CHAPTER 4 OPERATIONS IN CONTROLLED AIRSPACE

Division 4.1 Operation of unmanned aircraft at controlled aerodromes

4.01 Purpose

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

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 Definition

In this Division:

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

(a) within 3 NM of the movement area of a controlled aerodrome; and

(b) the approach and departure paths referred to in section 4.05, whether or not they extend beyond 3 NM of the movement area of the controlled aerodrome.

unmanned aircraft to which this Division applies has the meaning derived from section 4.03.

4.03 Application of prescribed requirements relating to the operation of RPA below 400 ft in controlled airspace

(1) Subject to subsections (2) and (3), this Division applies to:

(a) an RPA;

(b) a model aircraft.;

(2) This Division does not apply to a micro RPA, a tethered balloon or kite, an unmanned free balloon, a rocket or fireworks.

Note The operation of these aircraft and rockets is governed by particular provisions in Part 101 of CASR.

(3) This Division does not apply to the operation of an unmanned aircraft in accordance with any of the following:

(a) an authorisation (however called) or exemption, granted under CASR, that permits operation of the aircraft within 3 NM of the movement area of a controlled aerodrome;

(b) the approval of an approved area under regulation 101.030 of CASR;

(c) if the unmanned aircraft is an RPA operated by the holder of a remote pilot licence — the privileges and limitations of:

(i) the licence; and

(ii) the certification of the RPA operator conducting the operation.

(d) if the unmanned aircraft is an RPA that is operated by an RPA operator:

(i) within 3 NM of the movement area of the controlled aerodrome but outside the aerodrome approach and departure paths; and

(ii) in accordance with the permission of ATC.

Note An RPA operator means a person who is certified as an RPA operator in accordance with regulation 101.335 of CASR. See the definitions in subsection 1.03 (2).

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

(1) Subject to the requirements in subsection (2), a person is approved to operate an unmanned aircraft to which this Division applies in a no-fly zone of a controlled aerodrome.

(2) For subsection (1), the requirements are that the unmanned aircraft must:

(a) be operated exclusively inside a building whose structure at the time of the operation makes it impossible for the RPA to escape and fly away; or

(b) be tethered, on a lead that is no longer than x ft, in such a way that is impossible for it to escape and fly away in normal, abnormal or emergency operations.

(3) For paragraph (2) (b), x ft is the distance in feet from the point on the ground at which the tether is attached to the ground, to the maximum height permitted by ATC for the unmanned aircraft to operate.

Note 1 Controlled aerodromes are in controlled airspace and have instrument approach procedures.

Note 2 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) For paragraph 4.01 (1) (b), Figure 4.03 (1)-1 shows the approach and departure paths of a controlled aerodrome.

Note 1 Figure 4.05 (1)-2 also illustrates a cross-section of part of Figure 4.05 (1).

Note 2 Figure 4.05 (1)-3 illustrates one example of a multi-runway 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 4.05 (1), the no-fly zone 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:

(A) to a distance of 7 km from the end of the runway strip; and

(B) to a width that is initially 1 km until the splay exceeds 1 km, and then to the width of the splay up to 3.85 km;

(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, with an initial splay width of 3.85 km and a final splay width of 4.65 km;

(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 follows:

(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, the width of the splay at that distance being no greater than 3.85 km); and

(b) a rectangle extending 500 metres on either side of the runway centreline and overlying the runway strip until it intersects the trapezoids at a distance of approximately 1.68 km from the end of the runway strip.

(4) The area that is shaded grey is described as the racetrack shape comprised of 2 semi-circles each:

(a) with a radius of 4 km from the point on the centreline at each end of the runway in the direction of the closest threshold (***point 1***); and

(b) ending at the point that is perpendicular to point 1; and

(c) extending in lines parallel to the centreline until the lines extended from 1 semi - circle meet the lines extended from the other semi-circle.

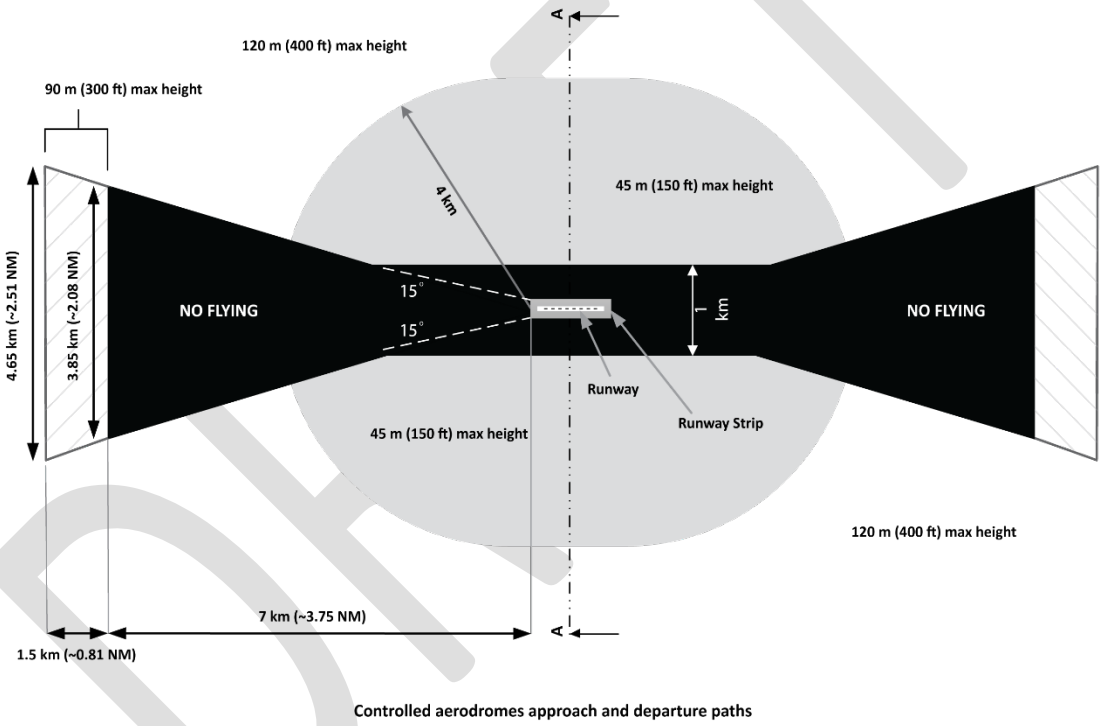
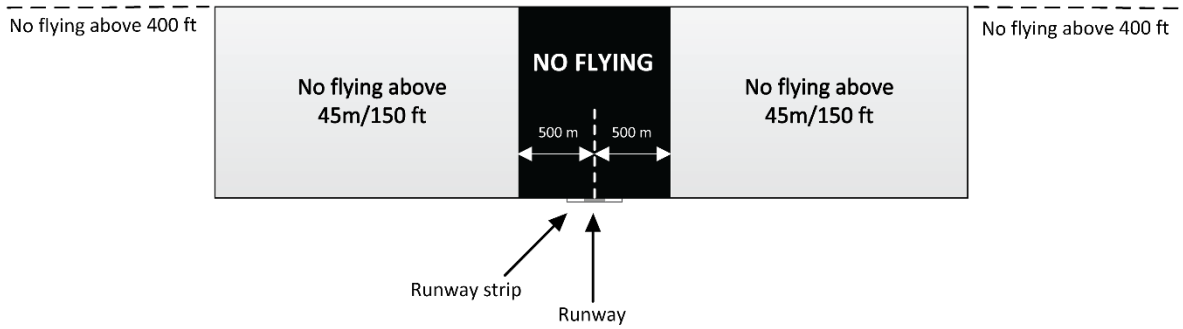


Figure 4.05 (1)-1: Controlled aerodromes approach and departure paths (shows matters)

Note The diagram is not to scale.



Section through A-A

Figure 4.05 (1)-2: Controlled aerodromes approach and departure paths cross section (illustrates matters)

Note The diagram is not to scale.

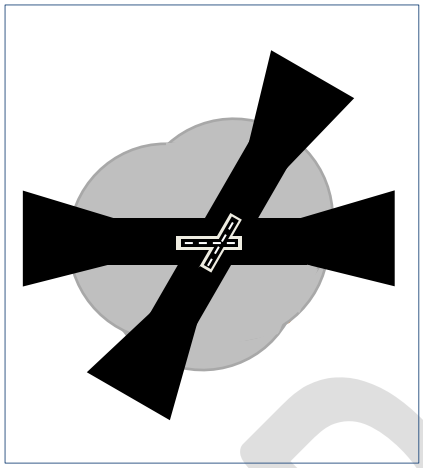


Figure 4.05 (1)-3: Intersecting runways (illustrates matters)