



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 Aerial Vehicles

Reason for Revision

The Jamaica Civil Aviation Authority (JCAA) issues this Flight Safety Notification FSN-GN-2015-01 R2 dated April 14, 2016 2016 to update the format of FSNs currently in force. This Flight Safety Notification supersedes and cancels FSN-GN-2015-01 R1 dated April 20, 2015.

Purpose

This FSN provides guidance to the public for the safe operations of Unmanned Aerial Vehicles, (UAVs) in Jamaican Airspace. The rapid proliferation in the use of Unmanned Aerial Vehicles in Jamaica has prompted the need to issue this notification to reduce the risks to other 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 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 Aerial Vehicles (UAVs)
- (3) Unmanned Aerial Systems (UAS')

References

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

- (1) The Civil Aviation Act, 2004 (Jamaica)
- (2) The Civil Aviation Regulations, 2012 (Jamaica)
- (3) Annex 2 to the Convention on Civil Aviation
- (4) CIR 328/AN/190 (ICAO)

Applicability

These guidelines apply to all persons who operate Unmanned Aerial Vehicles, including:

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

N.B. - 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 issued document permitting the operations of UAVs.
- (2) Unmanned Aerial Vehicle (UAV) - A power-driven aircraft, other than a model aircraft, that is designed to fly without a human operator on-board. Unmanned air vehicles 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 on-board pilot's view.
- (4) UAV Operator - The person that has possession of the UAV system, as owner, operator, lessee, or otherwise.
- (5) UAV System - A set of configurable elements consisting of a UAV, 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.

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- (6) Visual line-of-sight (VLOS) - Unaided (except corrective lenses and/or sunglasses) visual contact with the UAV 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 UAV, who assists the pilot in the duties associated with collision avoidance and complying with the applicable rules of flight.

General Operating Conditions

It is required that if at any time during the operations of the UAV, 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 UAV operations at any time so that they can verify the 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 UAV sufficient to be able 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. Vision enhancing devices such as binoculars, night vision goggles, powered vision magnifying devices, and goggles designed to provide a first person view are not considered unaided visual contact and are therefore prohibited. In determining the range that will ensure the UAV can be seen, consideration must be given to the pilot's capabilities, the meteorological conditions, the size and visibility of the UAV, and any other relevant factors.

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

Operators of UAVs, under their responsibilities listed in the JCAA, must advise the JCAA whenever an occurrence (incidents and accidents) occur. This is to ensure that the cause of any such occurrence is determined and appropriate mitigation/corrective measures be implemented in order to reduce the likelihood of reoccurrence.

Operating Restrictions

1. Recreational (Hobbyists)

Unmanned Aerial Vehicles 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 UAV;
- (5) Over or within 500 ft (152 m) of an organised open-air assembly of people;
- (6) Over or within 165 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 for 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; or
- (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 UAV, 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 UAV.

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 organisations found in breach.



Operators of UAVs 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 that should be operating under the authorisation of a Special Aerial Works Permit but are not;
- (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.

Future Updates

As the use of this technology increases and the sector matures, more oversight will be required to incorporate safe operations of UAVs in the current airspace. The JCAA will provide updates to this FSN and disseminate information on the regulations to support the safe and orderly development of this sector and the aviation industry.

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

Approved by:  

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