

27th October 2015

Proposed Small Unmanned Aircraft (Drones) and Rocket Order

The Irish Aviation Authority is proposing to publish a Small Unmanned Aircraft (Drones) and Rocket Order, which is now available for comment. This legislation will apply to small unmanned aircraft being used in or over the State. The draft text is contained below.

Comments on this draft order may be submitted, in writing, to:

FAO: Ms Kelly Hood,
Safety Regulation Division,
Irish Aviation Authority,
11-12 D'Olier St.,
Dublin 2.

or

SI-Consultation@iaa.ie

Comments must be received before 5pm Tuesday 10th November 2015 to ensure they are included in the review.

Definitions

2. In this Order:

‘the Act’ means the Irish Aviation Authority Act, 1993 (S.I. No. 29 of 1993);

‘aerodrome’ means a defined area (including any buildings, installations and equipment) on land or water or on a fixed, fixed off-shore or floating structure intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft;

‘aircraft’ means 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;

‘air traffic service (ATS)’ means a generic term meaning variously, flight information service, alerting service, air traffic advisory service, air traffic control service (area control service, approach control service or aerodrome control service);

‘air traffic services unit’ means a generic term meaning variously, air traffic control unit, flight information centre, aerodrome flight information service unit or air traffic services reporting office;

‘aerodrome traffic circuit’ means the specified path to be flown by aircraft operating in the vicinity of an aerodrome;

‘aerodrome traffic’ means all traffic on the manoeuvring area of an aerodrome and all aircraft flying in the vicinity of an aerodrome. An aircraft operating in the vicinity of an aerodrome includes, but is not limited to, aircraft entering or leaving an aerodrome traffic circuit;

‘aerodrome traffic zone’ means an airspace of defined dimensions established around an aerodrome for the protection of aerodrome traffic;

‘aerodrome control service’ means air traffic control service for aerodrome traffic;

‘aerial work’ means an aircraft operation in which an aircraft is used for specialised services such as agriculture, construction, photography, videography, surveying, observation and patrol, search and rescue, aerial advertisement, etc.;

‘the Authority’ means The Irish Aviation Authority;

‘Congested Area’ means any area in relation to a city, town or settlement which is substantially used for residential, industrial, commercial or recreational purposes;

‘controlled airspace’ means an airspace of defined dimensions within which air traffic control service is provided in accordance with the airspace classification;

‘controlled aerodrome’ means an aerodrome at which air traffic control service is provided to aerodrome traffic regardless whether or not a control zone exists;

‘Drone’ shall mean an aircraft without a human pilot on board, whose flight is controlled either autonomously or under the remote control of a pilot on the ground or in another vehicle;

‘prohibited area’ means airspace of defined dimensions designated by the Authority above the land areas of the country or territorial waters thereof, within which the flight of aircraft is prohibited by the Authority;

‘restricted area’ means an airspace of defined dimensions designated by the Authority above the land areas of the State or the territorial waters thereof, within which the flight of aircraft is restricted by the Authority in accordance with specified conditions;

‘small unmanned aircraft’ means an unmanned aircraft or a drone having a mass of 150 kilogram or less;

‘Specific Aerial Work Permission’ means a permission issued by the Authority in accordance with this order to conduct aerial work in accordance with operational limits accepted by the Authority;

‘Unmanned Aircraft’ shall mean an aircraft including a drone without a human pilot on board.

Revocations

3. The Irish Aviation Authority, S.I. No. 25 of 2000 - Irish Aviation Authority (Rockets and Small Aircraft) Order, 2000 is hereby revoked.

Directions

4. The Authority may give directions for the purposes of giving effect to the provisions of this Order other than written permissions and authorisations referred to herein and may exempt persons or operations from the provisions of this Order subject to such conditions as may be specified in relation to any such exemption. A condition specified in or with a written permission or in relation to an exemption in a particular case shall have the effect of a direction under this Order and shall be complied with by the person or persons to whom it applies.

Continuance in Force of Existing Directions, Permissions and Exemptions

5. Every permission, direction or exemption issued or in force under the appropriate provisions of the Irish Aviation Authority S.I. No. 25 of 2000 - Irish Aviation Authority (Rockets and Small Aircraft) Order, 2000, at the time of the coming into operation of this Order shall continue in force and shall be deemed for all purposes to have been issued under this Order.

Applicability

6. (1) This order shall apply, unless otherwise specified herein, to:
 - (a) small unmanned aircraft (including drones) with a maximum take-off mass of less than or equal to 150 kilograms including equipment installed in or attached to and including cargo;
 - (b) unmanned rockets exceeding 1.5 kilograms in fuelled mass and with more than 100 grams of propellant,

when such aircraft are in or over the State.

- (2) This Order shall not apply to:-
 - (a) fireworks used in aerial display where the maximum altitude reached is less than 400 ft above ground level at the launch site(s), unless launched within controlled airspace or an aerodrome traffic zone;
 - (b) to a model rocket using not more than 100 grams (0.1 kilogram) of propellant or using a slow burning propellant and made of paper, wood or frangible plastic containing no substantial parts and having a mass of no more than 500 grams (0.5 kilogram) operated in a manner that does not create a hazard to persons, property or other aircraft; and
 - (c) to drones and small unmanned aircraft of less than 1 kilogram maximum mass less fuel and constructed of wood, paper or frangible plastic and containing no substantial parts, when operated below 50 ft (15m) above the ground or water and in a manner that does not create a hazard to persons, property or other aircraft.

Small Unmanned Aircraft (Drones)

7. (1) Aircraft subject to this order shall be required to be registered in a manner established by the Authority.
- (2) A person who has charge of the operation of a small unmanned aircraft shall not permit:
 - (a) that aircraft to be operated so as to cause a hazard to another aircraft or in the vicinity of aircraft manoeuvring in an aerodrome traffic circuit; or
 - (b) that aircraft to be operated in a negligent or reckless manner so as to endanger life or damage the property of others.
- (3) When two small unmanned aircraft are converging at approximately the same altitude, the aircraft that has the other on its right shall give way, except as follows:
 - (a) small unmanned aircraft shall give way to aircraft, including gliders and balloons, other than small unmanned aircraft.
 - (b) when two small unmanned aircraft are approaching head-on approximately so and there is a danger of collision, each aircraft's course shall be altered to the right.

- (4) The authority may define areas within Air Traffic Services airspace, where small unmanned aircraft activity may take place without permission from the Authority.
- (5) A person who has charge of the operation of a small unmanned aircraft which has a mass of less than 25 kilograms, without fuel but including any articles or equipment installed in or attached to the aircraft and including cargo at the commencement of its flight shall not allow such an aircraft to be flown, unless otherwise permitted by the Authority and subject to such conditions as are required by such permission:
 - (a) within controlled, prohibited or restricted airspace;
 - (b) in Air Traffic Services airspace class G, within 5km of an aerodrome during periods of aircraft operations, unless the aerodrome operator has given permission;
 - (c) at a distance of less than 30 metres from a person, vessel, vehicle or structure not under the direct control of the operator, except while it is landing or taking-off;
 - (d) at a distance of 120 metres from an assembly of 12 or more persons not under the direct control of the operator, except while it is landing or taking-off;
 - (e) beyond direct unaided visual line of sight with or without the use of correcting lenses and not further than 300 metres from the point of operation;
 - (f) at a height of more than 400 feet (120 metres) above the ground or water;
 - (g) permitting or attempting to permit, any article or animal, whether or not attached to a parachute to be dropped from that aircraft.

Permissions issued in accordance with this order may be regarded as specific aerial work permissions.

- (6) A person who has charge of the operation of a small unmanned aircraft shall not permit such aircraft to be operated from any place unless the aircraft may take-off and land without undue hazard to persons or property and in respect of which the owner or occupier of that place shall have given permission for such use.
- (7) A person who has charge of the operation of a small unmanned aircraft, which has a mass of 7 kilograms or more and less than 25 kilograms, without fuel but including any articles or equipment installed in or attached to the aircraft and including cargo at the commencement of its flight, or as otherwise directed by the Authority, shall not allow such an aircraft to be flown unless:

- (a) that person is operating as a member of a body accepted by the Authority and in accordance with the operating rules of such a body; or
 - (b) that person has successfully undertaken a course of safety training accepted by the Authority.
- (8) A person who has charge of the operation of a small unmanned aircraft which has a mass of 25 kilograms, or more and less than 150 kilograms, without fuel but including any articles or equipment installed in or attached to the aircraft and including cargo at the commencement of its flight, shall not allow such an aircraft to be flown without the permission of the Authority and subject to such conditions as are required by such permission.

Rockets

- 8. (1) A rocket shall not be operated by any person within the State unless that person:
 - (a) furnishes such pertinent information as may be required by the Authority;
 - (b) obtains permission from the Authority prior to the launching of the rocket; and
 - (c) complies with such conditions as are imposed with that permission.
- (2) The Authority may refuse any application for permission to operate a rocket and may otherwise prohibit such an operation if it appears that it would be inexpedient in the interest of aviation safety to allow that operation to proceed.

Revocation, Limitation, and Suspension of Permissions, Exemptions and Authorisations

- 9.** (1) The Authority may:
- (a) revoke, limit, or suspend any permission, authorisation or exemption issued under this Order; and
 - (b) cause such investigations or inspections as it considers appropriate to be made in respect of an incident or other occurrence which caused or could have caused a hazardous effect on the operation of an aircraft or in contravention of the provisions of this Order, and may, for the purposes of such investigation or inspection, detain an aircraft, remove and detain any aircraft equipment, take copies of or extracts from any documents or records (including the records in any electronic flight data), have access to any place or premises and obtain from any person such information as may reasonably be required; and
 - (c) authorise, permit or delegate a person, persons, an organisation or organisations to inspect such manuals, procedures, operations or proficiencies it considers necessary for the safe operation of an unmanned aircraft or the issue of a specific aerial work permission.

Power to Prevent Aircraft Flying

- 10.** If it appears to the Authority or to an authorised officer of the company that a small unmanned aircraft is intended to be or is likely to be flown from any place within the State and that there would be a contravention of any provision of this Order or a contravention of the Act or any Orders or Directions thereunder if that aircraft were to be so flown, the Authority or an authorised officer of the company may direct the registered owner, the pilot in command or the operator of that aircraft or the person designated by the registered owner or operator thereof to act as pilot in command of that aircraft or any other person acting or purporting to act as pilot-in-command of that aircraft, with or without the permission of the registered owner or the legitimate operator of that aircraft, that he or she is not to permit or cause the aircraft to make the flight and the Authority or an authorised officer of the company may take such steps as are necessary to detain that aircraft at a suitable location.