

FSN-GN-2015-01 Revision: 3 28 January 2020

# Flight Safety Notification General

Flight Safety Notifications (FSNs) are not mandatory in nature, but provide means such as guidance, methods, procedures and practices acceptable to the Authority for complying with regulations and other requirements in a systematic manner. These are not necessarily the only means of compliance. FSNs may also contain explanations of regulations, other guidance material, best practices or information useful to the aviation community. Unless incorporated into a regulation by reference, FSNs are not regulatory and do not create or change a regulatory requirement. A change of a regulatory requirement may come in the form of a Directive. A Flight Safety Notification is not a Directive.

# **Operations of Unmanned Aircraft**

#### Reason for Revision

The Jamaica Civil Aviation Authority (JCAA) issues this Flight Safety Notification (FSN) FSN-GN-2015-01 R3 dated 28 January 2020 to provide for Unmanned Aircraft (UA) operators' additional guidance and make them aware that there are prohibited and restricted areas.

## Purpose

The purpose of this FSN is to update the nomenclature from Unmanned Aerial Vehicle (UAV) to Unmanned Aircraft (UA) and provide additional guidance to the public for the safe operations of UA in Jamaican Airspace. The increased proliferation in the use of Unmanned Aircraft Systems (UASs) in Jamaica has prompted the need to issue Revision 3 to this Notification to reduce the risks to all users of the airspace and the public. While the operations of these units cross several areas of responsibility for multiple local agencies, a number of which are obvious such as concerns for aviation safety and security, national security, and privacy, the JCAA provides this additional guidance primarily with respect to aviation safety.

While generally known by other names, the aviation industry and its Regulations use the term "Remotely Piloted Aircraft (RPA)" to relate to:

- (1) Drones
- (2) Unmanned Aircraft (UA)
- (3) Unmanned Aircraft Systems (UASs)
- (4) Unmanned Aerial Vehicles (UAVs)

#### References

The following references were used in the development of this FSN.

- (1) The Civil Aviation Act, 1966 (Jamaica)
- (2) The Civil Aviation Regulations, 2012 (Jamaica)
- (3) Annex 2 to the Convention on Civil Aviation Rules of the Air
- (4) CIR 328/AN/190 (ICAO)
- (5) Aeronautical Information Publication (AIP) ENR 5.1 (Jamaica)
- (6) Annex 15 to the Convention of Civil Aviation Aeronautical Information Services

#### **Applicability**

These guidelines apply to all persons who operate Unmanned Aircraft (UA), including:

- (1) Recreational or Hobbyists Persons who operate model aircraft or UA solely for recreational purposes.
- (2) Professional (commercial and non-commercial) operators Persons or companies operating UA for non-recreational purposes, including business-related activities such as, but not limited to, aerial photography, surveillance, geometric surveys, power line inspections, crop observations, research, and development activities.

Note: The latter requires Special Aerial Work Permits, which are granted by the JCAA, subject to the operator(s) meeting specific criteria.

#### **Definitions**

The following definitions apply:

- (1) Special Aerial Work Permit A JCAA document issued in accordance with the Jamaica Civil Aviation Regulations, Schedule 11 permitting the operations of UA in the category of Aerial Works.
- (2) Unmanned Aircraft (UA) A power-driven aircraft, other than a model aircraft, that is designed to fly without a human operator onboard. Unmanned aircraft exclude fireworks, kites, rockets, and large unmanned free balloons.

- (3) First Person View (FPV) Device A device that generates and transmits a streaming video to a control station monitor, giving the remotely located pilot the perspective of an onboard pilot's view.
- (4) UA Operator The person that has possession of the UA system, as owner, operator, lessee, or otherwise.
- (5) UA System A set of configurable elements consisting of a UA, its associated control station(s), the required command and control links and any other elements as may be required, at any point during flight operation.
- (6) Visual line-of-sight (VLOS) Unaided (except corrective lenses and/or sunglasses) visual contact with the UA sufficient to be able to maintain operational control of the aircraft, know its location, and be able to scan the airspace in which it is operating to decisively see and avoid other air traffic or objects.
- (7) Visual Observer A trained crewmember or associate, in visual line-of-sight of the UA, who assists the pilot in the duties associated with collision avoidance and complying with the applicable rules of flight.
- (8) Prohibited Area an airspace of defined dimensions, above the land areas or territorial waters of a State, within which the flight of aircraft is prohibited.
- (9) Restricted Area an airspace of defined dimensions, above the land areas or territorial waters of a State, within which the flight of aircraft is restricted in accordance with certain specified conditions.
- (10) Danger Area an airspace of defined dimensions within which activities dangerous to the flight of aircraft may exist at specified times.

# **General Operating Conditions**

It is required that if at any time during the operations of the UA, safety hazards to other airspace users, people or property become apparent, the operations MUST be terminated. Flight operations shall not resume until the hazards are resolved.

JCAA Inspectors and Jamaican law enforcement officers have the authority to review UA operations at any time so that they can verify that operations are being conducted in accordance with this FSN and the Civil Aviation Regulations.

### **Flight Conditions**

The operator shall maintain continuous unaided visual contact with the UA sufficiently to maintain operational control, knowing its location, and be able to scan the airspace in which it is operating to decisively see and avoid other air traffic or objects. Use of vision enhancing devices such as binoculars, night vision goggles, powered vision magnifying devices, and goggles designed to provide a first person view are considered aided visual contact and are therefore prohibited. In determining the range that will ensure the UA can be seen, consideration must be given to the pilot's capabilities, the meteorological conditions, the size and visibility of the UA, and any other relevant factors.

Note: The operation of UA at night or low visibility conditions is prohibited.

Operators of UA, as part of their responsibilities, must advise the JCAA whenever there is an occurrence (incident or accident). This is to ensure that the cause of any such occurrence is determined and appropriate mitigation/corrective measures are implemented in order to reduce the likelihood of reoccurrence.

# **Prohibited, Restricted and Danger Areas**

The utilization of UA within prohibited, restricted and danger areas have been increasing, hence the need for all UA operators to become aware of these areas. The location of these areas can be found in the Jamaica Aeronautical Information Publication (AIP). It is recommended that all UA operators familiarize themselves with the information available in the AIP published by the Jamaica Civil Aviation Authority (JCAA).

#### Contact information:

Telephone: (876) 929-3552 / (876) 960-3948

E-mail: aisjamaica@jcaa.gov.jm

### **Operating Restrictions:**

## 1. Recreational (Hobbyists)

Unmanned aircraft shall not be operated:

- (1) At a height exceeding 400 ft (122 m) above ground level;
- (2) Beyond the maximum range of 1,640 ft (500 m);
- (3) At a distance beyond unaided visual range of the operator(s) of the aircraft;
- (4) Using first person view (FPV) or computer aided visual of the UA;
- (5) Over or within 500 ft (152 m) of an organized open-air assembly of people;
- (6) Over or within 65 ft (50 m) of any person. However, during take-off and landing, the aircraft may be flown within 165 ft (50 m), but no less than 100 ft (30 m) of any person.
  - These stipulations do not apply to the person in control of the aircraft.
- (7) Over private or public property or dwelling without prior permission;
- (8) Within 16,500 ft (5,000 m) of any aerodrome or rotorcraft designated landing zones, such as helipads;
- (9) If not equipped with fail-safe mechanisms that will cause the aircraft to land in the event of loss of radio communications or control communications and the person in charge of the aircraft has been satisfied that the mechanisms are in good working order before flight;
- (10) If the aircraft has not been verified to be able to complete its intended flight, taking into consideration the payload, wind and propulsive power availability for the duration of the flight;
- (11) Autonomously or on pre-programmed flights;
- (12) At night or during low visibility conditions;

- (13) With the intention of dropping or discharging any items to the ground;
- (14) Within or over restricted and prohibited airspace.

#### Flights must be conducted:

- (1) Within the operator's visual line of sight (VLOS);
- (2) Clear of all visual obstructions, including clouds, buildings, hills, etc.;
- (3) Without first person view device;
- (4) Safely and without recklessness;
- (5) At safe distances away from all obstacles.

# 2. Professional (Commercial and Non-Commercial Operators)

All commercial operators must apply to the JCAA for a Special Aerial Work Permit before each flight.

All entities or persons wishing to operate a UA, as referenced in this paragraph, shall:

- (1) Apply to the JCAA in writing for approval, providing all details of the intended operation; and
- (2) Not fly the aircraft, unless written permission has been received from the JCAA, stating any applicable restrictions or conditions.

Having received approval, the professional operator must observe and comply with all the conditions included in the permit, in order to exercise the authority provided to operate a UA.

Note: Applications for restricted airspace require a minimum of one month's notice as approvals are required from the specific airspace managers.

#### **Penalties**

The safe operation of aircraft in Jamaica's airspace is a priority for the JCAA. Non-compliance with the Civil Aviation Regulations may lead to penalties and fines against persons and organizations found in breach.

Operators of UA shall make themselves aware of other legal requirements and are responsible to comply with such requirements in operating within Jamaican airspace. Operators should consider, among other items, the following:

- (1) Penalties may be assessed for persons who are **not** operating under the authorization of a Special Aerial Works Permit issued by the JCAA;
- (2) The Civil Aviation Regulations describe several criminal offences involving the dangerous operation of aircraft and endangering the safety of other aircraft. Committing such offences may be punishable by imprisonment and/or fines;
- (3) Other penalties may apply with respect to other local regulations.

For further information, please contact the Flight Safety Division of the JCAA at (876)960-3948, or visit our website at www.jcaa.gov.jm.

Approved by:

Date: 28 January 2020

**Noel Ellis** 

Director, Flight Safety

for Director-General of Civil Aviation

Jamaica Civil Aviation Authority