



# **PART V**

## **GENERAL**

### **AIRWORTHINESS REGULATIONS**

**FOREWORD**

**CONTENTS**

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## FOREWORD

- 1 The State of Bahrain Civil Aviation Affairs is known in these regulations as the “Authority”.
- 2 Development of the requirements of ANTR Part V - General will be in accordance with Notice of Proposed Amendment (NPA) procedures. These procedures allow for the amendment of ANTR Part V – General to be harmonized with amendments to EASA and ICAO Annexes in a timely manner.
- 3 ANTR Volume 1 Part V – Airworthiness Regulations comprises of the following;
  - (a) Part V - General Regulations
  - (b) ANTR M - Continuing Airworthiness
  - (c) ANTR 145 - Approved Maintenance Organisations
  - (d) ANTR 147 - Approved Maintenance Training Organisations
  - (e) ANTR 21 - Certification of Aircraft & Related Products, Parts & Appliances, and of Design & Production Organisations
4. Definitions and abbreviations of terms used in ANTR Part V – General are in ANTR Part 1 – Definitions.
5. The editing practices used in this document are as follows:
  - (a) ‘Shall’ is used to indicate a mandatory requirement and may appear in ANTRs.
  - (b) ‘Should’ is used to indicate a recommendation and normally appears in AMCs and IEMs.
  - (c) ‘May’ is used to indicate discretion by the Authority, the industry or the applicant, as appropriate.
  - (d) ‘Will’ indicates a mandatory requirement and is used to advise of action incumbent on the Authority.

*NOTE: The use of the male gender implies the female gender and vice versa.*

6. New, amended and corrected text will be enclosed within heavy brackets until a subsequent “amendment” is issued.
7. [This is the 3<sup>rd</sup> Edition Revision 4 ~~3~~ to ANTR Part V dated 28 February 2023.]

**Revision Highlights**  
**Bahrain CAA Publication Revisions Highlight Sheet**

☒ ANTR: Part V      ☐ CAP: \_\_\_\_      ☐ TPM: \_\_\_\_

The following pages of ANTR Part V have been revised on the basis of annual review Dec 2022.

| Item | Paragraph number   | Page | Reason  |
|------|--------------------|------|---|
| 1    | Foreword           | i    | To indicate the current revision status.                          |
| 2    | Rev. Highlights    | ii   | Revision Highlights   |
| 3    | Record of Revision | iii  | To introduce Rev. to Record of Revision                           |
| 4    | LEP                | iv   | List of effective pages   |
| 5.   | <b>Chapter 5</b>   |      |   |
| a.   | 5.2.1 (a)          | 5-1  | To introduce requirement of conformity to the Airworthiness Codes |

## REVISION RECORD

## ANTR PART V

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| 3 <sup>rd</sup> Edition<br>Initial Issue | 01 August 2010    |
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## LIST OF EFFECTIVE PAGES

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| i   | <del>25 Sep 22</del> | 25 Dec 2022 |
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## CHAPTER 1

### GENERAL

#### 1.1 OBJECTIVE AND SCOPE

- 1.1.1 This Regulation establishes common technical requirements and administrative procedures for ensuring the continuing airworthiness of aircraft, including any component for installation thereto, which are:
- (a) Registered in the Kingdom of Bahrain; or
  - (b) Registered in another country and used by an operator for which BCAA ensures oversight of operations.
- 1.1.2 For the purpose of this Part, the competent authority shall be Bahrain Civil Aviation Affairs (BCAA) designated by the State. This competence will cover:
- (a) Oversight of the continuing airworthiness for aircraft registered in the Kingdom of Bahrain.
  - (b) Oversight of maintenance organisations.
  - (c) Oversight of continuing airworthiness management organisations as specified in ANTR M.B. 704.
  - (d) Approval of maintenance programmes for aircraft registered in the Kingdom of Bahrain.

#### 1.2 AIRWORTHINESS CODE & CERTIFICATION SPECIFICATIONS

- 1.2.1 Unless notified to the contrary, Certificates of Airworthiness shall be issued to aircraft which conform to a type design / Certification specification that are in accordance with EASA Part 21, FAA Part 21, Transport Canada Part 21 or any other regulation acceptable to the BCAA and meets the Type Certificate / Airworthiness Standards of EASA Part 23 / 25, FAA Part 23 / 25, Transport Canada Part 23 / 25 or any other regulation acceptable to the BCAA as complementary regulations under ANTR Part V.
- 1.2.2 Bahrain CAA does not issue any Type Certificates or Supplemental Type Certificates, but only accepts such certification issued by the ICAO Contracting States as stipulated in para 1.2.1 above.

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## CHAPTER 2

### REGISTRATION & DEREGISTRATION / CANCELLATION OF AIRCRAFT REGISTRATION

#### 2.1 AIRCRAFT TO BE REGISTERED

Article 9 & 10 of the Civil Aviation Law 14 of 2013 amended time-to-time requires that no aircraft other than aircraft registered in the state of Bahrain may operate in the territory of the state of Bahrain unless it carries one of the required documents specified in the mentioned articles. Article 48 of the Civil Aviation Law 14 of 2013, as amended empowers the state of Bahrain to register an aircraft

2.1.1 An aircraft shall not fly in or over Bahrain unless it is registered in:

- (a) a Contracting State; or
- (b) some other country in relation to which there is in force an agreement between the Government of Bahrain and the Government of that country which makes provision for the flight over Bahrain of aircraft registered in that country:

Provided that:

- (1) a glider may fly unregistered, and shall be deemed to be registered in Bahrain for the purposes of these regulations, on any flight which:
  - (i) begins and ends in Bahrain without passing over any other country, and
  - (ii) is not for the purpose of transport or aerial work other than aerial work which consists of the giving of instruction in flying or the conducting of flying tests in a glider owned or operated by a flying club of which the person giving the instruction or conducting the test and the person receiving the instruction or undergoing the test are both members
- (2) This paragraph shall not apply to any kite or captive balloon.

2.1.2 If an aircraft flies over Bahrain in contravention of paragraph 2.1.1 in such manner or circumstances that if the aircraft had been registered in Bahrain an offence against these regulations would have been committed, the like offence shall be deemed to have been committed in respect of that aircraft.

#### 2.2 QUALIFICATION FOR REGISTRATION

2.2.1 The Minister shall be the authority for the registration of aircraft in Bahrain and the CAA shall keep the register on its premises and record therein the particulars specified in a legible or a non-legible form so long as the recording is capable of being reproduced in a legible form.

2.2.2 Subject to the provisions of this article, an aircraft shall not be registered or continue to be registered in Minister if it appears to the Minister that:

- (a) the aircraft is registered outside Bahrain and that such registration does not cease by operation of law upon the aircraft being registered in Bahrain;

- (b) an unqualified person holds any legal or beneficial interest by way of ownership in the aircraft or any share therein;
- (c) it would be in expedient in the public interest for the aircraft to be or to continue to be registered in Bahrain.

2.2.3 The following persons and no others shall be qualified to hold a legal or beneficial interest by way of ownership in an aircraft registered in Bahrain or a share therein:

- (a) citizens of Bahrain;
- (b) bodies incorporated in Bahrain;
- (c) Non-Bahraini citizens who have business interests in the Kingdom of Bahrain;
- (d) Offshore companies based outside the Kingdom of Bahrain who undertake business in the Kingdom of Bahrain

In cases (c) and (d), it shall be necessary to obtain the prior approval of the competent Minister before registration can be made.

2.2.4 If any unqualified person residing or having a place of business in Bahrain holds a legal or beneficial interest by way of ownership in an aircraft, or a share therein, the Minister, upon being satisfied that the aircraft may otherwise be properly so registered, may register the aircraft in Bahrain. The person aforesaid shall not cause or permit the aircraft, while it is registered in pursuance of this paragraph, to be used for the purpose of transport or aerial work.

2.2.5 If an aircraft is chartered by demise to a person qualified as aforesaid the Minister may, whether or not an unqualified person is entitled as owner to a legal or beneficial interest therein, register the aircraft in Bahrain in the name of the charterer upon being satisfied that the aircraft may otherwise be properly so registered, and subject to the provisions of this article the aircraft may remain so registered during the continuation of the charter.

2.2.6 Application for the registration of an aircraft in Bahrain shall be made in writing to the Minister and shall include or be accompanied by such particulars and evidence relating to the aircraft and the ownership and chartering thereof as it may require to enable it to determine whether the aircraft may properly be registered in Bahrain and to issue the certificate. In particular, the application shall include the proper description of the aircraft according to column 4 of the 'General Classification of Aircraft' set forth in Chapter 3 of this Part.

## **2.3 REGISTER OF NATIONALITY AND REGISTRATION MARKS**

2.3.1 The Authority shall maintain a current register under the provisions of Articles 48 & 49 of Civil Aviation Law, 14 of 2013, as amended showing for each aircraft registered by the Kingdom of Bahrain, the information recorded in the certificate of registration. The register of unmanned free balloons shall contain the date, time and location of release, the type of balloon and the name of the operator.

2.3.2 The certificate of registration, in wording and arrangement, shall be a replica of the certificate shown in ICAO Annex 7 and shall be bilingual, in Arabic and English.

2.3.3 Upon receiving an application for the registration of an aircraft in Bahrain and being satisfied that the aircraft may properly be so registered, the Minister shall register the aircraft,

wherever it may be, and shall include in the register the following particulars:

- (a) the number of the certificate;
- (b) the nationality mark of the aircraft and the registration mark assigned to it by the Minister
- (c) the name of the constructor of the aircraft and its designation;
- (d) the serial number of the aircraft; and
- (e) (1) the name and address of every person who is entitled as owner to a legal interest in the aircraft or a share therein, or, in the case of an aircraft which is the subject of a charter by demise, the name and address of the charterer by demise; and  
(2) in the case of an aircraft registered in pursuance of paragraph 2.2.4 or 2.2.5 of this article, an indication that it is so registered.

2.3.4 The Aircraft Register is made available to the public to view, under prior appointment on any business days & hours.

## **2.4 REGISTRATION RESPONSIBILITIES**

2.4.1 The Minister shall furnish to the person in whose name the aircraft is registered (hereinafter in this article referred to as 'the registered owner') a certificate of registration, which shall include the foregoing particulars and the date on which the certificate was issued:

2.4.2 The Minister may grant to any person qualified as aforesaid an aircraft dealer's certificate if it is satisfied that he has a place of business in Bahrain for buying and selling aircraft.

2.4.3 If at any time after an aircraft has been registered in Bahrain an unqualified person becomes entitled to a legal or beneficial interest by way of ownership in the aircraft or a share therein, the registration of the aircraft shall thereupon become void and the certificate of registration shall forthwith be returned by the registered owner to the Minister.

2.4.4 Any person who is the registered owner of an aircraft registered in Bahrain shall forthwith inform the Minister in writing of:

- (a) any change in the particulars which were furnished to the minister upon application being made for the registration of the aircraft;
- (b) the destruction of the aircraft, or its permanent withdrawal from use; or
- (c) in the case of an aircraft registered in pursuance of paragraph 2.2.5, the termination of the demise charter.

2.4.5 Any person who becomes the owner of an aircraft registered in Bahrain shall within 28 days inform the Minister in writing to that effect.

2.4.6 The Minister may, whenever it appears necessary or appropriate to do so for giving effect to this Part of these regulations or for bringing up to date or otherwise correcting the particulars entered on the register, amend the register or, if he thinks fit, may cancel the registration of the aircraft, and shall cancel that registration within 2 months of being satisfied that there has been a change in the ownership of the aircraft.

- 2.4.7 The Minister may, by regulations, adapt or modify the foregoing provisions of this article as he deems necessary or expedient for the purpose of providing for the temporary transfer of aircraft to or from the Bahrain register, either generally or in relation to a particular case or class of cases.
- 2.4.8 In this regulation references to an interest in an aircraft do not include references to an interest in an aircraft to which a person is entitled only by virtue of his membership of a flying club and the reference in paragraph 2.4.3 to the registered owner of an aircraft includes in the case of a deceased person, his legal personal representative, and in the case of a body corporate which has been dissolved, its successor.
- 2.4.9 Nothing in this article shall require the Minister to cancel the registration of an aircraft if in his opinion it would be inexpedient in the public interest to do so.

## **2.5 REGISTRATION CERTIFICATE AND VALIDITY OF REGISTRATION OF AIRCRAFT**

- 2.5.1 On registration, BCAA will assign nationality or common marks for the aircraft.
- 2.5.2 Registration markings shall not be allotted which might be confused with International Code of Signals, especially:
- a) Registration beginning with the letter 'Q'
  - b) Registrations 'SOS', 'XXX', 'PAN' and 'TTT'
- 2.5.3 Upon registration a Certificate of Registration shall be issued to the owner, which will be valid from the date of registration
- a) Till the date indicated on the Certificate of registration of the aircraft.
  - b) So long as the ownership / Lease Agreement remains valid
  - c) AOC granted to the operator remains valid
  - d) Till such time the conditions remain in compliant with Chapter 2.2 above
- 2.5.4 The Certificate of Registration shall be in accordance with Article 29 of the ICAO Convention and the Certificate of Registration shall be carried on board each aircraft engaged in air transport operation.
- 2.5.5 The owner / operator may apply to BCAA for varying any particular(s) the Certificate of Registration.
- 2.5.6 When a new type of aircraft is registered, BCAA shall advise the State of design that it has entered such aircraft on its register.
- 2.5.7 For removing the hypothecation / mortgages name from the Certificate of Registration the owner may apply to BCAA with documents substantiating the same.

## **2.6 ISSUE OF DUPLICATE CERTIFICATE OF REGISTRATION**

- 2.6.1 Where a certificate has been lost the owner may apply to BCAA for the issue of a duplicate certificate with an affidavit, a copy of the lost report filed with the security department for the loss and the prescribed fee.
- 2.6.2 Where a certificate has been mutilated, the owner may apply for issue of a duplicate certificate to the BCAA with the mutilated certificate and the prescribed fee.

## 2.7 DE-REGISTRATION / CANCELLATION OF REGISTRATION OF AIRCRAFT

- 2.7.1 The registration of an aircraft registered in Bahrain may be cancelled / deregistered at any time by the BCAA, if it is satisfied that:
- a. Applied by the owner for deregistration; or
  - b. such registration is not in conformity with Chapter 2.2 above; or
  - c. the registration has been obtained by furnishing false information; or
  - d. the aircraft could more suitably be registered in some other country; or
  - e. the aircraft has been destroyed or permanently withdrawn from use; or
  - f. it is inexpedient in the public interest that the aircraft should remain registered in Bahrain; or
  - g. the lease in respect of the aircraft registered pursuant to Chapter 2.2
    - i. has expired, or
    - ii. has been terminated by mutual agreement between the lessor and the lessee, or
    - iii. has been otherwise terminated in accordance with the provisions of the Lease Agreement, or terms of lease
  - h. the Certificate of Airworthiness in respect of the aircraft has expired for a period of five years or more.

## 2.8 RECORDING OF IRREVOCABLE DE-REGISTRATION AND EXPORT REQUEST AUTHORIZATION (IDERA)

For recording IDERA with BCAA the IDERA holder or his authorized signatory *or certified designee of the authorized signatory* shall submit application in accordance with CAP 16, along with Original IDERA and two notarized copies.

The registered owner or his authorized representatives may apply to BCAA for cancellation of registration, enclosing original C of R and the IDERA requirement. The applicant should also specify the clause of Article 51 of Civil Aviation Law 14 of 2013 and the relevant paragraph of this ANTR under which cancellation is sought. In case, it is proposed to invoke Para 2.7.1 (g) of this Part, the request for deregistration shall be supported by full explanation regarding the relevant provision of the lease agreement and the justification for using the provisions.

For deregistration of an aircraft under the provisions of Recording of Irrevocable De-registration and Export Request Authorization (IDERA), it shall not affect the rights of any entity thereof, or any inter-government organisation or private / public service provider in Bahrain to detain or attach or sell an aircraft under its law for payment of amounts owed to the Kingdom of Bahrain, any such entity, organisation or service provider by it in respect of that aircraft.



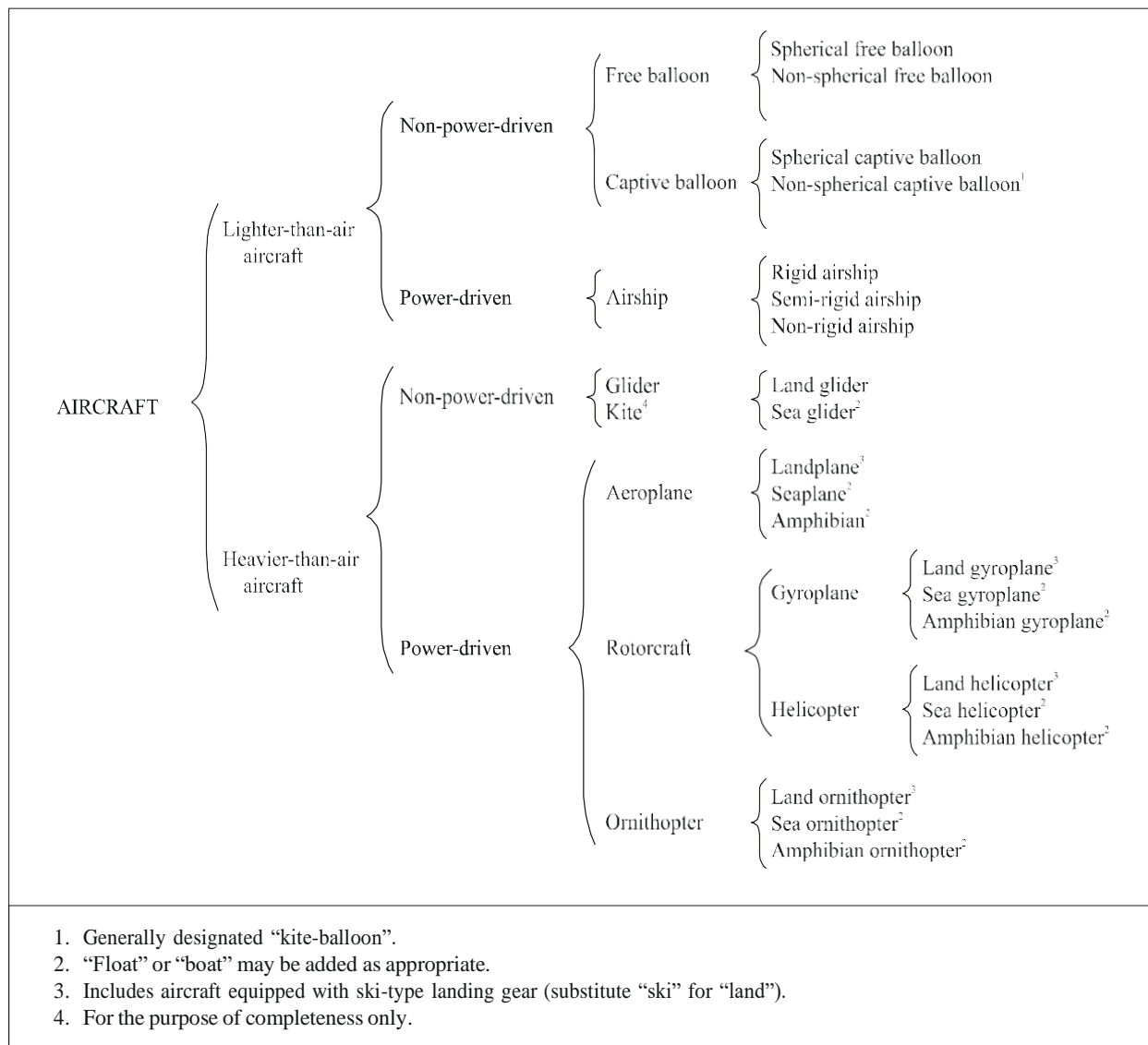
## CHAPTER 3

## CLASSIFICATION &amp; CATEGORY OF AIRCRAFT

## 3.1 CLASSIFICATION

Aircraft shall be classified in accordance with the following table;

| TABLE OF GENERAL CLASSIFICATION OF AIRCRAFT |                           |                  |  |
|---|---------------------------|------------------|--|
| Column 1                                    | Column 2                  | Column 3         | Column 4   |
| Aircraft                                    | Lighter than air aircraft | Non-power driven | Free Balloon   |
|   |                           |                  | Captive Balloon  |
|   | Heavier than air aircraft | Power driven     | Airship  |
|   |                           | Non-power driven | Glider   |
|   |                           |                  | Kite   |
|   |                           | Power driven     | Aeroplane (Landplane)<br>Aeroplane (Seaplane)<br>Aeroplane (Amphibian) |
|   |                           |                  | Rotorcraft   |
|   |                           |                  |  |
|   |                           |                  | Helicopter   |
|   |                           |                  | Gyroplane  |



### 3.2 CATEGORY

Aircraft shall be categorised in accordance with the following table

| Category of certificate of airworthiness | Purpose for which the aircraft may fly  |
|--|---|
| Transport (Passenger)                    | Any purpose.  |
| Transport (Cargo)                        | Any purpose, other than the public transport of passengers  |
| Aerial Work                              | Any purpose other than public transport   |
| Private                                  | Any purpose other than public transport or aerial work.   |
| Special                                  | Any purpose, other than public transport, specified in the Certificate of Airworthiness, but not including the carriage of passengers unless expressly permitted. |

**CHAPTER 4****NATIONALITY AND REGISTRATION MARKS****4.1 NATIONALITY**

- 4.1.1 An aircraft (other than an aircraft permitted by or under these regulations to fly without being registered) shall not fly in or over Bahrain unless it bears painted thereon or affixed thereto, in the manner required by the law of the country in which it is registered, the nationality and registration marks required by that law.
- 4.1.2 The marks to be borne by aircraft registered in Bahrain shall comply with paragraph 4.2.
- 4.1.3 An aircraft shall not bear any marks which purport to indicate:
- (a) that the aircraft is registered in a country in which it is not in fact registered,
  - (b) that the aircraft is a State aircraft (as defined in the ICAO Chicago Convention Article 3) of a particular country if it is not in fact such an aircraft, unless the appropriate authority of that country has sanctioned the bearing of such marks.

**4.2 NATIONALITY AND REGISTRATION MARKS****4.2.1 General Requirements**

- (a) The nationality or common mark and registration mark shall consist of a group of characters.
- (b) The nationality or common mark shall precede the registration mark. When the first character of the registration mark is a letter, it shall be preceded by a hyphen.
- (c) The nationality mark shall be selected from the series of nationality symbols included in the radio call signs allocated to the Kingdom of Bahrain, as the State of Registry, by the International Telecommunication Union. The nationality mark shall, and has been, notified to the International Civil Aviation Organization.
- (d) The common mark shall be selected from the series of symbols included in the radio call signs allocated to the International Civil Aviation Organisation by the International Telecommunication Union.
- (e) The registration mark shall be letters, numbers, or a combination of letters and numbers, and shall be that assigned by the Kingdom of Bahrain, as the State of Registry. The CAA has adopted letters.
- (f) When letters are used for the registration mark, combinations shall not be used which might be confused with the five-letter combinations used in the International Code of Signals, Part II, the three-letter combinations beginning with Q used in the Q Code, and with the distress signal SOS, or other similar urgent signals, for example XXX, PAN and TTT.

**4.2.2 Specific Requirements**

- 4.2.2.1 The nationality mark of the aircraft shall be "A9C" and the registration mark shall be a group of capital letters in Roman character assigned by the Minister on the registration of the

aircraft. The letters shall be without ornamentation and a hyphen shall be placed between the nationality mark and the registration mark. Numbers shall be Arabic numbers without ornamentation.

- 4.2.2.2 The nationality and registration marks shall be painted on the aircraft or shall be affixed by any other means ensuring a similar degree of permanence and displayed to the best advantage, taking into consideration the constructional features of the aircraft. The marks shall be kept clean and visible at all times.
- 4.2.2.3 The letters constituting each group of marks shall be of equal height and they, and the hyphen, shall be of a single colour which shall clearly contrast with the background on which they appear
- 4.2.2.4 The nationality and registration marks shall also be inscribed on a fire-proof metal plate affixed in a prominent position (See also 4.3):
  - (a) In the case of a microlight aeroplane, either in accordance with sub-paragraph (c) of this paragraph or on the wing;
  - (b) In the case of a balloon, on the basket or envelope; or
  - (c) In the case of any other aircraft on the fuselage or car, as the case may be.
- 4.2.2.5 The nationality and registration marks shall be painted on the aircraft in the following manner:

#### Position and size of marks

- (a) Heavier-than-air aircraft (excluding kites)
  - (1) Horizontal surfaces of the wings:
    - (i) On aircraft having a fixed wing surface, the marks shall appear on the lower surface of the wing structure, and shall be located on the left half of the lower surface of the wing structure unless they extend across the whole of the lower surface of the wing structure. So far as is possible, the marks shall be located equidistant from the leading and trailing edges of the wings. The tops of the letters and numbers shall be toward the leading edge of the wing.
    - (ii) The height of the letters shall be at least 50 centimetres, provided that if the wings are not large enough for the marks to be 50 centimetres in height, marks of the greatest height practicable in the circumstances shall be displayed.
  - (2) Fuselage (or equivalent structure) and vertical tail surfaces
    - (i) The marks shall also appear either:
      - (A) On each side of the fuselage (or equivalent structure), and shall, in the case of fixed wing aircraft, be located between the wings and the horizontal tail surface; or
      - (B) On the vertical tail surfaces.

- (ii) When located on a single vertical tail surface, the marks shall appear on both sides. When located on multi-vertical tail surfaces the marks shall appear on the outboard sides of the outer surfaces. Subject to sub-paragraphs (iv) and v) below, the height of the letters constituting each group of marks shall be at least 30 centimetres
- (iii) If one of the surfaces authorised for displaying the required marks is large enough for those marks to be 30 centimetres in height (whilst complying with sub-paragraph (v) below) and the other is not, marks of 30 centimetres in height shall be placed on the largest authorised surface.
- (iv) If neither surface is large enough for marks of 30 centimetres in height (whilst complying with sub-paragraph (v) below), marks of the greatest height practicable in the circumstances shall be displayed on the larger of the two surfaces.
- (v) The marks on the vertical tail surfaces shall be such as to leave a margin of at least 5 centimetres along each side of the vertical tail surface.
- (vi) On rotary wing aircraft where owing to the structure of the aircraft the greatest height practicable for the marks on the sides of the fuselage (or equivalent structure) is less than 30 centimetres the marks shall also appear on the lower surface of the fuselage as close to the line of symmetry as is practicable and shall be placed with the tops of the letters towards the nose. The height of the letters constituting each group of marks shall be at least 50 centimetres:  
  

Provided that if the lower surface of the fuselage is not large enough for the marks to be of 50 centimetres in height, marks of the greatest height practicable in the circumstances shall be displayed.
- (vii) If a heavier-than-air aircraft does not possess parts corresponding to those mentioned above, the marks shall appear in a manner such that the aircraft can be identified readily.

(b) Airships and free balloons

- (1) Airships: The marks on an airship shall appear either on the hull or on the stabilizer surfaces. Where the marks appear on the hull, they shall be located lengthwise on each side of the hull and also on its upper surface on the line of symmetry. Where the marks appear on the stabilizer surfaces, they shall appear on the horizontal and on the vertical stabilizers; the marks on the horizontal stabilizer shall be located on the right half of the upper surface and on the left half of the lower surface, with the tops of the letters and numbers toward the leading edge; the marks on the vertical stabilizer shall be located on each side of the bottom half stabilizer, with the letters and numbers placed horizontally.

- (2) Spherical balloons (other than unmanned free balloons).

The marks shall appear in two places diametrically opposite. They shall be located near the maximum horizontal circumference of the balloon.

- (3) Non-spherical balloons (other than unmanned free balloons).

The marks shall appear on each side. They shall be located near the maximum cross-section of the balloon immediately above either the rigging band or the points of attachment of the basket suspension cables.

- (4) Lighter-than-air aircraft (other than unmanned free balloons).

The side marks shall be visible both from the sides and from the ground.

- (5) Unmanned free balloons.

The marks shall appear on the identification plate.

*Note: The provisions of this Part shall not apply to meteorological pilot balloons used exclusively for meteorological purposes or to unmanned free balloons without a payload.*

#### 4.2.2.6 Width, spacing and thickness of marks

- (a) Heavier than air aircraft

- (1) For the purposes of this section 'a standard letter' shall mean any letter other than the letters I, M and W
- (2) The width of each standard character (except the letter I and the number 1) and the length of the hyphen between the nationality mark and the registration mark shall be two-thirds of the height of a character.
- (3) The characters and hyphens shall be formed by solid lines and shall be of a colour contrasting clearly with the background. The thickness of the lines shall be one-sixth of the height of a character
- (4) The width of the letters M and W shall be neither less than two-thirds of their height nor more than their height.
- (5) The width of the letter I shall be one-sixth of the height of the letters forming the marks.
- (6) Each character, including hyphens, shall be separated from that which it immediately precedes or follows by a space of not less than one-quarter of a character width. Each such space shall be equal to every other such space within the marks.
- (7) The letters and numbers in each separate group of marks shall be of equal height.
  - (i) Wings. The height of the marks on the wings of heavier-than-air aircraft shall be at least 50 centimetres.
  - (ii) Fuselage (or equivalent structure) and vertical tail surfaces. The height of the marks on the fuselage (or equivalent structure) and on the vertical tail surfaces of heavier-than-air aircraft shall be at least 30 centimetres.
  - (iii) Special cases. If a heavier-than-air aircraft does not possess parts corresponding to those mentioned in (i) and (ii) above, the measurements of the marks shall be such that the aircraft can be identified readily

(b) Lighter than air aircraft

- (1) The height of the marks on lighter-than-air aircraft other than unmanned free balloons shall be at least 50 centimetres.
- (2) The measurements of the marks related to unmanned free balloons shall be determined by the Authority, taking into account the size of the payload to which the identification plate is affixed.

### **4.3 IDENTIFICATION PLATE**

- a) An aircraft shall carry an identification plate inscribed with its nationality and registration mark together with the name and address of the registered owner/lessee/lessor. The plate shall be made of fireproof metal or other fireproof material of suitable physical properties and shall be secured to the aircraft in a prominent position near the main entrance or, in the case of an unmanned free balloon, affixed conspicuously to the exterior of the payload. In the case of a remotely piloted aircraft, secured in a prominent position near the main entrance or compartment or affixed conspicuously to the exterior of the aircraft if there is no main entrance or compartment.

The Identification Plate affixed as stated above shall be removed and submitted to the BCAA / evidence of removal in the form as required by BCAA submitted to the BCAA on cancellation and / or de-registration of the aircraft from the Aircraft Registry of Bahrain.

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## CHAPTER 5

### CERTIFICATE OF AIRWORTHINESS

*Note: Refer also to ANTR 21, Subpart H*

#### 5.1 CERTIFICATE OF AIRWORTHINESS TO BE IN FORCE

- 5.1.1 Article 10 & 36 of the Civil Aviation Law 14 of 2013 as amended time-to-time requires that an aircraft shall not fly in or over Bahrain unless there is in force in respect thereof a certificate of airworthiness duly issued or rendered valid under the law of the country in which the aircraft is registered, and any conditions subject to which the certificate was issued or rendered valid are complied with:

Provided that the foregoing prohibition shall not apply to flights, beginning and ending in Bahrain without passing over any other country, of:

- (a) a glider, if it is not being used for the transport of passengers or aerial work other than aerial work which consists of the giving of instruction in flying or the conducting of flying tests in a glider owned or operated by a flying club of which the person giving the instruction or conducting the test and the person receiving the instruction or undergoing the test are both members;
- (b) a balloon flying on a private flight;
- (c) a kite;
- (d) an aircraft flying in accordance with the conditions of a permit to fly issued in accordance with ANTR 21A. Subpart P in respect of that aircraft.

Article 36 of the Civil Aviation Law 14 of 2013 empowers the state of Bahrain to issue or render valid a Certificate of Airworthiness.

- 5.1.2 In the case of an aircraft registered in Bahrain the certificate of airworthiness referred to in paragraph 5.1.1 shall be a certificate issued or rendered valid in accordance with the provisions of paragraph 5.2 of these regulations.

#### 5.2 ISSUE, RENEWAL OF CERTIFICATE OF AIRWORTHINESS

- 5.2.1 The Minister shall issue in respect of any aircraft a certificate of airworthiness if he is satisfied that the aircraft is fit to fly having regard to:

- (a) Its compliance with the appropriate airworthiness requirements of the country of origin, and any additional requirement that he finds appropriate in respect of design, construction, workmanship and materials of the aircraft (including, in particular, any engines or propellers fitted thereto), and if any equipment carried in the aircraft is considered necessary for the airworthiness of the aircraft.

For the purpose of this regulation, appropriate airworthiness requirements mean the comprehensive and detailed airworthiness codes / TCDS and supplemental TCDS, if any issued by the respective State of Design of aircraft, adopted or accepted by the Kingdom of Bahrain for the aircraft under consideration and conformity to such TCDS and its supplementals by BCAA before issue of Certificate of Airworthiness.

- (b) The results of flying trials, and such other tests of the aircraft as he may require provided that, if the Minister has issued a certificate of airworthiness in respect of an aircraft which, in his opinion, is a prototype aircraft or a modification of a prototype aircraft, he may dispense with flying trials in the case of any other aircraft if he is satisfied that it conforms to such prototype or modification.

- 5.2.2 Every certificate of airworthiness shall specify such categories as are, in the opinion of the Minister, appropriate to the aircraft in accordance with Chapter 3 to these regulations and the certificate shall be issued subject to the condition that the aircraft shall be flown only for the purposes indicated in relation to those categories.
- 5.2.3 The Minister may issue the certificate of airworthiness subject to such other conditions relating to the airworthiness of the aircraft as he thinks fit.
- 5.2.4 The certificate of airworthiness may designate the performance group to which the aircraft belongs for the purposes of the requirements referred to in ANTR-OPS 1 or ANTR-OPS 3, as applicable.
- 5.2.5 The Minister may issue a certificate of validation rendering valid for the purposes of these regulations a certificate of airworthiness issued in respect of any aircraft under the law of any country other than Bahrain.
- 5.2.6 Subject to the provisions of the ANTRs, a certificate of airworthiness or validation issued under this article shall remain in force for a period of one year.
- 5.2.7 All mandatory airworthiness information issued by the type certificate holder or State of Design, and manufacture, shall be adopted by Bahrain CAA. Bahrain CAA may classify lower category airworthiness information as mandatory.
- 5.2.8 All continuing airworthiness requirements, mandatory airworthiness information, aircraft operations requirements / limitations issued by the type certificate holder or State of Design, and manufacture, will be accepted by the BCAA.  
  
All continuing airworthiness requirements, mandatory airworthiness information, aircraft operations requirements / limitations shall be based on the BCAA accepted type certificate or as issued by the State of Design or State of Manufacture and as accepted by BCAA.
- 5.2.9 A certificate of airworthiness or a certificate of validation issued in respect of an aircraft shall cease to be in force:
  - (a) if the aircraft, or such of its equipment as is necessary for the airworthiness of the aircraft, is overhauled, repaired or modified, or if any part of the aircraft or of such equipment, is removed or is replaced, otherwise than in a manner and with material of a type approved by the Minister either generally or in relation to a class of aircraft or to the particular aircraft; or
  - (b) until the completion of any inspection of the aircraft or of any such equipment as aforesaid, being an inspection made for the purpose of ascertaining whether the aircraft remains airworthy and:
    - (1) classified as mandatory by the Minister;
    - (2) required by a maintenance schedule approved by the Minister in relation to that

aircraft; or

- (c) until the completion to the satisfaction of the Minister of any modification of the aircraft or of any such equipment as aforesaid, being a modification required by the Minister for the purpose of ensuring that the aircraft remains airworthy.

5.2.10 Nothing in these regulations shall oblige the Minister to accept an application for the issue of a certificate of airworthiness or for the variation or renewal of any such certificate when the application is not supported by such reports from such approved persons as the Minister may specify (either generally or in a particular case or class of cases).

## CHAPTER 6

### ENVIRONMENTAL PROTECTION

#### 6.1 GENERAL

- 6.1.1 Unless notified to the contrary, the BCAA shall accept the current ICAO Annex 16, Volume I and Volume II Standards, as published, as complementary regulations under ANTR Part V.

*Note: The aircraft Noise Certificate issuance requirements are contained in ANTR 21, Subpart I.*

#### 6.2 ADMINISTRATION ICAO ANNEX 16 VOLUME I STANDARDS

- 6.2.1 The provisions of 6.2.2 to 6.2.6 shall apply to all aircraft included in the classifications defined for noise certification purposes in ICAO Annex 16, Volume I, Chapters 2, 3, 4, 5, 6, 8, 10, 11 and 12 where such aircraft are engaged in international air navigation.
- 6.2.2 Noise certification shall be granted or validated by the BCAA, as the State of Registry of an aircraft, on the basis of satisfactory evidence that the aircraft complies with requirements that are at least equal to the applicable Standards specified in ICAO Annex 16, Volume I and Volume II.
- 6.2.3 If noise recertification is requested, it shall be granted or validated by the BCAA, as the State of Registry of an aircraft, on the basis of satisfactory evidence that the aircraft complies with requirements that are at least equal to the applicable Standards specified in ICAO Annex 16, Volume I and Volume II. The date used by the Authority to determine the recertification basis shall be the date of acceptance of the first application for recertification.
- 6.2.4 The documents attesting noise certification shall be approved by the BCAA, as the State of Registry, and shall be required to be carried on the aircraft.
- 6.2.5 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 manufacturer, 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 this Annex
- Item 11. The chapter and section of ICAO Annex 16, Volume I according to which the aircraft was certificated.
- Item 12. Additional modifications incorporated for the purpose of compliance with the applicable noise certification Standards.
- Item 13. The lateral/full-power noise level in the corresponding unit for documents issued under Chapters 2, 3, 4, 5 and 12 of in ICAO Annex 16, Volume I.
- Item 14. The approach noise level in the corresponding unit for documents issued under Chapters 2, 3, 4, 5, 8 and 12 of ICAO Annex 16, Volume I.
- Item 15. The flyover noise level in the corresponding unit for documents issued under Chapters 2, 3, 4, 5 and 12 of ICAO Annex 16, Volume I.
- Item 16. The overflight noise level in the corresponding unit for documents issued under Chapters 6, 8 and 11 of in ICAO Annex 16, Volume I.
- Item 17. The take-off noise level in the corresponding unit for documents issued under Chapters 8 and 10 of in ICAO Annex 16, Volume I.
- Item 18. Statement of compliance, including a reference to ICAO Annex 16, Volume I.
- Item 19. Date of issuance of the noise certification document.
- Item 20. Signature of the officer issuing it.

- 6.2.6 Item headings on the noise certification documents shall be uniformly numbered in Arabic numerals, as indicated above, 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 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 ANTR 21 shall prevail.
- 6.2.7 An administrative system for implementation of noise certification documentation shall be developed by the BCAA, as the State of Registry.
- 6.2.8 BCAA shall recognise 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 ICAO Annex 16, Volume I.
- 6.2.9 The BCAA 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 BCAA, as 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.
- 6.2.10 Unless otherwise specified in ICAO Annex 16, Volume I, the date to be used by the BCAA in determining the applicability of the Standards in ICAO Annex 16, Volume I shall be the date of application submitted to the State of Design for a type certificate, or the date of application under an equivalent prescribed procedure by the certificating authority of the State of Design. The application shall be effective for a duration equal to the period applied in the designation

of the airworthiness regulations appropriate to the aircraft type, except in special cases where the certificating authority accepts an extension of this period.

- 6.2.11 When this period of effectivity is exceeded, the date to be used in determining the applicability of the Standards in ICAO Annex 16, Volume I shall be the date of issue of the type certificate, or the date of issue of approval under an equivalent prescribed procedure, less the duration of effectivity.

### **6.3 ADMINISTRATION ICAO ANNEX 16 VOLUME II STANDARDS**

#### **6.3.1 Vented Fuel**

- 6.3.1.1 The provision of this Section shall apply to all turbine engine powered aircraft intended for operation in international air navigation manufactured after 18 February 1982.
- 6.3.1.2 Certification related to the prevention of intentional fuel venting shall be granted by the BCAA on the basis of satisfactory evidence that either the aircraft or the aircraft engines comply with requirements of ICAO Annex 16, Volume II, Chapter 2.

*Note: The document attesting certification relating to fuel venting may take the form of a separate fuel venting certificate or a suitable statement contained in another document approved by the certificating authority.*

- 6.3.1.3 BCAA shall recognise as valid a certification relating to fuel venting granted by the certificating authority of another Contracting State provided the requirements under which such certification was granted are not less stringent than the provision of ICAO Annex 16, Volume II.

#### **6.3.2 Emissions Certification**

- 6.3.2.1 The provisions of 6.3.2.2 to 6.3.2.4 shall apply to all engines included in the classifications defined for emission certification purposes in ICAO Annex 16, Volume II Chapters 2 and 3 where such engines are fitted to aircraft engaged international air navigation.
- 6.3.2.2 Emissions certification shall be granted by the BCAA on the basis of satisfactory evidence that the engine complies with requirements which are at least equal to the stringency of the provisions of ICAO Annex 16, Volume II. Compliance with the emissions levels of ICAO Annex 16, Volume II Chapters 2 and 3 shall be demonstrated using the procedure described in Appendix 6 to ICAO Annex 16, Volume II.

*Note: The document attesting emissions certification may take the form of a separate emissions certificate or a suitable statement contained in another document approved by the certificating authority.*

- 6.3.2.3 The document attesting emissions certification for each individual engine shall include at least the following information which is applicable to the engine type:
- (a) name of certificating 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 thrust;
- (e) reference pressure ratio;
- (f) a statement indicating compliance with Smoke Number requirements;
- (g) a statement indicating compliance with gaseous pollutant requirements.

6.3.2.4 BCAA shall recognise as valid emissions certification granted by the certifying authority of another Contracting State provided that the requirements under which such certification was granted are not less stringent than the provisions of ICAO Annex 16, Volume II.

**CHAPTER – 7**

**EXEMPTION OR WAIVER**

1. Exemption or waiver may be issued by BCAA to any technical requirements contained in this Regulation under this provision, provided that, such an exemption or waiver should only be applicable to that particular technical requirement. When such exemption or waiver is granted, it should be deemed to have been issued under the Civil Aviation legislation and in accordance with the established regulations and ensuing procedures.
2. For the purpose of this provision, no exemption or waiver should be granted pertaining to offences, violations or acts committed against any mandatory provisions of the Civil Aviation Law and from those that prescribed enforcements and penalties.
3. The exemptions / waivers may be granted, whatsoever necessary in the opinion of USCA with limitations / conditions in accordance with the documented procedure, upon request from the owner / operator of the aircraft with appropriate justification and commitment for withdrawal / removal of such exemptions / waivers as per the limitations mentioned thereunder.
4. No exemption or waiver should be granted to any provision or requirements of this Regulation that may invalidate any international regulations.