

Democratic Socialist Republic of Sri Lanka



Civil Aviation Authority of Sri Lanka

Implementing Standards

(Issued under Sec. 120, Civil Aviation Act No. 14 of 2010)

Title: Requirements for Operation of Pilotless Aircraft (Unmanned Aerial Vehicles/Remotely Piloted Aircraft)

Reference No. : CA-IS-2016-GEN-001

SLCAIS : 053

Date: 25th February 2016

Pursuant to Sec.120 of the Civil Aviation Act No.14 of 2010 which is hereinafter referred to as the CA Act, Director General of Civil Aviation has the power to issue, whenever he considers it necessary or appropriate to do so, such Implementing Standards for the purpose of giving effect to any provision in the CA Act, Regulations or Rules made thereunder including the Articles of the Convention on International Civil Aviation specified in the Schedule to the CA Act.

Accordingly I, being the Director General of Civil Aviation do hereby issue the Implementing Standards as mentioned in the Attachment hereto (Ref: CA-IS-2016-GEN-001-Att.01, titled **Requirements applicable for Operation of Pilotless Aircraft–(Unmanned Aerial Vehicles /Remotely Piloted Aircraft)**) that shall be complied with when operating pilotless aircraft under the provision of Section 80 of the CA Act, Article 8 of its Schedule or the applicable International Standards and Recommended Practices specified in Appendix 4 of Annex 2 to the Convention.

Attention is also drawn to Section 103 of the CA Act, which states inter alia that failure to comply with Implementing Standard is an offence.

H.M.C. Nimalsiri
Director General of Civil Aviation and
Chief Executive Officer

Civil Aviation Authority of Sri Lanka
04, Hunupitiya Road
Colombo 02.

Enclosure: Attachment No. CA-IS-2016-GEN-001-Att.01

Implementing Standards No. SLCAIS-053

Requirements for Operation of Pilotless Aircraft (Unmanned Aerial Vehicles / Remotely Piloted Aircraft)

1. APPLICABILITY

The requirements stipulated in this Implementing Standards shall be applicable to operation of remotely piloted aircraft, control line model aircraft, free flight model aircraft or drone which is hereinafter collectively referred to as **pilotless aircraft** within Sri Lanka airspace under the provision in Section 80 of the Civil Aviation Act No.14 of 2010 and Article 8 of the Schedule thereto.

2. APPROVED PERSON OR ORGANIZATION

- A. Director General of Civil Aviation may approve person or organization having appropriate expertise in the design, construction or operation of remotely piloted aircraft or appropriate knowledge of airspace designations and restrictions, who is hereinafter referred to as an **approved person** or **approved organization** as the case may be, to perform one or more of the following functions for and on behalf of Director General of Civil Aviation.
- a) issuing a pilot qualification for operating pilotless aircraft; or
 - b) appointing persons to give instruction to operators of pilotless aircraft; or
 - c) authorizing a person to notify the aeronautical information service provider, for the issue of a NOTAM, of pilotless aircraft operations; or
 - d) authorizing the construction or modification of pilotless aircraft; or
 - e) inspecting and approving the construction of a pilotless aircraft; or
 - f) authorizing the operation of a remotely pilotless aircraft.
- B. Notwithstanding the foregoing, Director General of Civil Aviation may approve a person or organization applying to him directly for operation of a pilotless aircraft.
- C. A person or organization intending to receive status of Approved Person or Approved Organization for the purposes of this Implementing Standard may apply to Director General of Civil Aviation in writing, giving his/her qualifications and experience in the construction/operation/maintenance of pilotless aircraft.

3. MASS LIMITS FOR OPERATION OF PILOTLESS AIRCRAFT

- A. A pilotless aircraft of gross mass of more than 25 kg shall not be operated unless
- a) explicit approval from Director General of Civil Aviation has been obtained, and
 - b) the published requirements on Personnel Licensing, Aircraft Operations and Airworthiness applicable to piloting aircraft are fully complied with.

- B. Subject to compliance with the requirements in this Implementing Standards, a pilotless aircraft with a gross mass of between 1 kg and 25 kg may be-
- a) designed, constructed or maintained under the authority of, Director General of Civil Aviation, an approved person or approved organization; and
 - b) operated under the authority of the Director General of Civil Aviation, an approved person or approved organization.
- C. A pilotless aircraft with a gross mass of less than 1 kg may be operated without approval from the Director General of Civil Aviation if it is operated for leisure or education purposes at a private premise with the consent of the property owner or at public places which are clearly identified for the purpose, with due regard to safety of persons and property.

4. FLIGHT CLERANCE

A pilotless aircraft of mass category mentioned under paragraph 2.A and 2.B shall not be flown in the open air over any area, without flight clearance obtained from the local police in charge of the area, over which the pilotless aircraft is flown except in the following situations.

- A. Pilotless aircraft is operated in an approved aerodrome, or
- B. Pilotless aircraft is operated in the presence of an authorized person of the Civil Aviation Authority of Sri Lanka.
- C. Pilotless aircraft is operated strictly within the premises owned by the owner of the aircraft

5. IDENTIFICATION STAMP

- A. No pilotless aircraft in the mass category mentioned under 2.A or 2.B shall be operated in any part of Sri Lanka, unless it carry an identification stamp issued by the Director General of Civil Aviation or a person or organization duly authorized by him.
- B. An identification stamp on a pilotless aircraft shall indicate its identification number, owner's national identity card number and his/her contact details.

6. OPERATION OF PILOTLESS AIRCRAFT FOR COMMERCIAL PURPOSES

Pilotless aircraft of any weight category shall not be operated for hire or reward, unless special approval is obtained from the Director General of Civil Aviation in writing after payment of the specified fee on case by case basis.

7. OPERATION OF PILOTLESS AIRCRAFT FOR AERIAL WORK

Pilotless aircraft of any weight category shall not be operated for any aerial work, unless special approval is obtained from the Director General of Civil Aviation in writing after payment of the specified fee on case by case basis.

8. CONTROL LINE MODEL AIRCRAFT

A control line model aircraft shall not be operated with a single or multiple wire system longer than 30 m.

9. SAFE OPERATION OF REMOTELY PILOTED AIRCRAFT

A pilotless aircraft of any weight category shall not be operated unless its method of propulsion, source of power and means of controls are checked and verified for normal operations prior to flight ensuring safe operations without endangering persons or property.

10. STATUS OF THE OPERATOR OF PILOTLESS AIRCRAFT

A pilotless aircraft shall not be operated by any person if he or she;

- A. is not familiar with operations and maneuvering of the aircraft safely.
- B. is not in good physical and mental health condition; and,
- C. is under the influence of alcohol or psychoactive substance; and,
- D. does not have sound sense of social responsibility.

11. PLACES OF OPERATIONS

A. A pilotless aircraft shall not be operated on or within 5 miles of boundary of —

- a) an uncontrolled aerodrome, unless—
 - 1. the operation is undertaken in accordance with the approval of the Director General of Civil Aviation and an agreement with the aerodrome operator; and
 - 2. in the case of a free flight model aircraft, the aircraft is launched downwind of an active runway; and
 - 3. in the case of a remotely piloted aircraft —
 - i. each pilot has an observer in attendance while the aircraft is in flight; and
 - ii. the aircraft is not operated at a height of more than 400 feet above ground level unless otherwise approved by Director General of Civil Aviation; and
- b) a controlled aerodrome, unless it is operated in accordance with an authorization from the relevant ATC unit and the Director General of Civil Aviation; and
- c) any aerodrome, unless the operating person has obtained prior approval from the Director General of Civil Aviation and
 - i. is the holder of, or is under the direct supervision of the holder of, a pilot qualification issued by an approved person or organization; or
 - ii. is under the direct supervision of a person appointed to give instruction in the operation of remotely piloted aircraft by an approved person or organization; or
 - iii. is the holder of a pilot licence or certificate issued by the Director General of Civil Aviation.

B. Unless otherwise authorized by the Director General of Civil Aviation in writing, a pilotless aircraft shall not be operated in any part of Sri Lanka;

- a) on or over any movement area of an active aerodrome; or
- b) on or over any active runway strip area; or
- c) over assembly of persons or public gatherings; or

- d) over congested areas; or
 - e) along or over roadway or railway; or
 - f) below or above open electricity power lines; or
 - g) within proximity to communication towers;
 - h) national park, protected areas or security establishments without approval
- C. Paragraph 10 (A) does not apply to a shielded operation that is conducted—
- a) outside of the boundary of the aerodrome; and
 - b) in airspace that is physically separated from the aerodrome by a barrier that is capable of arresting the flight of the aircraft.
- D. Paragraph 10 (A) (c) above does not apply to a free flight model aircraft, if the aircraft is not flown above 100 ft.

12. AIRSPACE

- A. A pilotless aircraft must not be operated;
- a) above any property unless explicit prior consent has been obtained from persons occupying that property or the property owner; and
 - b) causing safety or security hazard to third person or property, and
 - c) without maintaining observation of the surrounding airspace in which the aircraft is operating for other aircraft; and
 - d) at any height above 400 feet above ground level except in accordance with paragraph 11.(C).
- B. Nothing in paragraph 10 (A) (a) will be applicable if the aircraft is operated under the authority of Director General of Civil Aviation or an approved organization; and
- C. A pilotless aircraft may be operated more than 5 miles away from an aerodrome boundary and above 400 feet above ground level —
- a) If operation take places in an active danger area designated for that purpose; or
 - b) If the operation remains clear of Class C, D, and E airspace and that, at least 24 hours before the operation, a person authorized by an approved person or organization, notifies the aeronautical information service provider, for the issue of a NOTAM, of the following information:
 - 1 the name, address, and telephone number of the operator:
 - 2 the location of the proposed operation:
 - 3 the date, time and duration of the proposed operation:
 - 4 the maximum height above ground level proposed for the aircraft operation.

13. RIGHT OF WAY

- A. A person operating a pilotless aircraft must ensure the aircraft that the person is operating

gives way to, and remains clear of, all manned aircraft and on the ground and in flight.

- B. A person who is operating a free flight model aircraft must before launching the aircraft ensure that during the operation the aircraft will remain clear of all manned aircraft on the ground and in flight.
- C. A person operating a pilotless aircraft must ensure the aircraft that the person is operating gives way to and remains clear of all moving objects on earth or water surface
- D. A person operating a pilotless aircraft must ensure the aircraft that the person is operating remains well clear of persons, animals, birds or property.

14. DROPPING OF OBJECTS OR DISPLAY OF BANNERS

Nothing shall be dropped nor shall any banner be displayed in a pilotless aircraft in flight without approval from the Director General of Civil Aviation.

15. TOWING

Nothing shall be towed in a pilotless aircraft in flight without specific approval from Director General of Civil Aviation;

16. VISUAL LINE OF SIGHT OPERATION

- A. A pilotless aircraft shall not be operated over
 - a) any area in which the person's view of the surrounding airspace in which the aircraft will operate is obstructed; or
 - b) from an elevated ground, building or an object;
 - c) meteorological conditions that obstruct the operating person's ability to maintain visual line of sight of the aircraft.
- B. A person who operates a pilotless aircraft must at all times—
 - a) maintain visual line of sight with the aircraft; and
 - b) be able to see the surrounding airspace in which the aircraft is operating; and
 - c) maintain the aircraft below the cloud base.
- C. For the purposes of this Implementing Standard, visual line of sight means a straight line along which an observer has a clear view and which may be achieved with the use of—
 - a) spectacles, contact lenses, or a similar device used to correct subnormal vision of the user to no better than normal vision but not the use of an electronic, mechanical, electromagnetic, optical, or electro-optical instrument; or
 - b) a first person view system and a trained and competent observer who maintains—
 - 1 visual line of sight of the aircraft; and

- 2 sight of the surrounding airspace in which the aircraft is operating; and
- 3 direct communication with the person who is operating the aircraft.

17. NIGHT OPERATIONS

A pilotless of aircraft shall not be operated from dusk to dawn (night) unless the operation is—

- A. indoors with adequate lighting; or
- B. a shielded operation with adequate illumination.

18. AIR COMPETITION

Pilotless aircraft shall not be operated in a race or competition of any form, without special approval from Director General of Civil Aviation.

19. MODIFICATIONS

Pilotless aircraft which has already received approval from Director General of Civil Aviation, approved person or approved organization, shall not be modified without requisite approval for the modification.

20. RADIO INTERFERENCE

A pilotless aircraft shall not be operated to cause interference to radio communication, navigation or surveillance of aircraft and/or Air Traffic Management system.

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