

Lao People's Democratic Republic Pease Independence Democracy Unity and Prosperity

> Ministry of Public Works and Transport Department of Civil Aviation

LAO CIVIL AVIATION REGULATIONS

(LCAR)

PART 4 - AIRCRAFT REGISTRATION AND MARKING

1ST REVISION

SEPTEMBER 2013

PREAMBLE

The Department of Civil Aviation of Lao PDR, under the Decision of Minister of Public Works and Transport number 16948/MPWT regarding the authorization for signing all regulations, provisions of government management over flight safety, aviation security and standards of services in civil aviation sector, approves the updated technical regulations Part 4.

This regulation supersede the requirements of LCAR Part 4 issued in May 2010 and become effective on 01 March 2014.

This Part provides requirements dealing with:

• Aircraft registration and marking.

This regulation consists of 3 chapters and 1 implementing standards section.

Adopted by Director General Department of Civil Aviation of Lao PDR

0 1 MAR 2014

Dated: Yakua LOPANGKAO

Location	Date	Description Classification of Aircraft
4.2.1.5	Sep 2013	Classification of Aircraft
IS 4.2.1.5	Sep 2013	Classification of Aircraft

RECORDS OF AMENDMENTS

Introduction

This 1st Revision of Lao Civil Aviation Regulations (LCAR Part 4) is renamed from Lao Civil Aviation Safety Regulations (LCASR) Part 4 V 2.5 promulgated in may 2010, and updated Part 4 of Model Civil Aviation Regulation V 2.7 under COSCAP-SEA Assistance. This governs the application of nationality and registration marks.

This Part is derived from ICAO Annex 7 to the 06th edition, the Convention on International Civil Aviation and is supplemented from the U.S. Code of Federal Regulations, Title 14 – Aeronautics and Space.

Neither the European Aviation Safety Agency nor the Joint Aviation Authorities publish regulations for aircraft registration, leaving those to the individual member States.

CONTENTS

(LCAR	()		1		
Part 4	- Aircraft F	Registration and Marking	1		
4.1	GENE	RAL	1		
	4.1.1.1	Applicability	1		
	4.1.1.2	Definitions	1		
	4.1.1.3	Abbreviations	2		
4.2	Registr	ation Requirements	2		
	4.2.1.1	General	2		
	4.2.1.2	Registration Eligibility	3		
	4.2.1.3	Application	3		
	4.2.1.4	Aircraft Registry	3		
	4.2.1.5	Classification of Aircraft	4		
4.3	Nationa	ality and Registration Marks	4		
	4.3.1.1	Applicability	4		
	4.3.1.2	General			
	4.3.1.3	Display of Marks: General	5		
	4.3.1.4	Size of Marks	5		
	4.3.1.5	Location of Marks on heavier-than-air Aircraft	6		
	4.3.1.6	Location of Marks on Lighter-Than-Air Aircraft	6		
	4.3.1.7	special cases for Size and Location of Marks	7		
	4.3.1.8	Sale of Aircraft: Removal of Marks	7		
	4.3.1.9	Identification Plate Required	7		
PART 4— Implementing Standardsi					
		Certificate of aircraft registration			

4.1 GENERAL

Note 1: ICAO Annex 7 uses the term certificate of registration. For Part 4, the term certificate of aircraft registration is used to denote the same and further clarifies the certificate.

Note 2: Part 4 is written so that the owner of the aircraft is responsible for the aircraft registration, as contained in the Law. The owner, or operator of the aircraft if different from the owner, is responsible for proper marking of the aircraft prior to operation.

4.1.1.1 APPLICABILITY

- (a) This part prescribes the requirements for registration and marking of Civil Aircraft under the provisions of the Civil Aviation Law of Lao PDR.
- (b) This part does not apply to meteorological pilot balloons used exclusively for meteorological purposes or to unmanned free balloons without a payload.

4.1.1.2 DEFINITIONS

- (a) For the purpose of Part 4, the following definitions shall apply:
 - (1) **Aeroplane.** 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.
 - (2) Aircraft. 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. The term "aircraft," when used under the Civil Aviation Law of Lao PDR or regulations shall refer to civil aircraft only, and will not include State or public aircraft.
 - (3) Airship. A power-driven lighter-than-air aircraft.
 - (4) **Balloon.** A non-power-driven lighter-than-air aircraft.
 - (5) **Common mark.** A mark assigned by the International Civil Aviation Organisation to the common mark registering authority registering aircraft of an international operating agency on other than a national basis.
 - (6) Common mark registering authority. The authority maintaining the non-national register or, where appropriate, the part thereof, in which aircraft of an international operating agency are registered.
 - (7) **Fireproof material.** 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.

- (8) **Glider.** A non-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.
- (9) **Gyroplane.** 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.
- (10) **Heavier-than-air aircraft.** Any aircraft deriving its lift in flight chiefly from aerodynamic forces.
- (11) **Helicopter.** 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.
- (12) **International operating agency.** An agency of the kind contemplated in Article 77 of the Convention on International Civil Aviation.
- (13) Lighter-than-air aircraft. Any aircraft supported chiefly by its buoyancy in the air.
- (14) **Ornithopter.** A heavier-than-air aircraft supported in flight chiefly by the reactions of the air on planes to which a flapping motion is imparted.
- (15) Powered lift. A heavier-than-air aircraft capable of vertical takeoff, vertical landing, and low speed flight that depends principally on engine-driven lift devices or engine thrust for lift during these flight regimes and on nonrotating airfoil(s) for lift during horizontal flight
- (16) **Remotely piloted aircraft (RPA)**. An unmanned aircraft which is piloted from a remote pilot station.
- (17) **Rotorcraft.** A power-driven heavier-than-air aircraft supported in flight by the reactions of the air on one or more rotors.
- (18) **State of Registry.** The State on whose register the aircraft is entered.

4.1.1.3 ABBREVIATIONS

- (a) The following abbreviations are used in Part 4:
 - (1) RPA: Remotely piloted aircraft.

4.2 REGISTRATION REQUIREMENTS

4.2.1.1 GENERAL

- (a) No person may operate a civil aircraft that is eligible for registration under the Civil Aviation Laws of Lao PDR unless it has been registered by its owner or operator under the provisions of the laws of Lao PDR and the Department of Civil Aviation of Lao PDR (DCA) has issued a certificate of registration for that aircraft, which shall be carried aboard that aircraft for all operations.
- (b) The certificate of aircraft registration shall be in English.
- (c) The certificate of aircraft registration will be issued by the Director General of Civil Aviation in the form as contained in IS 4.2.1.1 and will be of a size determined by the Director General of Civil Aviation.

4.2.1.2 REGISTRATION ELIGIBILITY

- (a) An aircraft is eligible for registration if it is-
 - (1) Owned by:
 - (i) A citizen of Lao PDR,
 - (ii) An individual citizen of another State who is lawfully admitted for permanent residence in Lao PDR,
 - (iii) A corporation lawfully organised and doing business under the laws of Lao PDR and the aircraft is based and primarily used in Lao PDR, or
 - (iv) A government entity of Lao PDR or political subdivision thereof; and
 - (2) Not registered under the laws of any other State.

4.2.1.3 APPLICATION

- (a) A person who wishes to register an aircraft in Lao PDR must submit an application for aircraft registration to the Director General of Civil Aviation, Lao PDR in a form and manner acceptable to the DCA. Each application shall—
 - (1) Certify as to compliance with 4.2.1.2;
 - (2) Show evidence identifying ownership, and
 - (3) Be signed in ink.
- (b) Upon an applicant meeting all requirements for registration, a certificate of registration will be issued by the Director General of Civil Aviation (DGCA) of Lao PDR.

4.2.1.4 AIRCRAFT REGISTRY

- (a) As required by the Civil Aviation Law Part II Section 2 Article 9 and 10, the Authority shall maintain an aircraft registry showing for each aircraft registered by Lao PDR the information recorded on the certificate of aircraft registration and any other information required by the Authority.
- (b) Upon request, Lao PDR will provide information to another ICAO Contracting State or to ICAO as to aircraft registration and/or ownership of any particular aircraft registered in Lao PDR.

4.2.1.5 CLASSIFICATION OF AIRCRAFT

- (a) Aircraft shall be classified in accordance with the Table in IS: 4.2.1.5.
- (b) An aircraft which is intended to be operated with no pilot on board shall be further classified as unmanned.
- (c) Unmanned aircraft shall include unmanned free balloons and remotely piloted aircraft.

4.3 NATIONALITY AND REGISTRATION MARKS

4.3.1.1 APPLICABILITY

(a) This Subpart prescribes the requirements for the identification and marking of civil aircraft registered in Lao PDR.

4.3.1.2 GENERAL

- (a) No person may operate a civil aircraft registered in Lao PDR unless it displays nationality and registration marks in accordance with the requirements of this section. The letter or letters used to identify the aircraft nationality as of Lao PDR shall conform to the requirements outlined in Annex 7 to the Convention on International Civil Aviation. This is to be followed by a series of numbers or letters assigned by the Director General of Civil Aviation, Lao PDR.
- (b) Unless otherwise authorized by the Authority, no person may place on any aircraft a design, mark, or symbol that modifies or confuses the nationality and registration marks. Marks shall not be used which might be confused with the International Five Letter Code of Signals, Part II, the three-letter combinations beginning with Q used in the Q Code or Distress Codes or other similar, urgent codes.
- (c) Permanent marking of aircraft nationality and registration shall-
 - (1) Be painted on the aircraft or affixed by other means insuring a similar degree of permanence;

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- (2) Have no ornamentation;
- (3) Contrast in color with the background;
- (4) Be legible, and
- (5) Be kept clean and visible at all times.

4.3.1.3 DISPLAY OF MARKS: GENERAL

(a) No person shall operate an aircraft in Lao PDR unless it display on that aircraft marks consisting of the Roman capital letter(s), denoting nationality of state of registry, followed by the registration mark of the aircraft in Arabic numerals, Roman capital letters, or a combination thereof.

4.3.1.4 SIZE OF MARKS

- (a) No person shall operate an aircraft unless it display marks on the aircraft meeting the size requirements of this section.
- (b) Height. The character marks shall be of equal height and on-
 - (1) Heavier -than -air aircraft shall be at least -
 - (i) 50 centimeters high if on the wings, and
 - (ii) 30 centimeters high if on the fuselage (or equivalent structure) and vertical tail surfaces;
 - (iii) Identified readily if the aircraft processes no wings and fuselage.
 - (2) Lighter-than-air aircraft other than unmanned free balloons shall be at least 50 centimeters high.
 - (3) The character marks of unmanned free balloons and other lighter-than-air aircraft that is not of sufficient size to accommodate marks of at least 50 centimeters high shall be determined by Director General of Civil Aviation, taking into account the size of the payload to which the identification plate is affixed.
- (c) Width. Characters shall be two-thirds as wide as they are high, except the number "1" and the letter "I", which shall be one-sixth as wide as it is high.
- (d) Thickness. Characters shall be formed by solid lines one-sixth as thick as the character is high.
- (e) Spacing. The space between each character may not be less than one-fourth of a character width.

(f) Uniformity. The marks required by this Part for fixed-wing aircraft must have the same height, width, thickness, and spacing on both sides of the aircraft.

4.3.1.5 LOCATION OF MARKS ON HEAVIER-THAN-AIR AIRCRAFT

- (a) No person shall operate a fixed-wing aircraft unless it displays the marks once on the lower surface of the wing structure as follows:
 - (1) 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.
 - (2) So far as is possible, the marks shall be located equidistant from the leading and trailing edge of the wings.
 - (3) The tops of the letters and numbers shall be toward the leading edge of the wing.
- (b) On a heavier than air aircraft with a fuselage (or equivalent structure) and/or a vertical tail surface, the marks shall appear on either the vertical tail surfaces or the sides of the fuselage as follows:
 - (1) If displayed on the vertical tail surfaces, horizontally on both surfaces of a single vertical tail or on the outer surfaces of a multi-vertical tail.
 - (2) If displayed on the fuselage surfaces, horizontally on both sides of the fuselage between the trailing edge of the wing and the leading edge of the horizontal stabilizer.
 - (3) If engine pods or other appurtenances are located in the area described in paragraph (b)(2) and are an integral part of the aircraft, the marks may appear on those pods or appurtenances.

4.3.1.6 LOCATION OF MARKS ON LIGHTER-THAN-AIR AIRCRAFT

- (a) Airships. No person shall operate an airship unless it display marks on
 - (1) The hull, located lengthwise on each side of the hull and on its upper surface on the line of symmetry; or
 - (2) The horizontal and vertical stabilizers surfaces—
 - (i) For the horizontal stabilizer, 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; and
 - (ii) For the vertical stabilizer, located on each side of the bottom half stabilizer, with the letters and numbers placed horizontally.

- (b) Spherical balloons (other than unmanned free balloons). No person shall operate a spherical balloon unless it display marks in two places diametrically opposite each other and located near the maximum horizontal circumference of the balloon.
- (c) Non-spherical balloons (other than unmanned free balloons). No person shall operate a spherical balloon unless it displays marks on each side, located near the maximum crosssection of the balloon immediately above either the rigging band or the points of attachment of the basket suspension cables.
- (d) Lighter-than-air aircraft (other than unmanned free balloons). No person shall operate any lighter-than-air aircraft other than unmanned free balloon unless it displays marks to be visible both from the sides and from the ground.
- (e) Unmanned free balloons. No person shall operate any unmanned free balloon unless it displays marks on the identification plate.

4.3.1.7 SPECIAL CASES FOR SIZE AND LOCATION OF MARKS

- (a) If either one of the surfaces authorized for displaying required marks is large enough for display of marks meeting the size requirements of this section and the other is not, the full-size marks shall be placed on the larger surface.
- (b) If neither surface is large enough for full-size marks, the Authority may approve marks as large as practicable for display on the larger of the two surfaces.
- (c) If, because of the aircraft configuration, it is not possible to mark the aircraft in accordance with this Part, the owner may apply to the Authority for a different procedure.

4.3.1.8 SALE OF AIRCRAFT: REMOVAL OF MARKS

(a) When an aircraft that is registered in Lao PDR is sold, the holder of the certificate of registration shall remove, before its delivery to the purchaser, all nationality and registration marks of Lao PDR, unless the purchaser is a citizen or other legal entity as prescribed in 4.2.1.2(a)(1).

4.3.1.9 IDENTIFICATION PLATE REQUIRED

- (a) No person shall operate an aircraft registered under the laws of Lao PDR unless identification plate is affixed to it—
 - (1) Containing the aircraft type, model, serial number, marks of nationality and registration mark; and
 - (2) Made of fireproof metal or other fireproof material of suitable physical properties; and
 - (3) Secured to the aircraft -
 - (i) in a prominent position, near the main entrance, or,

- (ii) In the case of an unmanned free balloon, affixed conspicuously to the exterior of the payload; and
- (ii) 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.

LAO CIVIL AVIATION REGULATIONS

(LCAR)

PART 4—IMPLEMENTING STANDARDS

FIRST REVISION

September 2013

Part 4-Aircraft Registration and Marking

IS 4.2.1.1 CERTIFICATE OF AIRCRAFT REGISTRATION

(a) The certificate of aircraft registration issued by the Director General of Civil Aviation shall be as follows.

Civil Aircraft Register Page No.	Lao People's Democratic Republic Peace Independence Democracy Unity Prosperity ***** Ministry of Public Works and Transport. Department of Civil Aviation CERTIFICATE OF REGISTRATION			C of R No FSD/DCA				
 Nationality and remark 4. Name of owner: 		2. Manufacturer and manufacturer's designation of aircraft		raft serial number:				
5. Address of owner:								
6. It is hereby certified that the above described aircraft has been duly entered on the Civil Aircraft Register of Lao PDR in accordance with the Convention on International Civil Aviation dated 7 December 1944 and with the Lao Civil Aviation Safety Regulations.								
[SIGNATURE] Date of issue:								
For DCA Use Only								



IS 4.2.1.5 CLASSIFICATION OF AIRCRAFT