GOVERNMENT NOTICE NO. 41

AVIATION ACT

(CAP. 70:01)

AVIATION (ENVIRONMENTAL PROTECTION) REGULATIONS, 2013

ARRANGEMENT OF REGULATIONS

REGULATION

IN EXERCISE of the powers conferred by section 19 of the Aviation Act, I, MOHAMMED SIDIK MIA, Minister of Transport and Public Works, make the following Regulations—

PART I–GENERAL

Citation and Application

1.—(1) These Regulation may be cited as the Aviation (Environmental Protection) Regulation, 2013.

(2) These Regulations apply to all aircrafts within Malawi.

(3) These Regulations prescribe regulations of noise and aircraft engine emissions restrictions at aerodromes and other places designated as noise sensitive areas in Malawi.

Interpretation

2.—(1) For the purpose of these Regulations, unless the context otherwise requires—

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

"rated output" for engine emissions purposes, means the maximum power or thrust available for take-off under normal operating conditions at ISA sea level static conditions without the use of water injection as approved by the Authority or other certificating authority. Thrust is expressed in kilonewtons;

"reference pressure ratio" means the ratio of the mean total pressure at the last compressor discharge plane of the compressor to the mean total pressure at the compressor entry plane when the engine is developing take-off thrust rating in ISA sea level static conditions;

"smoke" means the carbonaceous materials in exhaust emissions which obscure the transmission of light. Smoke includes soot, ash, grit, gritty particles, dust and any other substances whatsoever which obscures or is likely to obscure visibility;

"smoke number" means the dimensionless term qualifying smoke emissions.

PART II—NOISE

Aircraft noise restriction

3.–(1) The conditions under which noise and vibration shall be caused by aircraft on government aerodromes, licensed aerodromes or on aerodromes at which the manufacture, repair or maintenance of aircraft is carried out by persons carrying on business as manufacturers or repairers of aircraft, shall be as follows, that is to say that, whether in the course of the manufacture of the aircraft or otherwise—

(*a*) the aircraft is taking-off or landing;

(*b*) the aircraft is moving on the ground or water; or

(*c*) the engines are being operated in the aircraft—

(i) for the purpose of ensuring their satisfactory performance;

(ii) for the purpose of bringing them to a proper temperature in preparation for, or at the end of a flight; or

(iii) for the purposes of ensuring the instruments, accessories or other components of the aircraft are in a satisfactory condition.

(2) Except for the purpose of landing or taking off or in an emergency no person shall fly any aircraft over a game reserve or national park at an altitude of less that 1500 feet above ground level except with the prior permission of the Chief Game Warden.

(3) No person shall fly an aircraft over an area with sensitive fauna at an altitude of less than 1500 feet above ground level except with the prior permission of the authority responsible for area's designation.

Noise certification

4.–(1) The Authority shall grant or validate Noise Certificate of an aircraft on the basis of satisfactory evidence that the aircraft complies with requirements which are at least equal to the applicable standards specified in Annex 16 to the Chicago Convention.

(2) When the Authority issue or validate a Noise Certificate for an aircraft, the certificate shall provide the following information—

(*a*) State of Registry, nationality and registration marks;

(*b*) manufacture's serial number;

(*c*) manufacture's type and model designation, engine type or model, propeller type or model (if applicable);

(*d*) statement of any additional modifications incorporated for the purpose of compliance with the applicable noise certified standards;

(*e*) the maximum mass at which compliance with the applicable noise certification standards has been demonstrated: only one maximum take-off and landing mass pair shall be certificated for each individual aircraft;

(*f*) for aeroplanes for which the application for certification of prototype is submitted on or after 6 October 1977, and for helicopters for which application for certification of the prototype is submitted on or after 1 January 1985, the average noise level (s) at the reference point(s) for compliance with the applicable standards has been demonstrated to the satisfaction of the Certificating Authority;

(*g*) the Chapter of Annex 16, Volume I, according to which the aircraft was certified; and

(*h*) the height above the runway at which thrust or power is reduced following full thrust or power take-off.

(3) The information required under subregulation (2)(*b*) to (2) (*h*) shall be included in the flight manual.

(4) The documents attesting noise certification for an aircraft shall provide atleast the information contained in IS15:4 (4) and shall be approved by the Authority and shall be carried on the aircraft.

(5) IS 15:4 (5) in the Schedule hereto contains descriptions of Annex 16, Volume I according to which aircraft are noise certified.

Noise abatement procedures

5.—(1) No person shall introduce noise abatement procedures unless with the permission of the Authority.

(2) In granting permission required in subregulation (1) the Authority will consider if the following factors have been taken into account in the development of the noise abatement procedures—

(*a*) consultation with the operators which use the airport;

(*b*) the nature and extent of the noise;

(*c*) types of aircraft affected, including aircraft mass, aerodrome elevation, temperature consideration;

(*d*) types of procedures likely to be most effective;

(*e*) obstacle clearances and;

(*f*) human performance in the application of the operating procedures.

Part III – Smoke

Smoke and aircraft engine emissions restrictions

6.–(1) Subject to subregulation (2), no person shall operate or aircraft engine cause to be operated within 8 miles from the boundary of any aerodrome, restrictions any machinery or plant used for industrial or trade purposes which

emits or causes smoke or which shall emit or shall cause smoke unless the written authority of the Director has been first obtained for such operation and the machinery or plant is operated in compliance with any conditions the Director shall impose when granting such authority.

(2) Subregulation (1) shall not apply in relation to machinery or plant used for industrial or trade purposes which is installed, or an agreement for the purchase or installation of which has been entered into, before the date upon which the aerodrome in question is designated for the purpose of these Regulations.

(3) Any person who operates or causes to be operated any machinery or plant referred to in subregulation (2) shall use any practical means available for minimizing the smoke emitted or caused by such operation during any period when the Director notifies him that the emission or causing of smoke within the area in question is likely to affect visibility at or over the aerodrome or any approach or take-off area at that aerodrome; and for the purpose of this regulation 'practicable' means reasonably practicable having regard, *inter alia*, to—

(*a*) local conditions and circumstances;

(*b*) the financial implications;

(*c*) the current state of technical knowledge;

(*d*) the proper use of the machinery or plant;

(*e*) the type of fuel available.

(4) Any person who is engaged in construction, maintenance or repair work on an aerodrome or on any building thereon shall be exempt from the provisions of these Regulations.

Emissions certification

7.—(1) The Authority may grant emissions certification on the basis of satisfactory evidence that the engine complies with the requirements that are at least equal to the stringency of the provisions of Volume II of the Annex 8 to Chicago Convention.

(2) The document attesting emissions certification for each individual engine shall, when granted or validated, include at least the following information which is applicable to the engine type—

(*a*) the certifying authority;

(*b*) manufacturer's type and model designation;

(*c*) statement of any additional modifications incorporated for the purpose of compliance with the applicable emissions certification requirements;

(*d*) rated output;

(*e*) reference pressure ratio;

(*f*) a statement indicating compliance with smoke number requirements;

(*g*) a statement indicating compliance with gaseous pollutasnt requirements.

8. The Aviation (Smoke) Regulations, are hereby revoked.

Revocation
Cap.70:01
Sub. leg.
p. 168d

SCHEDULE

IMPLEMENTING STANDARDS FOR ENVIRONMENTAL PROTECTION

IS 15: 4(4) DOCUMENTS ATTESTING NOISE CERTIFICATION

1. The documents attesting noise certification for an aircraft shall provide at least the following information—

Item 1. Name of State.

Item 2. Title of the noise document.

Item 3. Number of the document.

Item 4. Nationality or common mark and registration marks.

Item 5. Manufacturer and manufacturer`s designation of aircraft.

Item 6. Aircraft serial number.

Item 7. Engine manufacture type and model.

Item 8. Propeller type and model for propeller-driven aeroplanes.

Item 9. Maximum take-off mass in kilograms.

Item 10. Maximum landing mass, in kilograms, for certificates issued under chapters 2, 3, 4, 5, and 12 of Annex 16 .

Item 11. The chapter and section of Annex 16 according to which the aircraft was certificated.

Item 12. Addition modification incorporated for the purpose of compliance with the noise certification Standards.

Item 13. The lateral/full-power noise level in corresponding unit for documents issued under chapters 2, 3, 4, 5 and 12 of Annex 16.

Item 14. The approach noise level in the corresponding unit for documents issued under chapters 2, 3, 4, 5, 8 and 12 of Annex 16.

Item 15. The flyover noise level in the corresponding unit for documents issued under chapters 2, 3, 4, 5 and 12 of Annex 16.

Item 16. The over flight noise level in the correspondence unit for documents issued under chapters 6, 8 and 11 of Annex 16.

Item 17. The take-off noise level in the corresponding unit for documents issued under chapters 8 and 10 of Annex 16.

Item 18. Statement of compliancy, including a reference to Annex 16, Volume I.

Item 19. Date of issuance of the noise certification document.

Item 20. Signature of the officer issuing it.

2. Item headings on the noise certification documents shall be uniformly numbered in Arabic numerals, as indicated in 1, so that on any noise certification document the number will, under any arrangement, refer to the same item heading, except where the information in items 1 and 6 and Items I through 6 and Items 18 through 20 is given in the certificate of airworthiness, in which case the numbering system of the certificate of airworthiness according to Annex 8 shall prevail.

3. An administrative system for implementation of noise certification documentation shall be developed by State of Registry.

4. The Authority shall recognize as valid a noise certification granted by another Contracting State provided that the requirements under which such certification was granted are at least equal to the applicable Standards specified in Annex 16.

5. The Authority shall suspend or revoke the noise certification of an aircraft on its register if the aircraft ceases to comply with the applicable noise Standards. The State of Registry shall not remove the suspension of a noise certification or grant a new noise certification unless the aircraft is found, on reassessment, to comply with the applicable noise Standards.

IS 15: 4(5) CHAPTERS FOR CERTIFYING AIRCRAFT WITH REGARD TO NOISE

1. Chapter 2 - Subsonic jet aeroplanes application for type certificate submitted before 6 October, 1977.

1.1 The Standards of these Regulations shall be applicable to all subsonic jet aeroplanes for which either the application for a Type Certificate was submitted, or another equivalent prescribed procedure was carried out by the certificating authority, before 6 October, 1977, expect those aeroplane—

(1) requiring a runway length' of 610 m or less at maximum certificated mass for airworthiness; or

(2) powered by engines with a bypass ratio of 2 or more and for which a certificate of airworthiness for individual aeroplane was first issued before 1 March, 1972; or

(3) powered by engines with a bypass ratio of less than 2 and for which either the application for Type Certificate was submitted, or another equivalent prescribed procedure was carried out by the certificating authority, before 1 January, 1969, and for which a certificate of airworthiness for the individual aeroplanes was first issued before 1 January, 1976.

1.2 The Standards of these Regulations shall also be applicable to derived versions of all aeroplanes covered by 1.1 for which the application for certification of change in type design was accepted, or another equivalent procedure was carried out by the certificating authority, on or after 26 November, 1981.

1.3 Notwithstanding 1.1 and 1.2, it may be recognized by the authority that the following situations for jet aeroplanes and propeller-driven heavy aeroplanes on its registry do not require demonstration of compliance with the provisions of the Standards of Annex 16, Volume 1—

(1) Gear down flight with one or more retractable landing gear down during the entire flight;

(2) Spare engine and nacelle carriage external to the skin of the aeroplane (and return of the Pylon or other external mount); and

(3) Time-limited engine and/or nacelle changes, where the change in type design specifies that the aeroplane may not be operated for a period of more than 90 days unless compliance with the provisions of Annex 16 Volume 1, is shown for that change in type design. This applies only to changes resulting from a required maintenance section.

2. CHAPTER 3

(1) Subsonic jet aeroplanes — Application for Type Certificate submitted on or after 6 October, 1977 and before 1 January, 2006.

(2) Propeller — driven aeroplanes over 5700 kg — Application for Type Certificate on or after 1 January, 1985 and before 17 November 1988.

(3) Propeller driven aeroplanes over 8618 kg — Application for Type Certificate submitted on or after 17 November, 1988 and before 1 January, 2006.

2.1 The Standards of this Chapter shall be applicable to—

(1) All subsonic jet aeroplanes, including their derived versions, other than aeroplanes with require a runway' length of 610 m or less at maximum certificated mass for airworthiness, in respect of which either the application for a Type Certificate was submitted, or another equivalent prescribed procedure was carried out by the certificating authority, on or after 6 October, 1977 and before 1 January, 2006;

(2) All propeller-driven aeroplanes, including their derived versions, of over 5 700 kg maximum certification take-off mass for which either the application for a Type Certificate was submitted, or another equivalent prescribed procedure was carried out by the certificating authority, on or after 1 January, 1985 and before 17 November, 1988, except where the Standards of Chapter 10 apply;

(3) All propeller-driven aeroplanes, including their derived versions, of over 8618 kg maximum certificated take-off mass, for which either the application for a Type Certification was submitted, or another equivalent prescribed procedure was

carried out by the certificating authority, on or after 17 November, 1988 and before 1 January, 2006.

2.2 Notwithstanding 2.1, it may be recognized by the Authority that the following situations for jet aeroplanes and propeller-driven heavy aeroplanes on its registry do not require demonstration of compliance with the provisions of the Standards of Annex 16, Volume I—

(*a*) Gear down flight with one or more retractable landing gear down during the entire flight.

(*b*) Spare engine and nacelle carriage external to the skin of the aeroplane (and return of the pylon or other external mount).

(*c*) Time-limited engine and/or nacelle changes, where the change in type design specifies that the aeroplane may not be operated for a period of more than 90 days unless compliance with the provisions of Annex 16, Volume I, is shown for the change in type design. This applies only to change resulting from a required maintenance action.

Made this 26th day of June, 2013.

MOHAMMED SIDIK MIA
Minister of Transport and Public Works

(FILE NO. 5/2/3)