be in distress in respect of:
- (1) All flights operating the Lusaka Flight Information Region for which flight plan information has been received;
  - (2) Other flights which request assistance.
- (e) Search and rescue action shall be undertaken in accordance with the requirements of these regulation

## PART 12 – AIR NAVIGATION SERVICES REGULATIONS

- (f) National search and rescue mock exercises shall be held at least once a year.
- (g) The Authority shall monitor the exercises and assess the level of preparedness for search and rescue operations.
- (h) The Air Traffic Service Provider shall ensure that staff engaged in SAR Operations are sufficient in number and adequately trained in addition to ensuring their participation in annual mock exercises-
  - (1) The ATS Provider shall adequately define all the functions and responsibilities of SAR personnel In addition to properly defined job description;
  - (2) Training records of SAR Personnel shall be properly maintained.

### **12.8.3 COMMUNICATIONS AND EQUIPMENT OF RESCUE UNITS**

- (a) Each Rescue Coordination Centre shall be equipped with rapid and reliable communication facilities and equipment for search and rescue operations;
- (b) Each control tower shall be equipped with a reliable alerting device for alerting rescue fire services and other relevant agencies;
- (c) Rescue units shall be provided with facilities and equipment for locating promptly, and for providing adequate assistance at, the scene of an accident;
- (d) The approved Air Traffic Services Provider shall issue guidelines for the establishment of a Rescue Coordination Centres and Rescue sub centres including personnel and equipment requirements and also guidelines for aerodrome emergencies of ATS at each aerodrome;
- (e) Each rescue coordination centre shall keep a record of the operational efficiency of the search and rescue organisation in its region.

### **12.8.4 REQUISITIONING OF AIRCRAFT OR VESSELS**

- (a) **The Authority may in the event of an aeronautical search and rescue operation-**
  - (1) **requisition any civil aircraft or vessel;**
  - (2) **request the assistance of any military aircraft or vessel; or**

- (3) **instruct any holder of a Zambia aircraft flight crew licence or the master of a vessel to assist in the operation.**

**12.8.5 CO-OPERATION WITH OTHER CONTRACTING STATES**

The designated ATS Provider shall coordinate and cooperate with search and rescue organisation of other neighbouring contracting states.

**12.8.6 COOPERATION WITH OTHER AGENCIES**

(a) The approved Air Traffic Services provider shall:

- (1) maintain and ensure continuous liaisons with other agencies relevant for Search and Rescue operations.
- (2) Maintain a database and/or schedule of supporting organisations, agencies and companies, together with available equipment and personnel for deployment to search and rescue operations.

(b) The approved Air Traffic Services provider shall enter into contracts, agreements and memoranda of understanding with the supporting organisations, agencies, companies and persons who render services and/or provide equipment for search and rescue operation.

**12.8.6 INFORMATION CONCERNING EMERGENCIES**

- (a) Any person, agency, authority or any element of the search and rescue organisation having reason to believe that an aircraft is in an emergency shall give immediately all available information to the rescue coordination centre concerned.
- (b) The rescue coordination centre shall, immediately upon receipt of information concerning aircraft in emergency evaluate such information and determine the extent of the operation required.
- (c) When information concerning aircraft in emergency is received from other sources than air traffic service units, the rescue co-ordination centre shall determine to which emergency phase the situation corresponds and shall apply the procures applicable to that phase.

**12.8.7 AERONAUTICAL SEARCH AND RESCUE TRAINING**

The Air Traffic Service provider shall ensure staff engaged in SAR Operations are adequately trained and in addition ensure their participation in annual mock SAR exercises.

**12.9 METEOROLOGICAL SERVICES FOR AIR NAVIGATION**

**12.9.1 PROVISION OF METEOROLOGICAL SERVICE FOR AIR NAVIGATION**

- (a) The Authority shall designate a service provider for the provision of meteorological services for air navigation.
- (b) The service provider designated under sub regulation(a) shall provide the following services in support of aviation:
  - (1) make routine meteorological observations at regular intervals;
  - (2) make special weather observations whenever specified changes occur in respect of surface wind, visibility, runway visual range, present weather, cloud and air temperature ;
  - (3) prepare and obtain significant weather forecasts information and maintain contact with Regional specialized meteorological centres for the exchange of information on volcanic ash and tropical cyclones activity;
  - (4) provide briefing, consultation and flight documentation to flight crew members and other flight operations personnel;
  - (5) perform weather watch and monitoring, including the ability to detect and forecast hazards relevant to the aviation community, as prescribed by the Authority;
  - (6) derive forecast and warning products to the requirements prescribed by the Authority for the pilot, air traffic service and air operators;
  - (7) maintain a record of aeronautical climatological information for supply to pilot, air traffic service and air operators and any other persons on request;
  - (8) exchange aeronautical meteorological information with other aeronautical

meteorological offices; and

- (9) supply information received concerning the accidental release of radioactive materials into the atmosphere within its area of responsibility to the air traffic service providers for dissemination.
- (c) The conditions, rules, requirements, procedures or standards of the designation shall be prescribed by the Authority.
- (d) A person shall not provide meteorological information service at aerodromes or portion of airspace, except under the conditions prescribed by the Authority.

## **12.10 CONSTRUCTION OF VISUAL AND INSTRUMENT FLIGHT PROCEDURES**

### **12.10.1 CONSTRUCTION OF FLIGHT PROCEDURES**

A holder of a certificate shall develop visual and instrument flight procedures to be used by aircraft operating in the designated airspace and aerodrome as prescribed by the Authority.

### **12.10.2 APPROVAL AS PROCEDURE DESIGNER**

A person shall not design or publish visual and instrument flight procedures for use in the designated airspace and aerodromes unless he has completed approved training in the construction of visual and instrument flight procedures.

### **12.10.3 RESPONSIBILITIES OF A HOLDER OF CERTIFICATE.**

A holder of a certificate authorised under requirement of 12.4.12.1 shall carry out design work, review or amend visual and instrument flight procedures subject to any conditions specified in the certificate.

## **12.11 EXEMPTIONS**

### **12.11.1 REQUIREMENTS FOR APPLICATION**

- (a) A person may apply to the Authority for an exemption from any application of these Regulations.
- (b) Unless in case of emergency, a person requiring exemptions from any of these regulations shall make an application to the Authority at least sixty days from the

proposed effective date, giving information as to -

- (1) name and contact address including electronic mail and fax if any
  - (2) telephone number;
  - (3) a citation of the specific requirement from which the applicant seeks exemption;
  - (4) a description of the type of operations to be conducted under the proposed exemption;
  - (5) the proposed duration of the exemption;
  - (6) an explanation of how the exemption would be in the public interest, that is, benefit the public as a whole;
  - (7) a detailed description of the alternative means by which the applicant will ensure a level of safety equivalent to that established by the regulation in question;
  - (8) a 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; and
  - (9) if the applicant handles international operations and seeks to operate under the proposed exemption, an indication whether the exemption would contravene any provision of the Standards and Recommended Practices of the International Civil Aviation Organization (ICAO).
- (c) Where the applicant seeks emergency processing, the application shall contain supporting facts on the nature of the emergency.
- (d) The Authority may deny, in writing, an application if it finds that the applicant has not justified the failure to apply for an exemption in time.
- (e) The application for exemption shall be accompanied by fee

specified by the Authority.

**12.11.2 REVIEW AND PUBLICATION**

- (a) The Authority shall review the application for accuracy and compliance with the requirements in 12.5.1 and if it appears satisfactory, it shall publish a detailed summary of the application for comments, within a prescribed time, in either.
  - (1) a *Government Gazette*;
  - (2) aeronautical information circular; or
  - (3) a daily newspaper with wide circulation.
- (b) Where application requirements have not been fully complied with, the Authority shall request the applicant in writing, to comply prior with publication or making a decision under sub regulation (c).
- (c) If the request is for emergency relief, the Authority shall publish the decision as soon as possible after processing the application.

**12.11.3 EVALUATION OF THE REQUEST**

- (a) determination of whether an exemption would be in the public interest;
  - (1) a determination, after a technical evaluation of whether the applicant's proposal would provide a level of safety equivalent to that established by the regulation, although where the Authority decides 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;
  - (2) a determination of whether a grant of the exemption would contravene these Regulations; and
  - (3) 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.

- (b) The Authority shall notify the applicant by letter and publish a detailed summary of its evaluation and decision to grant or deny the request.
- (c) The summary referred to in sub-regulation (2) shall specify the duration of the exemption and any conditions or limitations of the exemption.
- (d) Where the exemption affects a significant population of the aviation community of the Republic of Zambia, the Authority shall publish the summary in aeronautical information circular.

## **12.12**

### **GENERAL PROVISIONS**

#### **12.12.1 DRUG AND ALCOHOL TESTING AND REPORTING.**

- (a) Any person who performs any function prescribed by these Regulations directly or by contract under the provisions of these Regulations may be tested for drug or alcohol usage.
- (b) Where the Authority or any person authorised by the Authority wishes to test a person referred to in sub regulation (a) for the percentage by weight of alcohol in the blood, or for the presence of narcotic drugs, marijuana, or depressant or stimulant drugs or substances in the body, and that person.
  - (1) refuses to submit to the test; or
  - (2) having submitted to the test, refuses to authorise the release of the test results the Authority may suspend or revoke the certificate of the holder that employs that person.
- (c) In determining whether to suspend or revoke the certificate of the holder, the Authority shall consider all relevant factors, including-
  - (1) whether the holder had knowledge of the drug or alcohol use;
  - (2) whether the holder encourage the person to refuse the drug or alcohol test;
  - (3) whether the holder dismissed the person who failed or refused the drug tests; or
  - (4) the position that person held with the holder.

- (d) The Authority shall require the holder to show cause why the certificate should not be suspended, revoked or cancelled.
- (e) A person who is convicted, whether in or outside the designated airspace, for any offence relating to the growing, processing, manufacture, sale, disposition, possession, transportation, or importation of narcotic drugs, marijuana, or depressant or stimulant drugs or substances, shall be dismissed from the employment by the holder of certificate.
- (f) The Authority may suspend or revoke the certificate of a holder that refuses to dismiss from its employment a person convicted under sub regulation (c).

**12.12.2 CHANGE OF NAME.**

- (a) A holder of a certificate issued under these Regulations may apply to change the name on a certificate.
- (c) The holder shall include with any such request:-
  - (1) the current certificate; and
  - (2) a court order, or other legal document verifying the name change.
- (c) The Authority may change the licence, certificate or authorisation and issue a replacement thereof;
- (d) The Authority shall return to the holder with the appropriate endorsement, the original documents specified in sub-regulation 2(b) and retain copies thereof.

**12.12.3 CHANGE OF ADDRESS.**

- (a) A holder of a certificate issued under these Regulations shall notify the Authority of the change in the physical and mailing address within fourteen days.
- (b) A person who does not notify the Authority of the change in the physical address within the time frame specified in sub-regulation (a) shall not exercise the privileges of the certificate.

**12.12.4 REPLACEMENT OF DOCUMENTS.**

A person may apply to the Authority in the prescribed form for replacement of documents issued under these Regulations if such documents are lost or destroyed.

**12.12.5 USE AND RETENTION OF DOCUMENTS AND RECORDS.**

- (a) A person shall not-
- (1) use any certificate or exemption issued or required by or under these Regulations which has been forged, altered, revoked, or suspended, or to which he is not entitled; or
  - (2) forge or alter any certificate or exemption issued or required by or under these Regulations; or
  - (3) lend any certificate or exemption issued or required by or under these Regulations to any other person; or
  - (5) make any false representation for the purpose of procuring for himself or any other person the grant issue renewal or variation of any such certificate or exemption.
  - (6) mutilate, alter, render illegible or destroy any records, or any entry made therein, required by or under these Regulations to be maintained, or knowingly make, or procure or assist in the making of, any false entry in any such record, or wilfully omit to make a material entry in such record.
- (b) All records required to be maintained by or under these Regulations shall be recorded in a permanent and indelible material.
- (c) A person shall not issue any certificate or exemption under these Regulations unless he is authorised to do so by the Authority.
- (d) A person shall not issue any certificate of the kind referred to in sub-regulation (4) unless he has satisfied himself that all statements in the certificate are correct, and that the applicant is qualified to hold that certificate.

**12.12.6 REPORTS OF VIOLATION.**

- (a) Any person who knows of a violation of the Act, any amendment thereto, or any Regulations, rules, or orders issued thereunder, shall report it to the Authority.
- (b) The Authority may determine the nature and type of any additional investigation or enforcement action that need to be taken.

**12.12.7 ENFORCEMENT OF DIRECTIONS**

Any person who fails to comply with any direction given to him by the Authority or by any authorised person under any provision of these Regulations shall be deemed for the purposes of these Regulations to have contravened that provision.

**12.12.8 AERONAUTICAL FEES**

- (a) The Authority shall notify in writing the fees to be charged in connection with the issue, renewal, extension or variation of any certificate, test, inspection or investigation required by, or for the purpose of these Regulations any orders, notices or proclamations made thereunder.
- (b) Upon an application being made in connection with which any fee is chargeable in accordance with the provisions of sub-regulation (1), the applicant shall be required, before the application is accepted, to pay the fee so chargeable.
- (c) If, after that payment has been made, the application is withdrawn by the applicant or otherwise ceases to have effect or is refused, the Authority shall not refund the payment made.