

A stylized paper airplane icon in shades of blue and grey is shown flying over a dashed grey line that represents a flight path, curving upwards and then downwards.

CIVIL AVIATION DIRECTIVE – 7

# AIRCRAFT NATIONALITY AND REGISTRATION MARKS

CIVIL AVIATION AUTHORITY OF MALAYSIA

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## Introduction

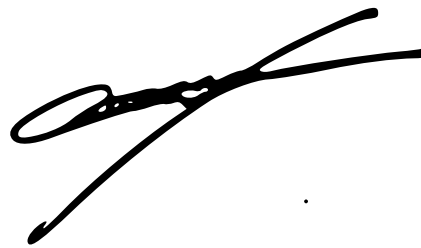
In exercise of the powers conferred by section 24O of the Civil Aviation Act 1969 (Act 3), the Chief Executive Officer makes this Civil Aviation Directive (CAD) 7 –Aircraft Nationality and Registration Marks, pursuant to Regulation 8, 13 and 16 of the Malaysian Civil Aviation Regulations (MCAR 2016).

This CAD contains Standards adopted by the International Civil Aviation Organization as the minimum Standards for the display of marks to indicate appropriate nationality and registration which have been determined to comply with Article 20 of the Convention. Standards for Aircraft Nationality and Registration Marks were first adopted by the Council on 8 February 1949 pursuant to the provisions of Article 37 of the Convention on International Civil Aviation (Chicago 1944) and designated as Annex 7 to the Convention. They became effective on 1 July 1949. The Standards were based on recommendations of the first and second sessions of the Airworthiness Division held respectively in March 1946 and February 1947.

Civil Aviation Directive 7 –Aircraft Nationality and Registration Marks is published by the Chief Executive Officer under section 24O of the Civil Aviation Act 1969 (Act 3) and comes into operation on 1<sup>st</sup> April 2021.

### Non-compliance with this CAD

Any person who contravenes any provision in this CAD commits an offence and shall on conviction be liable to the punishment under section 24O of the Civil Aviation Act 1969 (Act 3) and/or under Malaysia Civil Aviation Regulation 2016.



**(Captain Chester Voo Chee Soon)**  
Chief Executive Officer  
Civil Aviation Authority of Malaysia

## Civil Aviation Directive components and Editorial practices

This Civil Aviation Directive is made up of the following components and are defined as follows:

**Standards:** Usually preceded by words such as “*shall*” or “*must*”, are any specification for physical characteristics, configuration, performance, personnel or procedure, where uniform application is necessary for the safety or regularity of air navigation and to which Operators must conform. In the event of impossibility of compliance, notification to the Civil Aviation Authority of Malaysia (CAAM) is compulsory.

**Recommended Practices:** Usually preceded by the words such as “*should*” or “*may*”, are any specification for physical characteristics, configuration, performance, personnel or procedure, where the uniform application is desirable in the interest of safety, regularity or efficiency of air navigation, and to which Operators will endeavour to conform.

**Appendices:** Material grouped separately for convenience but forms part of the Standards and Recommended Practices stipulated by the CAAM.

**Definitions:** Terms used in the Standards and Recommended Practices which are not self-explanatory in that they do not have accepted dictionary meanings. A definition does not have an independent status but is an essential part of each Standard and Recommended Practice in which the term is used, since a change in the meaning of the term would affect the specification.

**Tables and Figures:** These add to or illustrate a Standard or Recommended Practice and which are referred to therein, form part of the associated Standard or Recommended Practice and have the same status.

**Notes:** Included in the text, where appropriate, Notes give factual information or references bearing on the Standards or Recommended Practices in question but not constituting part of the Standards or Recommended Practices;

**Attachments:** Material supplementary to the Standards and Recommended Practices or included as a guide to their application.

It is to be noted that some Standards in this Civil Aviation Directive incorporates, by reference, other specifications having the status of Recommended Practices. In such cases, the text of the Recommended Practice becomes part of the Standard.

The units of measurement used in this document are in accordance with the International System of Units (SI) as specified in CAD 5. Where CAD 5 permits the use of non-SI alternative units, these are shown in parentheses following the basic units. Where two sets of units are quoted it must not be assumed that the pairs of values are equal and interchangeable. It may, however, be inferred that an equivalent level of safety is achieved when either set of units is used exclusively.

Any reference to a portion of this document, which is identified by a number and/or title, includes all subdivisions of that portion.

Throughout this Civil Aviation Directive, the use of the male gender should be understood to include male and female persons.





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## 1 Introduction

### 1.1 Citation

- 1.1.1 These Directives are the Civil Aviation Directive 7 – Aircraft Nationality and Registration Marks, Issue 01/Revision 00, and comes into operation on 1<sup>st</sup> April 2021.
- 1.1.2 This CAD 7 –Aircraft Nationality and Registration Marks, Issue 01/Revision 00 will remain current until withdrawn or superseded.

### 1.2 Applicability

- 1.2.1 This CAD applies to registered owner of Malaysian registered aircraft under the Malaysian Civil Aviation Regulations 2016.
- 1.2.2 This CAD prescribes the requirement for aircraft nationality and registration marks of Malaysian registered aircraft.
- 1.2.3 The provisions of this CAD shall not apply to meteorological pilot balloons used exclusively for meteorological purposes or to unmanned free balloons without a payload.

### 1.3 Revocation

- 1.3.1 This CAD revokes Notice 7201 Nationality and Registration Marks issue 1 dated 15<sup>th</sup> April 2016.

### 1.4 Definitions

When the following terms are used in the Standards for Aircraft Nationality and Registration Marks, they have the following meanings:

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

**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. (See Table 1, Classification of aircraft.)

**Airship** means a power-driven lighter-than-air aircraft.

**Balloon** means a non-power-driven lighter-than-air aircraft.

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

**Glider** means a non-power-driven heavier-than-air aircraft which derives its lift in flight chiefly from aerodynamic reactions on surfaces which remain fixed under given conditions of flight.

**Gyroplane** means a heavier-than-air aircraft supported in flight by the reactions of the air on one or more rotors which rotate freely on substantially vertical axes.



**Heavier-than-air aircraft** means any aircraft deriving its lift in flight chiefly from aerodynamic forces.

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

**Lighter-than-air aircraft** means any aircraft supported chiefly by its buoyancy in the air.

**Ornithopter** means a heavier-than-air aircraft supported in flight chiefly by the reactions of the air on planes to which a flapping motion is imparted.

**Remotely piloted aircraft (RPA)** means an unmanned aircraft which is piloted from a remote pilot station.

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

**State of Registry** means the State on whose register the aircraft is entered.

## 2 Classification of Aircraft

- 2.1 Aircraft shall be classified in accordance with Table 1.
- 2.2 An aircraft which is intended to be operated with no pilot on board shall be further classified as unmanned.
- 2.3 Unmanned aircraft shall include unmanned free balloons and remotely piloted aircraft.

AIRCRAFT	Lighter-than-air aircraft	Non-power-driven	Free balloon	<ul style="list-style-type: none"> <li>Spherical free balloon</li> <li>Non-spherical free balloon</li> </ul>		
			Captive balloon	<ul style="list-style-type: none"> <li>Spherical captive balloon</li> <li>Non-spherical captive balloon<sup>1</sup></li> </ul>		
		Power-driven	Airship	<ul style="list-style-type: none"> <li>Rigid airship</li> <li>Semi-rigid airship</li> <li>Non-rigid airship</li> </ul>		
		Heavier-than-air aircraft	Non-power-driven	Glider	<ul style="list-style-type: none"> <li>Land glider</li> </ul>	
	Kite <sup>4</sup>			<ul style="list-style-type: none"> <li>Sea glider<sup>2</sup></li> </ul>		
	Power-driven		Aeroplane	<ul style="list-style-type: none"> <li>Landplane<sup>3</sup></li> <li>Seaplane<sup>2</sup></li> <li>Amphibian<sup>2</sup></li> </ul>		
				Rotorcraft	Gyroplane	<ul style="list-style-type: none"> <li>Land gyroplane<sup>3</sup></li> <li>Sea gyroplane<sup>2</sup></li> <li>Amphibian gyroplane<sup>2</sup></li> </ul>
					Helicopter	<ul style="list-style-type: none"> <li>Land helicopter<sup>3</sup></li> <li>Sea helicopter<sup>2</sup></li> <li>Amphibian helicopter<sup>2</sup></li> </ul>
			Ornithopter	<ul style="list-style-type: none"> <li>Land ornithopter<sup>3</sup></li> <li>Sea ornithopter<sup>2</sup></li> <li>Amphibian ornithopter<sup>2</sup></li> </ul>		

1. Generally designated “kite-balloon”.
2. “Float” or “boat” may be added as appropriate.
3. Includes aircraft equipped with ski-type landing gear (substitute “ski” for “land”).
4. For the purpose of completeness only.

**Table 1. Classification of aircraft**



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### **3 Nationality and Registration Marks to be Used**

- 3.1 The nationality mark and registration mark shall consist of a group of characters.
- 3.2 The nationality shall precede the registration mark and it shall be preceded by a hyphen.
- 3.3 The nationality mark of a Malaysian registered aircraft shall be 9M.
- 3.4 (Reserved).
- 3.5 The registration mark of Malaysian registered aircraft shall be:
- a) a group of three or more capital letters in Roman letters; and
  - b) assigned by the CAAM.
- 3.6 The following nationality and registration marks are allocated:
- 1) “9M-E \_\_” for amateur built aircraft; and
  - 2) “9M-U \_\_” for microlight aircraft.
- 3.7 When letters are used for the registration marks, 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.

*Note. — For reference to these codes, see the currently effective International Telecommunication Regulations.*



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## 4 Location of Nationality and Registration Marks

### 4.1 General

- 4.1.1 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 in a manner acceptable to the CAAM. The marks shall be kept clean and visible at all times.

### 4.2 Lighter-than-air aircraft

- 4.2.1 *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.
- 4.2.2 *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.
- 4.2.3 *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.
- 4.2.4 *Lighter-than-air aircraft (other than unmanned free balloons)*. The side marks shall be visible both from the sides and from the ground.
- 4.2.5 *Unmanned free balloons*. The marks shall appear on the identification plate (see Section 9).

### 4.3 Heavier-than-air aircraft

- 4.3.1 *Wings*. On heavier-than-air aircraft, the marks shall appear once on the lower surface of the wing structure. They 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.
- 4.3.2 *Fuselage (or equivalent structure) and vertical tail surfaces*. On heavier-than-air aircraft, the marks shall appear either on each side of the fuselage (or equivalent structure) between the wings and the tail surface or on the upper halves of the vertical tail surfaces. When located on a single vertical tail surface, they shall



appear on both sides. When located on multivertical tail surfaces, they shall appear on the outboard sides of the outer surfaces.

- 4.3.3 *Special cases.* If a heavier-than-air aircraft does not possess parts corresponding to those mentioned in 4.3.1 and 4.3.2, the marks shall appear in a manner such that the aircraft can be identified readily.



## 5 Measurement of Nationality and Registration Marks

### 5.1 Lighter-than-air aircraft

5.1.1 The height of the marks on lighter-than-air aircraft other than unmanned free balloons shall be at least 50 centimetres.

5.1.2 The measurements of the marks related to unmanned free balloons shall be as acceptable by the CAAM, taking into account the size of the payload to which the identification plate is affixed.

5.1.3 *Special cases.* If a lighter-than-air aircraft does not possess parts of sufficient size to accommodate the marks described in 5.1.1, the measurements of the marks shall be as acceptable by the CAAM, taking account of the need for the aircraft to be identified readily.

### 5.2 Heavier-than-air aircraft

5.2.1 *Wings.* The height of the marks on the wings of heavier-than-air aircraft shall be at least 50 centimetres.

5.2.2 *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.

5.2.3 *Special cases.* If a heavier-than-air aircraft does not possess parts corresponding to those mentioned in 5.2.1 and 5.2.2, or if the parts are too small to accommodate the marks described therein, the measurements of the marks shall be as acceptable by the CAAM, taking account of the need for the aircraft to be identified readily.

5.3 The letters and numbers in each separate group of marks shall be of equal height



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## **6 Type of Characters for Nationality and Registration Marks**

- 6.1 The letters shall be capital letters in Roman characters without ornamentation. Numbers shall be Arabic numbers without ornamentation.
- 6.2 The width of each character (except the letter I and the number 1) and the length of hyphens shall be two-thirds of the height of a character.
- 6.3 The characters and hyphens shall be formed by solid lines and shall be of a color contrasting clearly with the background. The thickness of the lines shall be one-sixth of the height of a character.
- 6.4 Each character shall be separated from that which it immediately precedes or follows, by a space of not less than one-quarter of a character width. A hyphen shall be regarded as a character for this purpose.



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## **7 Register of Nationality and Registration Marks**

- 7.1 The CAAM maintain a current register showing for each aircraft registered by the CAAM, 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.

*Note. – Refer CAD 7101 Aircraft Registration and CAD 7301 Aircraft Mortgage for details.*



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## **8 Certificate of Registration**

8.1 *(Reserved).*

8.2 Certificates of registration are issued in Malay language, and they include an English translation.

*Note: Refer CAD 7101 Aircraft Registration for detail.*



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## **9 Identification Plate**

- 9.1 An aircraft shall carry an identification plate inscribed with at least its nationality and registration mark. The plate shall be made of fireproof metal or other fireproof material of suitable physical properties.
- 9.2 The identification plate shall be secured to the aircraft in a prominent position near the main entrance or:
- a) in the case of an unmanned free balloon, affixed conspicuously to the exterior of the payload; and
  - b) 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.



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## **10 Malaysian Flag and the Word ‘Malaysia’ on an Aircraft**

- 10.1 Malaysian Flag and the word ‘MALAYSIA’ shall be painted or affixed by any other means ensuring a similar degree of permanence, on both sides of aircraft fuselage, preferably towards the front or nose of the aircraft.
- 10.2 Malaysian Flag and the word ‘MALAYSIA’ shall be of appropriate dimension in relation to the aircraft size and be in contrast to the background.



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## **11 Removal of Marks**

- 11.1 When an aircraft is deregistered under the Malaysian Civil Aviation Regulations 2016, the holder of the Certificate of Registration shall remove all nationality and registration marks and identification plate from the aircraft.



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## **12 Reservation of Registration Marks**

- 12.1 Any person may apply to the CAAM to reserve a registration mark for an aircraft.
- 12.2 An applicant for the reservation of registration marks shall:
- a) submit an application form CAAM/AW/7201-01 which is signed by the applicant; and
  - b) be accompanied by the applicable fee.
- 12.3 Upon receipt of an application under paragraph 12.2, the CAAM may reserve a registration mark for a period not exceeding 12 months if the mark has not already been allocated or reserved.
- 12.4 A registration mark that has been reserved under paragraph 12.3 may not, while reserved, be allocated to another aircraft as a registration mark otherwise than at the request of the person on whose request the registration mark was reserved.



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