



# GCAA

GUYANA CIVIL AVIATION AUTHORITY

## DIRECTIVE

No: GCAA/ASR/DIR/2017-01 R1

Revised: 25 September, 2020

**SUBJECT: OPERATION AND SURVEILLANCE OF UNMANNED AERIAL VEHICLES**

**INITIATED BY: DIRECTOR AVIATION SAFETY REGULATION**

## DIRECTIVE

### TO OWNERS AND OPERATORS OF UNMANNED AERIAL VEHICLES

#### AUTHORITY

The Guyana Civil Aviation Authority (GCAA) (also referred to as the Authority) hereby issues this Directive under the authority of the Civil Aviation Act of 2018 of Guyana, Section 15 (4).

#### APPLICABILITY:

This **DIRECTIVE** is applicable to Owners and Operators of Unmanned Aerial Vehicles (including drones, remotely piloted aircraft systems (RPAS) and any other aircraft that is operated remotely and without a human pilot onboard, in Guyana.

#### VALIDITY:

This **DIRECTIVE** was first issued by the Authority on the 27<sup>th</sup> February 2017, however it is now revised to meet new and current requirements of the Authority.

**DIRECTIVE** (GCAA/ASR/DIR/2017-01) is hereby cancelled and is superseded by revised Directive (GCAA/ASR/DIR/2017-01 R1) effective from the **25th day of September 2017** and remains valid until cancellation or revocation by the Director General Guyana Civil Aviation Authority.

#### PURPOSE:

The purpose of this **DIRECTIVE** is to give directions to owners and operators of UAVs that are operated in Guyana for both operational and GCAA surveillance purposes.

## DEFINITION:

For the purpose of this Directive, the following definitions shall apply: -

- (a) **AERIAL WORK.** An operation in which an aircraft is used for specialized services such as agriculture, construction, photography, surveying, search and rescue, observation and patrol, aerial advertisement, etc.
- (b) **AERODROME.** A defined area on land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and movement of aircraft.
- (c) **AERODROME TRAFFIC ZONE.** An airspace of **defined** dimensions established around an **aerodrome** for the protection of **aerodrome traffic**.
- (d) **BEYOND VISUAL LINE-OF-SIGHT.** An operation in which the UAV pilot or UAV observer does not use visual reference to the remotely piloted aircraft in the conduct of flight.
- (e) **CONGESTED AREA.** A city, town or settlement, or any area which is substantially used for residential, commercial, industrial or recreational purposes.
- (f) **COMMERCIAL OPERATIONS.** An operation where the UAV flight is being conducted for business purposes (mapping, security surveillance, wildlife survey, aerial application, etc.) other than commercial air transport, in return for specific remuneration or form of valuable consideration.
- (g) **MODEL AIRCRAFT.** A remotely-piloted aircraft that is used for sport and recreation and cannot carry onboard a pilot or passenger and is not equipped with a camera or recording device and does not have provisions for attachment of same.
- (h) **OPERATOR.** A person, organisation or enterprise engaged in or offering to engage in an aircraft operation, including a UAV.
- (i) **PRIVATE OPERATIONS.** Operation where the UAV flight is being conducted for one's own business purposes only with no return for specific remuneration or form of valuable consideration.
- (j) **PILOT-IN-COMMAND.** The pilot designated by the operator, or in the case of general aviation, the owner, as being in command and charged with the safe conduct of a flight. In the case of a UAV, the person under whose control, the UAV is flown and manoeuvred, whether it is from a hand-held controller or a command center.
- (k) **RECREATIONAL OPERATIONS.** Operation where the UAV flight is being conducted for leisure, sport, or fun purposes only with return for specific remuneration or form of valuable consideration.

- (l) **UNMANNED AERIAL VEHICLE (UAV).** An aircraft, capable of being flown without a pilot being on board that aircraft, either autonomously, or controlled remotely by a pilot located outside the aircraft. This include drones, remotely piloted aircraft systems (RPAS) or any other such aerial vehicles remotely controlled and without a human pilot onboard.
  
- (m) **VISUAL LINE-OF-SIGHT OPERATIONS (VLOS).** An operation in which the remote crew maintains direct visual contact with the aircraft to manage its flight and meet separation and collision avoidance responsibilities.

# DIRECTIVE

## PART: A

### OPERATION OF UNMANNED AERIAL VEHICLES

1. No person or organization shall operate an unmanned aerial vehicle in Guyana's` airspace without having first received written permission from the Civil Aviation Authority, unless such a vehicle is operating in accordance with Paragraph 13.
2. A person or organization that wishes to operate an Unmanned Aerial Vehicle, other than in accordance with Paragraph 13, shall apply to the Authority in writing for approval and shall provide the Authority with the details of the intended operation.
3. No person shall drop, cause to be dropped, or permit another person to drop any article or animal, whether or not attached to a parachute, from an Unmanned Aerial Vehicle so as to endanger persons or property.
4. No person shall use an Unmanned Aerial Vehicle to tow any object during flight.
5. The Pilot-in-Command of an Unmanned Aerial Vehicle shall maintain direct, unaided visual contact with that aircraft, while it is in flight, sufficient to monitor its flight path in relation to other aircraft, persons, vehicles, vessels, and structures for the purpose of avoiding collisions, unless specific authorization to the contrary has been granted in writing by the Authority (**Visual Line-of-Sight**).
6. The Pilot in Command of an Unmanned Aerial Vehicle shall not fly the aircraft:
  - (a) within an aerodrome traffic zone unless the permission of the Authority and the permission of the applicable Air Traffic Control Unit has first been obtained, and the pilot-in-command ensures, upon having received such authorization, that the UAV remains clear of the take-off, approach and landing routes and the pattern of traffic formed by manned aircraft operating within the vicinity of said aerodrome traffic zone.
  - (b) at a height of more than 150 metres above the terrain;
  - (c) at a distance greater than 500 metres from the point at which he is positioned;
  - (d) at night or in low visibility conditions;

- (e) over or near to private or public property, unless written permission is sought and obtained from the relevant stakeholders with responsibility for the area, **prior to the commencement of the UAV operations.**
  - (f) in a reckless or unsafe manner;
  - (g) over any establishment or zone designated in a Government notice as a prohibited area or within 1km of any restricted fly zone (as listed in the Aeronautical Information Publication), Official residences, Army Camps, Army bases, and Police Headquarters;
  - (h) Within 1km of a helipad; or
  - (i) Beyond Visual Line-of-Sight.
7. The Pilot in Command of an Unmanned Aerial Vehicle shall not fly the aircraft for the purposes of aerial work except in accordance with a permit granted by the Authority.
8. An organisation intending to operate an Unmanned Aerial Vehicle for commercial purposes, may apply to the Authority for a commercial operations permit and will be required to present for approval, an operations manual, prior to commencing same, which shall contain policies and procedures for the operations for which the organisation intends to use the Unmanned Aerial Vehicle, and which shall contain at least the following information:
- (a) company organisation;
  - (b) manual distribution and revision procedures;
  - (c) persons authorized to act on the organisation's behalf;
  - (d) staff training program;
  - (e) area of intended operations;
  - (f) a plan of intended activities;
  - (g) briefing of pilots and ground crew;
  - (h) communications procedures;
  - (i) accident and incident notification;
  - (j) record-keeping, including aircraft logbook;

- (k) a maintenance programme, based on the manufacturer's instructions for maintaining the aircraft; and
- (l) Emergency procedures, including but not limited to, emergency recall, loss of control datalink, or loss of visual contact.

Part C contains the contents of a UAV Operations Manual.

9. A Pilot in Command of an Unmanned Aerial Vehicle shall not operate that aircraft in any of the circumstances below without first obtaining approval from the Authority:
  - (a) over or within 150 metres of any congested area, or organised open air assembly;
  - (b) within 100 metres of any vessel, vehicle, or structure, which is not under the control of the person accountable to the Authority for the aircraft, or someone who has contracted the services of the aircraft; or
  - (c) subject to Paragraph (11), within 50 metres of any person, either vertically or horizontally.
10. No person shall operate an Unmanned Aerial Vehicle as the Pilot-in-Command of that vehicle, unless that person has in his possession the necessary Permit issued by the Authority pursuant to Paragraph 14.
11. No person shall, during take-off or landing, operate an Unmanned Aerial Vehicle within 30 metres of any person, other than the Pilot or another person assisting in the operation and under the supervision of the pilot.
12. No person shall operate an Unmanned Aerial Vehicle for commercial operations unless the operator has presented to the Authority proof of possession of the necessary Liability Insurance.
13. A person operating an unmanned aerial vehicle, weighing seven (7) kg or less, which is considered to be a model aircraft and which is not being used for aerial work or any other commercial activity, and is not carrying any equipment capable of transmitting or receiving any information other than that required to control the vehicle in flight:
  - (a) shall not be required to obtain a permit to operate the vehicle, but shall comply with all other restrictions and limitations of these Regulations; and
  - (b) shall not operate the vehicle beyond visual range of the operator.

14. A person wishing to operate as the Pilot-in-Command of an Unmanned Aerial Vehicle, as referred to in Paragraph (1), shall apply to the Authority for a permit to do so and the Authority may grant such a permit after:
  - (a) the person has provided the Authority with a certificate issued by an approved person or organisation confirming that the person has been trained, tested, and found to be competent to operate as the pilot of an Unmanned Aerial Vehicle; or
  - (b) has demonstrated to the Authority that he is competent to operate the aircraft safely by carrying out such maneuvers while in control of the aircraft as the Authority may require.
15. The Authority may accept a certificate of training from another ICAO member state that has an acceptable framework of Regulations governing UAV operations and the training of pilot operators within their airspace.
16. Non-conformity with the conditions of a Permit, operations outside of the limitations specified in this Directive, or failure to comply with the conditions approved in an operations manual, shall lead to the suspension of the Permit and will be considered a breach of the Guyana Civil Aviation Regulations.
17. The pilot-in-command of an unmanned aerial vehicle shall:
  - (a) Not attempt to operate the UAV from more than one control station.
  - (b) Not attempt to operate more than one UAV at any one time.
  - (c) Be advised that use of control relays to extend the operational area of a UAV are **strictly prohibited**.
  - (d) Always give way to manned aircraft.
  - (e) Prior to each flight, confirm that there is no unacceptable radio frequency interference present, or is likely to be present during the flight of the UAV.
  - (f) Prior to conducting the take-off/launch of the UAV ensure that there is no contamination adhering to any of the critical surfaces of the UAV.
  - (g) Not permit the use of a portable device at the control system of a UAV where the device may impair the functioning of the systems or equipment;
  - (h) Not conduct the take-off/launch of a UAV if explosive, corrosive, bio-hazardous, or light emitting (laser) payloads, or payloads that can be jettisoned, dispersed, or dropped, are carried on board.

18. The operator of an Unmanned Aerial Vehicle, upon having received written permission from the Civil Aviation Authority shall:
- (a) Establish and adhere to procedures to be followed in the event that control of the UAV can no longer be maintained.
  - (c) Establish and adhere to an emergency contingency plan, normal lost-link and emergency procedures, including those established by the manufacturer of the UAV.
  - (c) Ensure that when planning to operate within the vicinity of any hinterland aerodrome, the Civil Aviation Authority and the applicable Air traffic Control Unit is informed at least three (3) working days prior to operations.
  - (d) Ensure that at least two (2) hours to commencing any operation and after the cessation/completion of same (particularly within 5km of any aerodrome), the applicable air traffic control centers are informed so that the necessary NOTAMS may be formulated and distributed.

## **PART: B**

### **AERIAL SURVEILLANCE USING AN UNMANNED AERIAL VEHICLE**

1. No person shall operate an Unmanned Aerial Vehicle, irrespective of the dimensions or maximum weight of that aircraft, for the purposes of obtaining, recording, or transmitting information, whether in the visible spectrum or otherwise, unless that person has obtained written authorization from the Authority to obtain, record, or transmit such information.
2. A person wishing to use an Unmanned Aerial Vehicle for any or all of the activities referenced in Paragraph (1) may submit a request in writing to the Authority, and shall include in the request –
  - (a) the name and address of the applicant and the name of the company for whom he is working, if applicable;
  - (b) a drawing or map reference showing the geographical area over which that person intends to operate the aircraft;
  - (c) details of the aircraft to be used, including the make, model, serial number and dimensions of the aircraft, as well as the type of power plant installed;
  - (d) the date and time period during which the applicant wishes to operate the aircraft;
  - (e) the purpose for which the information collected will be used;
  - (f) proof that the owner has liability insurance pursuant to the Civil Aviation Regulations currently in force;
  - (g) Security clearance for the applicable operation: and
  - (h) any other information requested by the Authority.

3. Nothing in this **DIRECTIVE** shall prevent the prosecution, conviction and punishment of any person for the breach of any other written Law of Guyana for the time being in force including but not limited to:
  - (a) Criminal Law Acts of Guyana.
  - (b) Customs Act of Guyana
  - (c) Telecommunications Act of Guyana

# **PART: C**

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Lt. Col. (Rt'd) Egbert Field,   
**Director General**  
**Guyana Civil Aviation Authority**

**Date:** September 25, 2020