### CHAPTER 9 OPERATIONS OF RPA IN PRESCRIBED AREAS

## Division 9.1 RPAS operations at or near non-controlled aerodromes

#### 9.01 Prescribed areas

- (1) For regulation 101.066 of CASR, this Division prescribes the requirements relating to the operation of an RPA or a model aircraft in a prescribed area.
- (2) For subsection (1), the no-fly zone of a non-controlled aerodrome is a prescribed area for this Division.

### 9.02 Definitions

In this Division:

area that is shaded black has the same meaning as in section 9.06.

area that is shaded grey has the same meaning as in section 9.06.

defined unmanned aircraft means any of the following:

- (b) an unmanned aircraft operated in accordance with an authorisation (however called) or exemption, granted under CASR, that permits operation of the aircraft within the no-fly zone of a non-controlled aerodrome during a relevant event;
- (c) an unmanned aircraft operated in accordance with an approval of an approved area under regulation 101.030 of CASR.

no-fly zone of an HLS means the area and airspace that is a cylinder:

- (a) whose centre is the centre of the HLS; and
- (b) which has a radius of 0.75 NM; and
- (c) which has a vertical height of 400 ft.

no-fly zone of a non-controlled aerodrome means any areas and airspace that are:

- (a) within 3 NM, in any direction, from the measurement point of any runway of the non-controlled aerodrome; or
- (b) within the approach and departure paths referred to in section 9.06, whether or not they extend beyond 3 NM, in any direction, from the measurement point of any runway of the non-controlled aerodrome.

*Note* If the runway is a grass landing strip, the threshold centrepoint of the runway is the point on the threshold of the runway at which the notional centreline of the runway would intersect the threshold

relevant airspace means each of the following:

- (a) the no-fly zone of a non-controlled aerodrome;
- (b) the no-fly zone of an HLS.

**relevant event** means that a manned aircraft is within relevant airspace, including when the aircraft is in the course of approaching, landing at, taking off from, or manoeuvring on the movement area of, the aerodrome.

### 9.02A Meaning of to become aware

In sections 9.03 and 9.04, to become aware that a relevant event is occurring, or is about to occur, is taken to mean the state of awareness that a reasonable person would have, in all the circumstances, that the relevant event was occurring, or was about to occur.

## 9.03 RPA flight in the no-fly zone of a non-controlled aerodrome

- (1) A person may fly an RPA or a model aircraft, or conduct RPA operations, in relevant airspace provided that:
  - (a) the flight or operation does not occur during a relevant event; and
  - (b) if, during the flight or operation, the person becomes aware that a relevant event is occurring, or is about to occur the person complies with section 9.04.

*Note* A remote pilot with a relevant radio qualification should monitor the aerodrome radio frequency and communicate with manned aircraft using the aerodrome frequency.

- (2) Despite subsection (1), a certified RPA operator may conduct RPA operations in relevant airspace during a relevant event, but only if the RPA operation is exclusively:
  - (a) an indoors operation; or
  - (b) a tethered operation in accordance with section 9.05; or
  - (c) an operation using a defined unmanned aircraft; or
  - (d) an operation using a micro RPA.

*Note* A person must not operate an unmanned aircraft in such a manner as to create an obstruction to an aircraft taking off from, or approaching for landing at, a landing area or a runway of an aerodrome – see subregulation 101.075 (4) of CASR.

- (3) Despite subsection (1), a person may fly an RPA or model aircraft in relevant airspace during a relevant event, but only if the flight is:
  - (a) an indoors operation; or
  - (b) both:
    - (i) the operation of a micro RPA, or a model aircraft that has a gross weight of not more than 250 g; and
    - (ii) outside the movement area, and the approach and departure paths referred to in section 9.06; or
  - (c) an operation using a defined unmanned aircraft.

Note See also regulation 101.075 of CASR for offences in relation to operations near aerodromes.

### 9.04 Action on becoming aware of a relevant event

- (1) If the person who is flying an RPA or model aircraft within relevant airspace becomes aware that a relevant event is occurring, or is about to occur, the person must:
  - (a) if the RPA or model aircraft is airborne:
    - (i) act immediately to ensure that the RPA or model aircraft is safely manoeuvred away from the path of the manned aircraft; and
    - (ii) land the RPA or model aircraft as soon as safely possible; or
  - (b) if the RPA or model aircraft is on the ground, on water, or on any object or structure on the ground or water not launch the unmanned aircraft.
- (2) To avoid doubt, this section does not apply to an operation mentioned in subsection 9.03 (2) or (3).

# 9.05 Approval to operate an RPA in a no-fly zone of a non-controlled aerodrome — tethered operations

- (3) For a tethered operation in the no-fly zone of a non-controlled aerodrome, the certified RPA operator must:
  - (a) use a tether that is no longer than 150 ft; and

- (b) ensure that the RPA is not operated higher than 150 ft above the aerodrome elevation; and
  - *Note* The aerodrome elevation can be determined from the aerodrome obstacle limitation data (OLS data).
- (c) conduct the tethered operation in accordance with the operator's documented practices and procedures for operations under this Division; and
- (d) ensure that:
  - (i) the RPA is flown within the area that is shaded grey for the non-controlled aerodrome; or
  - (ii) if the RPA is flown within the area that is shaded black for the non-controlled aerodrome, the RPA is not flown within 3 NM from the measurement point of any runway of the non-controlled aerodrome.
- (4) For paragraph (2) (b), the requirements for the no-fly zone of an HLS are as follows:
  - (a) the tether must be no longer than 150 ft;
  - (b) the RPA must always be at least 465 m from the central axis of the no-fly zone of the HLS;
  - (c) the RPA flight must be conducted within VLOS;
  - (d) the RPA flight must be conducted in accordance with the certified RPA operator's documented practices and procedures for operations under this Division.

## 9.06 Approach and departure paths — non-controlled aerodromes

(1) Figure 9.06 (1)-1 shows the approach and departure paths of a non-controlled aerodrome.

*Note* Figure 9.06 (1)-2 illustrates a cross-runways scenario to which the requirements in this Division apply in the same way as for a single runway. Application of the requirements does not affect the black-shaded areas but produces overlapping grey-shaded areas, and what would otherwise be a grey-shaded area becomes a black-shaded area because of the intersection of the runways.

- (2) As shown in Figure 9.06 (1)-1, the approach and departure path is up to 400 ft, as follows:
  - (a) anywhere on or from the ground upwards in the area that is the runway or the runway strip;
  - (b) anywhere in the following areas which are the approach and departure paths for the non-controlled aerodrome:
    - (i) on or from the ground upwards in the area that is shaded black to a distance of 7 km from the end of the runway strip;
    - (ii) anywhere from 150 ft (45 m) above the ground (referenced to the aerodrome elevation) in the area that is shaded grey.
- (3) The area that is shaded black, which shows the approach and departure paths and the ground below them, is described as comprising the following:
  - (a) a symmetrical trapezoids with the shorter side coincident with the ends of a nominal 100 m wide runway strip and extending out at an angle of 15 degrees on either side to a distance of 7 km:
  - (b) a rectangle extending 500 m on either side of the runway centreline and overlying the runway strip until it intersects the trapezoids of the approach and departure paths.
- (4) The area that is shaded grey is an area that extends 3 NM in all directions from the measurement point.

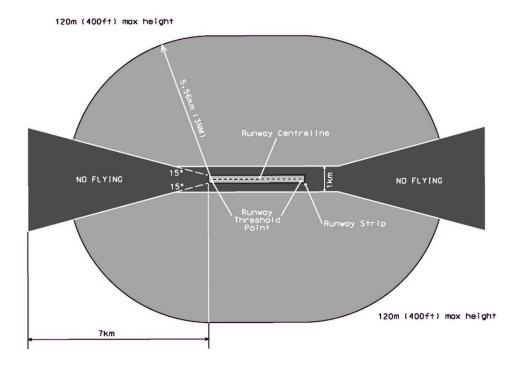


Figure 9.06 (1)-1 Non-controlled aerodromes approach and departure paths (shows matters, but shape only illustrates matters)

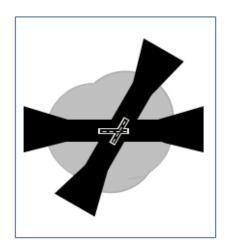


Figure 9.06 (1)-2: Intersecting runways (illustrates matters)

## CHAPTER 9 OPERATIONS OF RPA IN PRESCRIBED AREAS

Division 9.2 RESERVED

## CHAPTER 10 RECORD KEEPING FOR CERTAIN RPA AND MODEL AIRCRAFT

## **Division 10.1** Preliminary

## 10.01 Definitions for the Chapter

In this Chapter:

*configuration* of an RPA mentioned in this Chapter is comprised of the particular RPA's airframe, engines and motors, and all of the flight control system hardware for the RPA.

*Note* The configuration of an RPA for its *unique identification mark* does not include propellers, rotors or batteries.

*medium excluded RPA* means an RPA within the meaning of subregulation 101.237 (7) of CASR.

*Note* A medium RPA (that is not an airship) has a gross weight of at least 25 kg but less than 150 kg.

*operation*, for an RPA, means a single flight of the RPA, or a series of similar or related flights of the RPA on the same day.

record includes an electronic record but only when:

- (a) the electronic record is created in a form that makes the record unalterable after the record has been made; and
- (b) if an erroneous electronic record is created the correction of the electronic record is in the form of an electronic record which identifies the error and corrects it.

**small excluded RPA** means an RPA within the meaning of subregulation 101.237 (4) of CASR.

Note A small RPA has a gross weight of at least 2 kg but less than 25 kg.

*unique identification mark*, for an RPAS for an RPA mentioned in this Chapter, is the number (and letters, if any) that the certified RPA operator or other operator, as the case may be, ascribes to each configuration of the RPA that the particular operator operates.