

Statutory Instrument 71 of 2023.

[CAP. 13:16

Civil Aviation (Airworthiness) (Amendment) Regulations, 2023
(No.1)

IT is hereby notified that the Minister of Transport and Infrastructural Development has, in terms of section 79 of the Civil Aviation Act [*Chapter 13:16*], made the following regulations:—

1. These regulations may be cited as the Civil Aviation (Airworthiness) (Amendment) Regulations, 2023 (No. 1).

2. The Civil Aviation (Airworthiness) (Regulations), 2018, published in Statutory Instrument 64 of 2018 (“hereinafter called the principal regulations”), are amended in section 2 by the insertion of the following definitions—

““aircraft” means 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;

“anticipated operating conditions” means those conditions which are known from experience or which can be reasonably envisaged to occur during the operational life of the aircraft taking into account the operations for which the aircraft is made eligible, the conditions so considered being relative to the meteorological state of the atmosphere, to the configuration of terrain, to the functioning of the aircraft, to the efficiency of personnel and to all the factors affecting safety in flight. Anticipated operating conditions do not include—

- (a) those extremes which can be effectively avoided by means of operating procedures; and
- (b) those extremes which occur so infrequently that to require the Standards to be met in such extremes would give a higher level of airworthiness than experience has shown to be necessary and practical;

“configuration” means a particular combination of the positions of the moveable elements, such as

wing flaps and landing gear, etc., that affect the aerodynamic characteristics of the aircraft;

“critical engine” means any engine whose failure gives the most adverse effect on the aircraft characteristics relative to the case under consideration;

“design landing mass” means the maximum mass of the aircraft at which, for structural design purposes, it is assumed that it will be planned to land;

“design take-off mass” means the maximum mass at which the aircraft, for structural design purposes, is assumed to be planned to be at the start of the take-off run;

“design taxiing mass” means the maximum mass of the aircraft at which structural provision is made for load liable to occur during use of the aircraft on the ground prior to the start of take-off;

“fireproof” means the capability to withstand the application of heat by a flame for a period of 15 minutes;

“fire resistant” means the capability to withstand the application of heat by a flame for a period of 5 minutes;

“human factors principles” means principles which apply to aeronautical design, certification, training, operations and maintenance and which seek safe interface between the human and other system components by proper consideration to human performance;

“human performance” means human capabilities and limitations which have an impact on the safety and efficiency of aeronautical operations;

“landing surface” means that part of the surface of an aerodrome which the aerodrome authority has

- declared available for the normal ground or water run of aircraft landing in a particular direction;
- “limit loads” means the maximum loads assumed to occur in the anticipated operating conditions;
- “load factor” means the ratio of a specified load to the weight of the aircraft, the former being expressed in terms of aerodynamic forces, inertia forces, or ground reactions;
- “maintenance release” means a document which contains a certification confirming that the maintenance work to which it relates has been completed in a satisfactory manner in accordance with appropriate airworthiness requirements;
- “modification” means a change to the type design of an aircraft, engine or propeller;
- “major modification” means a type design change not listed in the aircraft, aircraft engine, or propeller specifications that might appreciably affect the mass and balance limits, structural strength, performance, power plant operation, flight characteristics, or other qualities affecting airworthiness or environmental characteristics or that will be embodied in the product according to non-standard practices;
- “major repair” means a repair of an aeronautical product that might appreciably affect the structural strength, performance, power plant, operation flight characteristics or other qualities affecting airworthiness or environmental characteristics or that will be embodied in the product using non-standard practices;
- “minor modification” means a modification other than a major modification;
- “minor repair” means a repair other than a major repair;
- “Performance Class 1 helicopter” means a helicopter with performance such that, in case of engine failure, it

is able to land on the rejected take-off area or safely continue the flight to an appropriate landing area;

“Performance Class 2 helicopter” means a helicopter with performance such that, in case of engine failure, it is able to safely continue the flight, except when the failure occurs prior to a defined point after take-off or after a defined point before landing, in which cases a forced landing may be required;

“Performance Class 3 helicopter” means a helicopter with performance such that, in case of engine failure at any point in the flight profile, a forced landing must be performed;

“pressure-altitude” means an atmospheric pressure expressed in terms of altitude which corresponds to that pressure in the standard atmosphere;

“repair” means the restoration of an aircraft, engine, propeller or associated part to an airworthy condition in accordance with the appropriate airworthiness requirements after it has been damaged or subjected to wear;

“satisfactory evidence” means a set of documents or activities that a Contracting State accepts as sufficient to show compliance with an airworthiness requirement;

“service bulletin” means a document issued by the manufacturer of aircraft, engine or component to communicate details of modifications, inspections or repairs which can be embodied in aircraft and service bulletins shall be construed accordingly; and

“ultimate load” means the limit load multiplied by the appropriate factor of safety.

3. Section 5 of the principal regulations is amended by the repeal of subsection (3).

4. Section 6 of the principal regulations is amended by the repeal of subsection (7).

5. Section 7 of the principal regulations is amended in subsection (1) by the addition of the words “on the basis of satisfactory evidence that the aircraft complies with the design aspects of the appropriate airworthiness requirements and” after the word “shall”.

6. Section 11 of the principal regulations is amended by the repeal of subsection (4) and substitution of the following—

“(4) Where an application for renewal is made after a period not exceeding 12 months after the expiry of the Certificate of Airworthiness, the Authority may renew the Certificate of Airworthiness subject to the payment of a civil penalty specified in Civil Aviation (General Procedures and Enforcement) Regulations published in SI 253 of 2018.”

7. Section 12 of the principal regulations is amended by the repeal of subsection (3).

8. Section 14 of the principal regulations is amended by the insertion of subsection (5) as follows—

“(5) The conditions specified in subsection (3) shall apply where a foreign registered aircraft is damaged while operating in Zimbabwe.”

9. The principal regulations are amended by the repeal of section 17 and the substitution of the following—

“Export approval of aeronautical products

17. (1) An owner of an aircraft registered in Zimbabwe or an agent of the owner may apply to the Authority for issue of an export certificate of airworthiness for aeronautical products or article.

(2) The export certificates of airworthiness shall be classified as follows—

- (a) Class I product- complete aircraft, engine or propeller which has been certificated;
- (b) Class II product – a major component of Class I product such as a wing, fuselage and empennage

service, the failure of which would jeopardize the safety of a class I product or any part, material or system thereof;

- (c) Class III product- any product or component which is not a Class I or Class II product or standard part.

(3) An application for an export certificate of airworthiness shall be made on a form prescribed by the Authority at least 14 days before the intended date of export of the aircraft out of Zimbabwe.

(4) The Authority shall issue an export certificate of airworthiness if—

- (a) the applicant submits a statement of compliance with the full intents of the approved maintenance programme or schedule;
- (b) the applicant submits a statement of compliance with the mandatory airworthiness directives and service bulletins applicable to the aircraft and its equipment;
- (c) the aircraft has been inspected in accordance with the performance rules of these regulations and found airworthy by persons authorised by the Authority to make such determination within the last 14 days;
- (d) the maintenance determined by the Authority as a prerequisite for issue of the export certificate of airworthiness has been carried out and certified by a person acceptable to the Authority in accordance with these regulations; the result of test flight, and such other tests as the Authority may determine are complied with;
- (e) historical records establish the production, modification and maintenance standard of the aircraft; or
- (f) a weight and balance report with a loading schedule, where applicable, for each aircraft in accordance with the applicable regulations is furnished to the Authority.

(5) Export certificate of airworthiness shall not be used for the purpose of flight but for confirmation of recent satisfactory review of the airworthiness status of the aircraft.

(6) Any extension or variations granted to an aircraft in accordance with an approved maintenance programme or schedule shall be automatically revoked before issue of the export certificate of airworthiness.”.

10. Section 21 of the principal regulations is amended by the deletion of subsection (2).

11. Section 22 of the principal regulations is amended by the deletion of subsection (7).

12. The principal regulations are amended by the repeal of section 23 and the substitution of the following—

“Airworthiness directives

23. (1) No person shall operate an aircraft or aircraft components to which an airworthiness directive applies except in accordance with the requirements of airworthiness directive.

(2) Upon registration of an aircraft in Zimbabwe, the Authority shall notify the State of Design of the registration of the aircraft in Zimbabwe, and request that the Authority receive all airworthiness directives addressing that aircraft, airframe, aircraft engine, propeller, appliance or component.

(3) Where the State of Design considers that a condition in an aircraft, airframe, engine, propeller, appliance or component is unsafe as shown by the issue of an airworthiness directive by that State, such directives shall apply to Zimbabwean registered aircraft of the type identified in that airworthiness directive.

(4) Where a manufacturer identifies a service bulletin as mandatory, such bulletin shall apply to a Zimbabwean registered aircraft of the type identified in that bulletin.

(5) The Authority may identify manufacturer's service bulletins and other sources of data or develop and prescribe inspections, procedures and limitations for mandatory compliance pertaining to affected aircraft in Zimbabwe.

(6) No person shall operate any Zimbabwean registered aircraft to which the measures of this regulations apply, except in accordance with the applicable directives and bulletins.”

13. Section 24 of the principal regulations is amended by the repeal of subsection (3).

14. The principal regulations are amended by the repeal of section 25 and the substitution of the following—

“Maintenance and Inspections

25. (1) No person shall operate an aircraft unless—

- (a) the aircraft and its components are maintained in accordance with a maintenance programme; and
- (b) the aircraft is inspected according to an inspection programme approved by the Authority.\

(2) The maintenance programme shall be developed by the operator, owner or through delegation to an approved maintenance organisation.

(3) Where the State of Registry is different from the State of the Operator, the review of the programme shall be coordinated with the State of the Operator.

(4) The design and application of the air operator's maintenance programme shall observe the Human Factors principles.

(5) The maintenance programme shall be applicable to aircraft, engines, propellers and aircraft parts.

(6) Every aircraft and helicopter shall have a maintenance programme that contains the following information—

- (a) a description of the aircraft and components and recommended methods for the accomplishment of maintenance tasks and such information shall include guidance on defect diagnosis;
 - (b) maintenance tasks and the intervals at which these are to be performed, taking into account the anticipated utilisation of the aircraft and operating environment of the aircraft;
 - (c) procedures for changing or deviating from paragraphs (a) and (b) above for tasks that do not have mandatory designations from the State of Design;
 - (d) certification maintenance requirements;
 - (e) where applicable, condition monitoring and reliability programme descriptions for aircraft systems, components and engines;
 - (f) basic requirements for a maintenance programme which include but are not limited to—
 - (i) inspection;
 - (ii) scheduled maintenance;
 - (iii) overhaul and repairs;
 - (iv) structural inspection; and
 - (v) maintenance tasks and intervals specified and identified as mandatory in approval of the type design; and
 - (g) where applicable, a continuing structural integrity programme (SIP) with at least—
 - (i) supplemental inspections;
 - (ii) corrosion prevention and control;
 - (iii) structural modification and associated inspections;
 - (iv) repair assessment methodology; and
 - (v) widespread fatigue damage (WFD) review.
- (7) The maintenance programme shall be based on information made available by the State of Design or by the

organisation responsible for the type design and any additional applicable experience.

(8) The owner or operator shall use one of the following inspection programmes as appropriate for the aircraft and the type of operation—

- (a) an annual inspection;
- (b) an annual or 100 hour inspection;
- (c) a progressive inspection; or
- (d) continuous airworthiness maintenance programme.”

15. The principal regulations are amended by the insertion of a new section as follows—

“Maintenance programme development basis

25B. (1) An Air operator’s maintenance programme shall be based upon the manufacturer recommended instructions for continuing airworthiness (ICAs) such as, but not limited to—

- (a) the maintenance review board (MRB) report, where applicable;
- (b) where available, the type certificate holder’s maintenance planning document (MPD) or;
- (c) any appropriate chapter in the maintenance manual (i.e., the manufacturer’s recommended maintenance programme.

(2) For a newly type-certificated aircraft, where no previously approved maintenance programme exists, the air operator shall comprehensively appraise the manufacturer’s recommendations, and the MRB report, where applicable, together with other airworthiness information, in order to produce a realistic programme for approval.

(3) The Authority shall consider the following requirements for the content of the maintenance programme—

- (a) MRB report approved by the State of Design;
- (b) MPD issued by the type certificate holder or manufacturer;

- (c) Airworthiness Limitation Items (ALIs) specified in the type certificate data sheet. These may include CMRs, safe life airworthiness limitation items, and damage-tolerant ALIs;
- (d) specific operation requirements of the State of Registry and the State of the Operator;
- (e) mandatory life limits for engine life-limited parts specified by the manufacturer;
- (f) engine and auxiliary power unit (APU) off-wing maintenance as specified in the engine and APU work scope planning guides; and
- (g) ICAs specified for air-operator-installed equipment or required by supplemental type certificate (STC) modifications, including emergency equipment.

(4) All items in the maintenance programme shall have the source document clearly identified and mandatory items including CMRs, ALIs and ADs must be clearly distinguished from items that are subject to adjustments or changes based on operating experience.”.

16. The principal regulations are amended by the insertion of a new section as follows—

“Updating the maintenance programme

25C. (1) Every revision to the approved programme shall be submitted to the Authority, in order to reflect changes in the type certificate holder’s recommendations, modifications, service experience, or as required by the Authority and in coordination with the State of the Operator where the two are different.

(2) An operator may use an operator reliability programme for updating maintenance programmes.

(3) No operator may vary the periods prescribed by the maintenance programme without the the approval of the Authority and in coordination with the State of the Operator where the two are different.

(4) The Authority shall not approve interval escalation or task modifications related to MCAI, ALIs and CMRs without appropriate coordination with the State of Design.

(5) The operator shall review the content of the maintenance programme periodically for continued validity in view of operating experience and ensure that the programme is amended, revised approved as necessary by means of establishing an appropriate revision and control system and that copies of all amendments to the maintenance programme are furnished promptly to all organizations or persons to whom the maintenance programme.”.

17. Section 27 of the principal regulations is amended in subsection (1) by deletion of 500kg and replacing it with 5700kg.

18. Section 31 of the principal regulations is amended by the deletion of subsection (3).

19. Section 32 of the principal regulations is amended in subsection (3) by the addition of the words “except if mandated by an airworthiness directive” after the words ‘carried out’.

20. Section 47 of the principal regulations is amended by the deletion of subsection (4).

21. Section 48 of the principal regulations is amended by the deletion of subsection (5).

22. The principal regulations are amended by the deletion of section 54 and the substitution of the following—

“54. (1) The Authority may develop a national code of airworthiness.

(2) The Authority recognizes airworthiness codes, standards and associated requirements from the following authorities—

- (a) Federal Aviation Administration (FAA);
- (b) European Union Aviation Safety Agency (EASA);
- (c) Transport Canada (TCAA); and
- (d) Agência Nacional de Aviação Civil (ANAC).

- (3) The review process shall include—
- (a) an assessment of the adequacy of the airworthiness and environmental standards applied by the State of Design relative to the requirements of the State of Registry;
 - (b) an assessment of acceptability of any findings of equivalent level of safety or exemptions granted by the State of Design;
 - (c) an assessment of suitability of any special conditions of airworthiness specified and certified by the State of Design; and
 - (d) an assessment of adequacy of the approved type design and compliance demonstration in regard to specified requirements, operating conditions, airworthiness directives, and airworthiness philosophies of the Authority.

(4) Notwithstanding subsection (2), the Authority may recognise any other airworthiness codes with the Minister's exemption.”.

23. Section 57 of the principal regulations is amended by the repeal of subsection (2).

24. The principal regulations are amended by the repeal of section 58.

