CHAPTER 4 OPERATIONS IN CONTROLLED AIRSPACE — CONTROLLED AERODROMES

4.01 Purpose

For subsection 101.072 (1) of CASR, this Chapter prescribes the requirements relating to the operation in controlled airspace, below 400 ft, of an unmanned aircraft.

Note Any operation above 400 ft within 3 NM of an aerodrome, would be subject to the restrictions and permission requirements under regulations 101.070 and 101.075.

4.02 Definitions

In this Chapter:

area that is crosshatched has the same meaning as in section 4.05.

area that is shaded black has the same meaning as in section 4.05.

area that is shaded grey has the same meaning as in section 4.05.

defined unmanned aircraft means an unmanned aircraft operated in accordance with:

- (a) an approval of an approved area under regulation 101.030 of CASR; or
- (b) a permission mentioned in regulation 101.075 that permits operation of the aircraft within the no-fly zone of a controlled aerodrome.

no-fly zone of a controlled aerodrome means any areas and airspace that are below 400 ft and:

- (a) within 3 NM, in any direction, from the measurement point of any runway of a controlled aerodrome; or
- (b) within the approach and departure paths referred to in section 4.05, whether or not they extend beyond 3 NM, in any direction, from the measurement point of any runway of the controlled aerodrome.

RPA, for the purposes of this Chapter, means an RPA that is not a defined unmanned aircraft.

4.03 RPA flight in the no-fly zone of a controlled aerodrome

- (1) Subject to this section, a person must not:
 - (a) conduct RPA operations; or
 - (b) fly an RPA;

in the no-fly zone of a controlled aerodrome.

- (2) A person who is:
 - (a) a certified RPA operator: or
 - (b) the remote pilot of a certified RPA operator;

may conduct, or fly as the remote pilot in, an RPA operation in the no-fly zone of a controlled aerodrome if the operation is a tethered operation in accordance with section 4.04.

- (3) A person may fly an RPA in the no-fly zone of a controlled aerodrome if the flight is exclusively an indoors operation.
- (4) A person may fly a micro RPA in the no-fly zone of a controlled aerodrome PROVIDED the aircraft does not enter:
 - (a) an approach and departure path described in paragraph (b) of the definition of *no-fly zone of a controlled aerodrome*; or

(b) any area within the aerodrome boundary.

- (5) A person must not fly a model aircraft that has a gross weight of more than 250 g in the no-fly zone of a controlled aerodrome.
- (6) A person may fly a model aircraft that has a gross weight of no more than 250 g in the no-fly zone of a controlled aerodrome PROVIDED the aircraft does not enter:
 - (a) an approach and departure path described in paragraph (b) of the definition of *no-fly zone of a controlled aerodrome*; or
 - (b) any area within the aerodrome boundary.
- (7) A person may fly a defined unmanned aircraft in the no-fly zone of a controlled aerodrome.

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

- (3) For a tethered operation in the no-fly zone of a 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 Chapter; and
- (d) notify ATC before the RPA takes off; and
- (e) ensure that the RPA is flown in accordance with any instructions issued by ATC; and
- (f) ensure that:
 - (i) the RPA is flown within the area that is shaded grey for the controlled aerodrome; or
 - (ii) if the RPA is flown within the area that is shaded black for the controlled aerodrome, the RPA is not flown within 3 NM from the measurement point of any runway of the controlled aerodrome.

Note The designation of controlled aerodromes and controlled airspace is made in the *Determination* of airspace and controlled aerodromes etc., as in force from time to time. This is a legislative instrument revised and reissued by CASA approximately every 6 months. Controlled aerodrome information in the Determination in force at any particular time is also published by Airservices Australia in the *Designated Airspace Handbook*.

4.05 Approach and departure paths — controlled aerodromes

- (1) Figure 4.05 (1)-1 shows the approach and departure paths of a controlled aerodrome. *Note* Figure 4.05 (1)-2 illustrates 1 example of a multi-runway scenario to which the requirements in this Chapter 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 4.05 (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 controlled aerodrome:
 - (i) subject to subparagraph (ii) 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 300 ft (90 m) above the ground (referenced to the aerodrome elevation) in the area that is between 7 km and 8.5 km from the end of the runway strip (the *area that is crosshatched*);
- (c) 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 8.5 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 4.05 (1)-1: Controlled aerodromes — approach and departure paths (shows matters, but shape only illustrates matters)



Figure 4.05 (1)-2: Intersecting runways (illustrates matters)