



# RPAS Platform

## Operating Rules

---

**Version**

2.1

**Date**

March 2021

## Revision History

Version	Date	Change description
1.0	November 2019	Initial release
1.5	September 2020	Updated emergency services data feeds
2.0	October 2020	Addition of airspace authorisations rules and data sources
2.1	March 2021	Provisional airspace authorisations content for onboarding release

## Related Documents

Documents	Available at
<p><b>The rules</b></p> <p>Civil Aviation Safety Regulations 1998 (CASR) Part 101 – Unmanned aircraft and rockets</p> <p>Part 101 (Unmanned Aircraft and Rockets) Manual of Standards 2019</p> <p>CASA 55/20 – Operation of Certain Unmanned Aircraft Directions 2020</p>	<p><a href="https://www.casa.gov.au/drones/documents-and-forms">https://www.casa.gov.au/drones/documents-and-forms</a></p>
<p><b>RPAS Platform onboarding documents</b></p> <p>RPAS Platform Concept of Operations</p> <p>RPAS Platform Test Procedure</p> <p>RPAS Platform Terms and Conditions</p> <p>RPAS Platform Application Form</p>	<p><a href="https://www.casa.gov.au/drones/industry-initiatives/digital-platform">https://www.casa.gov.au/drones/industry-initiatives/digital-platform</a></p>

## Contents

<b>Introduction</b> .....	<b>5</b>
1. Purpose .....	5
2. Overview .....	5
3. Prefixes .....	5
<b>Required Content</b> .....	<b>6</b>
4. Privacy Policy .....	6
5. Disclaimer .....	6
6. CASA Notifications .....	6
7. Reporting Unsafe Drone Operations.....	6
<b>Authoritative Data</b> .....	<b>7</b>
8. Data Sources .....	7
9. Airspace Data .....	7
10. Applying Data to Operating Rules.....	7
<b>Airspace Authorisations</b> .....	<b>12</b>
11. Overview .....	12
12. Required Content.....	12
13. Functional Rules .....	15
14. Performance Rules .....	16
<b>Attachment A – Authoritative Data</b> .....	<b>17</b>
<b>Attachment B – Electricity Transmission Lines</b> .....	<b>22</b>
<b>Attachment C – Definition of movement area</b> .....	<b>23</b>



## Introduction

### 1. Purpose

- 1.1 The purpose of this document is to define the criteria a compliant software application must achieve to be onboarded to the RPAS Platform.
- 1.2 The operating rules detailed in this document will be tested against an *RPAS Platform Test Procedure*. Software providers must demonstrate their application meets these test activities to become approved for connection to the RPAS Platform.
- 1.3 This document should be read in conjunction with the *RPAS Platform Concept of Operations* and *RPAS Platform Example Test Procedure* documents.

### 2. Overview

- 2.1 The operating rules are the rules that each software provider is required to follow. The rules identified here define the minimum behaviour of the application. Further processes, features, and capabilities are up to each software provider to determine as they develop their unique service offerings.
- 2.2 Operating rules set out in this document are aligned with the three categories of drone operations in Australia:
  - *recreational (model aircraft)* - predominantly drone users flying for fun
  - *excluded RPA* - operations flying RPA commercially (weighing more than 250 g up to 2 kg) or flying over their own land (weighing more than 250 g up to 25 kg), complying with standard operating conditions
  - *ReOC* - commercial operations conducted by organisations who hold an operators certificate issued by CASA
- 2.3 In the following operating rules:
  - (a) **shall** means the functionality must be demonstrated during the approval process,
  - (b) **may** means the functionality is suggested by CASA but not mandatory.

### 3. Prefixes

- 3.1 Each operating rule is assigned an identifier enclosed by brackets and comprised of a grouping prefix and a number. For example, [UAA0005], [HBY0025].
- 3.2 This document uses the following prefixes:
  - UAA - User Accounts, Access and Disclaimer
  - ASD - Airspace Data
  - AD - Additional Data
  - HBY - Recreational
  - CEX - Commercial Excluded Operation
  - ReOC - Commercial Included Operation
  - AA - Airspace Authorisations
- 3.3 Additional prefixes may be added as needed. Rule numbers are deliberately incremented by 5 to support future rule insertion. Restatements and clarifications of rules are not given a new identifier.

## Required Content

The following requirements are mandatory and must be applied by all approved applications, regardless of the RPAS Platform functions being delivered.

### 4. Privacy Policy

- 4.1 The application **shall** have a published privacy policy and abide by the Australian Privacy Principles [UAA0015].

### 5. Disclaimer

- 5.1 The application **shall** include the following CASA-provided disclaimer [UAA0020]:

Displayed to the user:

“The information provided is not for use in air navigation in Australia”

In Terms of Service:

“Airspace information related to Australia is not approved under Australian Civil Aviation Safety Regulation Part 175 (CASR Part 175), is advisory only, and is not to be used for the purpose of air navigation.”

### 6. CASA Notifications

- 6.1 The application **shall** display notifications provided by CASA for the applicable time range and filter by type of RPA operator [UAA0030].

### 7. Reporting Unsafe Drone Operations

- 7.1 The application **shall** include a reference to CASA’s *Report Unsafe Drone Operations* webpage (<https://www.casa.gov.au/drones/report-unsafe-drone-operations>) [UAA0040].

## Authoritative Data

### 8. Data Sources

- 8.1 Some operating rules require an underlying data source. The operating rules identify the authoritative data that **shall** be used by compliant implementations.
- 8.2 Some data sources are provided through the RPAS Platform via API. Other data is to be directly sourced from the data custodian.
- 8.3 There are two categories of data: airspace data and additional data. For each category, the data type, the authoritative source, the minimum refresh rate and the associated operating rule/s are provided in **Attachment A**.
- 8.4 In some cases data must be retrieved with authentication by a central service.

### 9. Airspace Data

- 9.1 Authoritative airspace data is identified in **Attachment A**.
- 9.2 Airspace data originates from Airservices Australia (ASA). Software Providers will need to source this data directly from Airservices Australia. There is a cost for accessing this data.

### 10. Applying Data to Operating Rules

- 10.1 Subsections are provided in the operating rules for each of the three types of RPAS operations: recreational, excluded RPA, and ReOC. Each section contains a table with the rules unique to that operation type and the responsibilities of a compliant Software Provider implementation. For each rule, the authoritative data source is provided, and the Software Provider's responsibility is described.
- 10.2 There are 3 ways in which authoritative data can be applied:
  - Block:** this implies that the intended flight should be not allowed, for a variety of potential reasons (e.g. altitude exceeds limit, flight in restricted airspace). In the context of a user planning a flight, Block indicates the flight plan cannot be accepted; if simply viewing information, the user should be informed of applicable rules.
  - Advise:** this implies that information should be highlighted to the user but does not currently represent a restriction on the intended flight.
  - No Action:** this applies to rules with which the operator must comply independent of the application. For example, a Software Provider cannot practically know if a flight is over people. The operator is required to comply with the rule, but no specific requirement is levied on the Software Provider to assist the operator.

10.3 Operating rules are aligned with the three categories of drone operations in Australia, and these **shall** be applied according to these categories:

**Recreational (Model Aircraft)**

Guidance material:

- CASA’s Know Your Drone website at <https://www.casa.gov.au/knowyourdrone>

Rule	Description	Data Source	Application
[HBY0005]	You must not fly your drone higher than 400 ft above the ground	N/A	Block
[HBY0010]	You must not operate your drone in prohibited or restricted areas, including temporary restricted or prohibited airspace.	[ASD0015] [ASD0005] [ASD0010]	Block If NAIPS subscription is not available, RA3 should be Block, RA1,2 should be Advise.
[HBY005]	You must not fly your drone over or near an area affecting public safety or where emergency operations are underway (without prior approval). This could include situations such as a car crash, police operations, a fire and associated firefighting efforts, and search and rescue operations.	[AD0005]	Block
[HBY0030]	You must keep your drone at least 3 NM away from controlled aerodromes (usually those with a control tower)	[ASD0025] [ASD0030]	Block
[HBY0035]	You may fly within 3 NM of a non-controlled aerodrome or helicopter landing site (HLS) only if manned aircraft are not operating to or from the aerodrome. If you become aware of manned aircraft operating to or from the aerodrome/ HLS, you must manoeuvre away from the aircraft and land as soon as safely possible. This includes: <ul style="list-style-type: none"> <li>• not operating your drone within the airfield boundary (*without approval)</li> <li>• not operating your drone in the approach and departure paths of the aerodrome (*without approval)</li> </ul>	[ASD0035] [ASD0030]	Advise <b>Note:</b> An application <b>may</b> show approach and departure paths for non-controlled aerodromes
[HBY0040]	Provide additional awareness of danger areas	[ASD0020]	Advise (text provided in danger area)
[HBY0045]	Provide additional awareness of risks (electricity lines)	[AD0010]	Advise
[HBY0050]	You must only fly during the day	Known sunrise and sunset calculation	Block

Rule	Description	Data Source	Application
[HBY0070]	CASA Advisories - CASA-generated airspace activation data to inform RPA users of locations where it may be unsafe or unlawful to operate a RPA for a specified period, and where those locations are not otherwise identified in an authoritative data source.	[ASD0050]	Block if "Block" is designated for this type of operator Advise if "Advise" is designated for this type of operator If "None" the advisory should not be displayed for this type of operator.
[HBY0075]	Marine Parks below 500ft AGL	[AD0015]	Block
[HBY0080]	You must be more than 3 NM away from the Helicopter Landing Site when it has an instrument approach	[AD0055]	Block

**Excluded RPA Operations**

Guidance material:

- CASA’s website at <https://www.casa.gov.au/drones/rules/sub2kg>
- Micro and Excluded Category RPA Plain English Guide available at: <https://www.casa.gov.au/publications-and-resources/publication/plain-english-guide-micro-and-excluded-rpa-operations>

Operating rules for Commercial Excluded Operations are the same as Recreational. The rule IDs for these operations are identical to Recreational but use the prefix [CEX].

**ReOC Operations**

Guidance material:

- CASA’s website at <https://www.casa.gov.au/drones/repl> and <https://www.casa.gov.au/drones/reoc>

The ReOC operates under a certificate provided by CASA and therefore can operate outside the Standard Operating Conditions, these rules err on the side of Advise rather than Block. Where applicable, Software Providers may create specific rules based on a ReOC authorisation in addition to the required rules below.

Rule	Description	Data Source	Application
[ReOC0005]	You must not fly your drone higher than 400 ft above the ground	N/A	Advise
[ReOC0010]	You must not fly your drone over or near an area affecting public safety or where emergency operations are underway (without prior approval)	[AD0005]	Advise
[ReOC0015]	You must only fly during the day	Known sunrise and sunset calculation	Advise (can fly at night with CASA Instrument 01/17)

## RPAS Platform Operating Rules

Rule	Description	Data Source	Application
[ReOC0020]	You must not operate your drone in prohibited or restricted areas without authorisation.	[ASD0015] [ASD0005] [ASD0010]	Advise If NAIPS subscription is not available, RA1,2,3 should be considered Advise. It is recommended to point to <a href="#">AirServices Restricted Area Briefing</a>
[ReOC0025]	You must keep your drone at least 3 NM away from controlled aerodromes (usually those with a control tower) Must have a CASA approval	[ASD0025] [ASD0030]	Advise
[ReOC0026]	You must not operate your drone within the 'no flying' areas of the approach and departure paths of a controlled aerodrome with an active GCD. <b>(Note:</b> this rule only applies where an application provides airspace authorisations)	[ASD0030]	Block The 'no flying' areas are as defined in section 4 of the <a href="#">Manual of Standards</a>
[ReOC0030]	You may fly within 3 NM of a non-controlled aerodrome or helicopter landing site (HLS) only if manned aircraft are not operating to or from the aerodrome. If you become aware of manned aircraft operating to or from the aerodrome/ HLS, you must manoeuvre away from the aircraft and land as soon as safely possible. This includes: <ul style="list-style-type: none"> <li>● not operating your drone within the airfield boundary (*without approval)</li> <li>● not operating your drone in the approach and departure paths of the aerodrome (*without approval)</li> </ul>	[ASD0035] [ASD0030]	Advise <b>Note:</b> An application <b>may</b> show approach and departure paths for non-controlled aerodromes
[ReOC0035]	Marine Parks below 500ft AGL	[AD0015]	Advise
[ReOC0040]	Danger Areas	[ASD0020]	Advise
[ReOC0045]	CASA Advisories - CASA-generated airspace activation data to inform RPA users of locations where it may be unsafe or unlawful to operate a RPA for a specified period, and where those locations are not otherwise identified in an authoritative data source.	[ASD0050]	Block if "Block" is designated for this type of operator Advise if "Advise" is designated for this type of operator If "None" the advisory should not be displayed for this type of operator.
[ReOC0050]	You must be more than 3 NM from the HLS when it has an instrument approach	[AD0055]	Advise

## RPAS Platform Operating Rules

Rule	Description	Data Source	Application
[ReOC0055]	Provide additional awareness of risks (electricity lines)	[AD0010]	Advise

## Airspace Authorisations

### 11. Overview

- 11.1 The standard RPA operating conditions exclude RPA operations within 3 nautical miles (3 NM) of the movement area of controlled aerodromes. Under certain conditions, a drone operator may fly within one of these areas if they have CASA approval before the start of their flight.
- 11.2 The Airspace Authorisations function allows RPA operators to submit a request to operate within 3 NM of a controlled aerodrome using a third-party application. Requests that meet pre-determined criteria may be granted through the third-party application.
- 11.3 Third-party applications must demonstrate compliance with the RPAS Platform operating rules and complete a checkout before they will be verified by CASA to provide this functionality.
- 11.4 The primary method to assess whether an RPA airspace authorisation can be granted is known as the Grid Cell Definition (GCD). GCDs are maps of airspace within 3 NM of a controlled aerodrome, which indicate areas and heights that RPA operations can operate based on local terrain, infrastructure and anticipated air traffic volumes. GCDs are similar to the FAA's Facility Maps which indicate maximum operation heights as a grid of cells.
- 11.5 GCD files are available for download via the RPAS platform [AD0025] to verified third-party applications. Requests that comply with the appropriate GCD for that aerodrome location and that meet the airspace authorisation operating rules are notified to the RPAS Platform via the RPAS Platform Third-party (3P) API.
- 11.6 The following section defines the criteria that a compliant software application must achieve to be onboarded to process airspace authorisation requests in the RPAS Platform.
- 11.7 The airspace authorisations function will follow a crawl, walk, run approach – with the rules expected to evolve as this function matures. The initial trial for airspace authorisations is provided at three controlled aerodromes with participating Chief Remote Pilots (CRPs) of ReOC operators approved by CASA. This initial trial of airspace authorisations is not intended for the general public. CASA expects additional compliance requirements to be added over time, which may include increased information security requirements such as ISO27001 compliance.

---

**NOTE:** The following airspace authorisation rules are provided as draft requirements and may be updated by CASA following the initial trial. The final requirements are not expected to differ significantly from what is provided below. CASA will publish finalised operating rules when these become available.

### 12. Required Content

- 12.1 The application **shall** display the following authorisation text to the user after the airspace authorisation has been confirmed with a digital response from the CASA RPAS Platform API [AA0051]. Text enclosed by brackets [ ] indicates dynamic content corresponding to the declaration API schema.
  - For the purposes of CASA Instrument [CASA XX/21] this airspace authorisation [id] is issued to ReOC [operator\_number] on [create\_date/time].

- The operator is authorised to fly remotely piloted aircraft [uas\_serial\_numbers] in the approved area subject to the following.
- The operator is authorised to operate the RPA in the operating area in the approved area on [start\_time – displayed as the start date in local time] from [start\_time – displayed as the start time in local time] until [start\_time + duration – displayed as the end time in local time].

12.2 The application **shall** display the following conditions of approval [AA0051] to the user.

**“Conditions**

1. The operator must confirm reliable VHF coverage exists in the operating area and maintain a listening watch on the appropriate Air Traffic Control (ATC) frequency from 15 minutes before the flight until the RPA has landed
2. An "escape" event where the RPA is not under control of the remote pilot must be notified to ATC immediately
3. The RPA operator must not transmit on the ATC frequency unless directed to by ATC or where an “escape” event has occurred
4. If directed by ATC, the RPA must land immediately and advise ATC when the RPA is on the ground
5. If loss of data link occurs the RPA must be constrained to the approved area and the operator must advise ATC and report when the RPA is on the ground
6. If it is impossible for the operator to comply with a provision of their Operations Manual and a condition in this approval, the operator must comply with the condition in this approval
7. If it is impossible for the operator to comply with a provision of their Operations Manual and a condition in this Schedule, the operator must comply with the condition in this Schedule
8. This approval is subject to cancellation at any time by CASA”

12.3 The application **shall** include a graphical depiction of the approved operating area including height limitation/s that is clearly labelled as ‘**Operating Area**’ [AA0051]. Where the original request falls partly outside the GCD area, this must be displayed either as an area trimmed to the GCD or clearly indicate that the authorisation applies only to the portion of the operation within the GCD area.

12.4 The application **shall** include the following declaration [AA0052]:

- I am authorised to make this application and hold the role of Chief Remote Pilot for this ReOC.
- I acknowledge I must not submit an airspace authorisation application for an RPA with a maximum take-off weight of 25 kg or more.
- I declare that all statements in this application are true and correct in every particular and that I have read and understood all provisions of the Civil Aviation Safety Regulations 1998 which are relevant to this application.

12.5 The application **shall** display the following text when a user requests access to the Airspace Authorisation functionality [AA0050]:

“Thank you for agreeing to participate in a trial enabling [insert name of Third Party Application] (“the app”) to process requests to operate RPAS in CASA

approved areas (airspace authorisation requests). During the trial, you will be able to submit airspace authorisation requests through the app. When you do, CASA will need to share some of your personal information with [insert name of Third Party Application provider] (“us” or “we”) and Airservices Australia so your identity can be verified. This information will include the aviation reference number (ARN) and remotely piloted operator certificate (ReOC) number CASA has issued you. Neither we nor Airservices Australia will use this information for any other purpose. We will protect your personal information in accordance with our privacy policy [insert link to app developer privacy policy]. For information about how Airservices Australia may handle your personal information, refer to its [privacy policy](#).

Please click the boxes below to indicate your consent to your personal information being used in this way. Without this consent, we will be unable to process any airspace authorisation request you may make.

- I consent to CASA sharing my ARN, ReOC number and other relevant personal information with you and Airservices Australia for the purpose of verifying my identity during the trial.
- If I have opted-in to the trial on behalf of an organisation I work for, I confirm I am authorised by the organisation to provide its ARN, ReOC number and other company identifiers for that purpose during the trial.”

- 12.6 The application **shall** only grant access to airspace authorisation functionality after the Chief Remote Pilot has been verified by CASA according to the method specified by CASA. [AA0050].

### 13. Functional Rules

Rule	Description
[AA0005]	The Third Party Application must conform with the mandatory elements of the RPAS Platform 3P API.
[AA0010]	The Third Party Application must identify to the user areas where GCD cells apply.
[AA0015]	The Third Party Application must only submit RPAS Operation requests that fall completely within GCD areas. The Third Party Application must trim a request that partly falls outside the GCD area, and submit the portion to the RPAS Platform that is completely within the GCD area.
[AA0020]	The Third Party Application must record and make viewable to the user their successful requests for an RPAS Operation for a period of at least 30 days from the planned start date of an operation.
[AA0025]	The Third Party Application must provide the ability for the user to cancel an RPAS Operation request. "Cancel" indicates that the operation is no longer planned.
[AA0030]	The Third Party Application must provide the ability for the user to close an RPAS Operation request. "Close" indicates the operation is complete before the submitted RPAS Operation end time.
[AA0035]	The Thirty Party Application must manage RPAS Operation requests as a service to operators. The Third Party Application must manage users using individual accounts (requiring a login) and reasonably secure identification mechanisms (e.g. usernames and passwords)
[AA0040]	The Third Party Application must follow industry best practices for app releases including HTTPS encryption for all API calls. <b>Note:</b> apps in the PlayStore and AppStore are vetted via the <a href="#">PlayStore</a> and <a href="#">AppStore</a> launch process
[AA0045]	The Third Party Application must make reasonable efforts to notify the user in the event that an authorised RPAS Operation is no longer valid. The Third Party Application will cancel Approved RPAS Operation if no longer valid.
[AA0050]	Airspace authorisations are available to verified Chief Remote Pilots of a valid ReOC holder. The ReOC number (Operator_number) is validated by RegEx [0-9]{4} The ARN (pilot_license_number) is validated by RegEx [0-9]{4,7} <b>Note:</b> There is currently no query to CASA's licencing system.
[AA0051]	The Third Party Application must display "conditions of approval" to the user when an RPAS Operation request has been confirmed with a digital response from the CASA RPAS Platform API
[AA0052]	The Third Party Application must display a declaration for the user to accept when submitting an RPAS Operation request

14. Performance Rules

Rule	Description	Data Source	Application	Assumption
[AA0055]	<p>The Third Party Application can automatically approve an RPAS operation request if the following criteria are met:</p> <ol style="list-style-type: none"> <li>1. Maximum height of the RPAS operation must be less than or equal to the height of the relevant GCD cells (relevant cells are all those which are intersected by the RPAS operation request)</li> <li>2. Where the airport flag of all relevant GCD cells are "true"</li> <li>3. Where the tower is active (in airspaces which transition from uncontrolled to controlled in tower hours, as defined in ERSA)</li> <li>4. Other operating rules do not block flight</li> <li>5. Data is successfully transferred to the RPAS platform (confirmed by a digital response from the CASA RPAS API)</li> </ol>	[AD0025]	BLOCK if any approval criteria failed	<p>The Third Party Application will not submit RPAS operation requests to the RPAS Platform which do not pass the flight operation rules.</p> <p>Aerodromes selected in initial trial phases will not require Rule 3.</p>
[AA0060]	The Third Party Application must only submit RPAS operation requests which start up to 30 days after the date of submission.		<p>BLOCK if start time in past</p> <p>BLOCK if start time &gt; 30 days from submission date</p>	
[AA0065]	The Third Party Application must only submit RPAS operation requests which are wholly within daylight hours.		BLOCK if any portion of the operation falls outside of civil twilight	

Third-party applications must also demonstrate compliance with [ReOC0026].

---

## Attachment A – Authoritative Data

### Airspace Data

Rule and Data Type	Authoritative Source	Refresh Rate (Minimum)	When applied	Notes	Related Operating Rules
<b>[ASD0005]</b> Restricted Airspace	Airservices Australia Product Group B Dataset 14 – PRD (Prohibited Restricted Danger Areas)	When updated by data provider (currently bi-annually)	AIRAC effective date	If NAIPS subscription or ERSA is not available, all restrictions should be considered 24H restrictions.  It is allowed for this airspace to be filtered 500ft and below. Airspaces with a lower value of NOTAM or Surface level must be included.	[HBY0010] [CEX0010] [ReOC0020]
<b>[ASD0010]</b> Temporary Restricted Airspace	Airservices Australia National Aeronautical Information Processing System (NAIPS)	At least every 15 minutes	Data effective date	It is allowed for this airspace to be filtered 500ft and below.	[HBY0010] [CEX0010] [ReOC0020]
<b>[ASD0015]</b> Temporary Prohibited Airspace	Airservices Australia National Aeronautical Information Processing System (NAIPS)	At least every 15 minutes	Data effective date	It is allowed for this airspace to be filtered 500ft and below.	[HBY0010] [CEX0010] [ReOC0020]
<b>[ASD0020]</b> Danger Areas	Airservices Australia Product Group B Dataset 14 – PRD (Prohibited Restricted Danger Areas)	When updated by data provider (currently bi-annually)	AIRAC effective date	It is allowed for this airspace to be filtered 500ft and below.	[HBY0040] [CEX0040] [ReOC0040]
<b>[ASD0025]</b> Controlled Aerodromes	Airservices Australia Product Group A Dataset 1 – Australian Landing Sites - AD, ALA, HLS, CTAF Frequencies (applicable only to those aerodromes printed in FAC section of ERSA)	When updated by data provider (currently quarterly)	AIRAC effective date	Area with a radius of 3 nautical miles that extends from the movement area of the airport.  See <b>Attachment C</b> for instructions on generating movement areas.  If NAIPS subscription or ERSA is not available, all aerodromes should be considered 24H active  Controlled aerodromes are determined by using the airport code to evaluate where the following conditions are true:	[HBY0030] [CEX0030] [ReOC0025]

Rule and Data Type	Authoritative Source	Refresh Rate (Minimum)	When applied	Notes	Related Operating Rules
				<ul style="list-style-type: none"> <li>Aerodrome in Dataset 10 (ATS Communications Frequencies) where Service Type is TWR (Tower)</li> <li>Aerodrome in Dataset 6 has runway threshold coordinates</li> </ul> <p>Aerodromes not meeting both of these criteria are non-controlled and are subject to ASD0035.</p>	
<p><b>[ASD0030]</b> Approach and departure paths of an aerodrome</p>	<p>Airservices Australia Product Group A Dataset 6 – Runway Thresholds Dataset 7 – Runway Details Dataset 10 – ATS Communications Frequencies</p>	As updated by data provider (currently quarterly)	AIRAC effective date	<p>For controlled aerodromes, these are to be defined by section 4 of the <a href="#">Manual of Standards</a>. Approach and departure paths at non-controlled aerodromes are optional. Where included, these are to be defined by section 9 of the <a href="#">Manual of Standards</a>.</p> <p><b>Note:</b> Non-controlled aerodromes can be identified in Group A Dataset10 where “Service type” is NOT “TWR” and which have runway threshold coordinates in Group A Dataset6.</p>	<p>[HBY0030] [CEX0030] [ReOC0025] <i>Optional:</i> [HBY0035] [CEX0035] [ReOC0030]</p>
<p><b>[ASD0035]</b> Non-controlled aerodromes including helicopter landing sites</p>	<p>Airservices Australia Product Group A Dataset 1 – Australian Landing Sites - AD, ALA, HLS, CTAF Frequencies Dataset 25 – NON-FAC-ERSA Australian Landing Sites</p>	As updated by data provider (currently quarterly)	AIRAC effective date	<p>An area with a radius of 3 nautical miles that extends from the aerodrome. If NAIPS subscription or ERSAs is not available, all aerodromes should be considered 24H active</p> <p><b>Note:</b> Non-controlled aerodromes are all sites from Dataset 25, in addition to the sites from Dataset 1 which do not meet the criteria of controlled aerodrome (see ASD0025).</p> <p><b>Note:</b> The information in Dataset 25 has not been validated by the relevant aerodrome and the landing sites are not certified or registered by CASA. These locations appear in ERSAs as Decode or Encode with the ID and location name listing only.</p>	<p>[HBY0035] [CEX0035] [ReOC0030]</p>
<p><b>[ASD0050]</b> CASA Advisories</p>	<p>CASA RPAS Platform <a href="https://data.casa.rpasplatform.net/advisories_geojson">https://data.casa.rpasplatform.net/advisories_geojson</a></p>	At least every 15 minutes	Data effective date	URL needs authentication with a service account.	<p>[HBY0070] [CEX0070] [ReOC0045]</p>

Rule and Data Type	Authoritative Source	Refresh Rate (Minimum)	When applied	Notes	Related Operating Rules
<b>[ASD0055]</b> Helicopter Landing Sites (HLS) with instrument approach	CASA RPAS Platform <a href="https://data.casa.rpasplatform.net/AU-CASA-HLS-DATASET.csv">https://data.casa.rpasplatform.net/AU-CASA-HLS-DATASET.csv</a>	At least every 15 minutes	Data effective date	URL needs authentication with a service account. To be displayed as 3 NM around HLS	[HBY0080] [CEX0080] [ReOC0050]
<b>[ASD0060]</b> Grid Cell Definition (GCD)	CASA RPAS Platform <a href="https://data.casa.rpasplatform.net/GCD">https://data.casa.rpasplatform.net/GCD</a>	At least every 24 hours	Data effective date	Geometry and properties of each GCD cell area, including maximum ceiling height allowed of RPAS operation, airport readiness (flag) status, and allowed operation categories  Note: GCD data is sourced from and owned by Airservices Australia. Use of this data may be subject to Airservices' conditions.	[AA0015] [AA0055]

## Additional Data

Rule and Data Type	Authoritative Source	Refresh Rate (Minimum)	Notes	Related Operating Rules
<p><b>[AD0005]</b> Fire Hazards and Incidents</p>	<p><b>Australian Capital Territory (ACT) Emergency Services Agency:</b> <a href="http://www.esa.act.gov.au/feeds/currentincidents.xml">http://www.esa.act.gov.au/feeds/currentincidents.xml</a></p> <p><b>New South Wales (NSW) Rural Fire Service:</b> <a href="http://www.rfs.nsw.gov.au/feeds/majorIncidents.xml">http://www.rfs.nsw.gov.au/feeds/majorIncidents.xml</a></p> <p><b>Victoria (VIC) Emergency:</b> <a href="https://data.emergency.vic.gov.au/Show?pagelId=getIncidentXML">https://data.emergency.vic.gov.au/Show?pagelId=getIncidentXML</a></p> <p>Additional sources: GeoJSON Burn Areas and Fire &amp; Rescue Victoria incidents (optional data source): <a href="https://emergency.vic.gov.au/public/osom-geojson.json">https://emergency.vic.gov.au/public/osom-geojson.json</a></p> <p><b>Tasmania (TAS) Fire Service:</b> <a href="http://www.fire.tas.gov.au/Show?pagelId=colBushfireSummariesRss">http://www.fire.tas.gov.au/Show?pagelId=colBushfireSummariesRss</a></p> <p>Additional sources: Burn Areas (optional data source): <a href="http://www.fire.tas.gov.au/Show?pagelId=boundaryKml&amp;t=">http://www.fire.tas.gov.au/Show?pagelId=boundaryKml&amp;t=</a></p> <p><b>South Australia (SA) Emergency Services:</b> <a href="http://data.eso.sa.gov.au/prod/cfs/crimson/cfs_cap_incidents.xml">http://data.eso.sa.gov.au/prod/cfs/crimson/cfs_cap_incidents.xml</a></p> <p>Additional sources: JSON (optional data source): <a href="https://data.eso.sa.gov.au/prod/cfs/crimson/cfs_current_incidents.json">https://data.eso.sa.gov.au/prod/cfs/crimson/cfs_current_incidents.json</a></p> <p>RSS (optional data source): <a href="https://data.eso.sa.gov.au/prod/cfs/crimson/cfs_current_incidents.xml">https://data.eso.sa.gov.au/prod/cfs/crimson/cfs_current_incidents.xml</a></p> <p><b>Western Australia (WA) Emergency:</b> <a href="https://www.emergency.wa.gov.au/data/incident_FCAD.rss">https://www.emergency.wa.gov.au/data/incident_FCAD.rss</a></p> <p><b>Queensland (QLD) Fire and Emergency Services:</b> <a href="https://www.qfes.qld.gov.au/data/alerts/bushfireAlert.xml">https://www.qfes.qld.gov.au/data/alerts/bushfireAlert.xml</a></p> <p><b>Northern Territory (NT) Police, Fire and Emergency Services (PFES):</b> <a href="https://www.pfes.nt.gov.au/incidentmap/json/ntfrsincidents.json">https://www.pfes.nt.gov.au/incidentmap/json/ntfrsincidents.json</a></p>	<p>At least every 15 minutes</p>	<p>Additional sources may be displayed for each state (where applicable) in addition to the incident feeds.</p> <p>Where no radius or polygon is supplied, default to 30m standoff distance.</p> <p>If displaying GeoJSON burn areas for Victoria, only features of feedType "Burn Area" should be displayed.</p> <p>To display Fire and Rescue Victoria incidents, only features where sourceOrg = "VIC/FRV" in the GeoJSON.</p>	<p>[HBY0015] [CEX0015] [ReOC0010]</p>
<p><b>[AD0010]</b> High Voltage Electricity</p>	<p>Geoscience Australia <a href="http://pid.geoscience.gov.au/dataset/ga/83105">http://pid.geoscience.gov.au/dataset/ga/83105</a></p>	<p>As updated by data provider</p>	<p>See <b>Attachment B</b> for the mapping of kilovolt ratings to height and width.</p>	<p>[HBY0045] [CEX0045] [ReOC0055]</p>

Rule and Data Type	Authoritative Source	Refresh Rate (Minimum)	Notes	Related Operating Rules
Transmission Lines				
<b>[AD0015]</b> Marine Zones	Parks Australia <a href="https://parksaustralia.gov.au/marine/maps/">https://parksaustralia.gov.au/marine/maps/</a>	As updated by data provider	It is allowed to trim parks to the Australian country boundary with a minimum of 12 NM from shore.	[HBY0075] [CEX0075] [ReOC0035]
<b>[AD0020]</b> CASA Notifications	CASA RPAS Platform <a href="https://data.casa.rpasplatform.net/notifications.json">https://data.casa.rpasplatform.net/notifications.json</a>	At least every 15 minutes	URL needs authentication with a service account.  The software provider may elect to maintain state to ensure that users are not presented with the same notification multiple times once read or acknowledged.	[UAA0030]

## Attachment B – Electricity Transmission Lines

### High Voltage Electricity Transmission Lines

The [Electricity Transmission Lines Database](#) does not include the height or width of any tower or transmission line, only their kilovolt rating. It is recommended to use this table to calculate the expected height and width:

Kilovolts	Height (metres)	Width (metres)
11	11	10
22	17	10
33	17	10
66	21	10
132	42	20
275	55	25
More than 275	60	25

If a kilovolt rating is between two table entries, the entry for the next higher rating shall be used.

### Sourcing

Height and width values have been sourced here:

<https://www.sa.gov.au/topics/energy-and-environment/electrical-gas-and-plumbing-safety-and-technical-regulation/powerline-safety/identifying-powerlines>

<https://www.sa.gov.au/topics/energy-and-environment/using-electricity-and-gas-safely/powerline-safety/building-safely-near-powerlines>

[https://www.sa.gov.au/data/assets/pdf\\_file/0003/18606/150513-Building-safely-near-powerlines-web.pdf](https://www.sa.gov.au/data/assets/pdf_file/0003/18606/150513-Building-safely-near-powerlines-web.pdf)

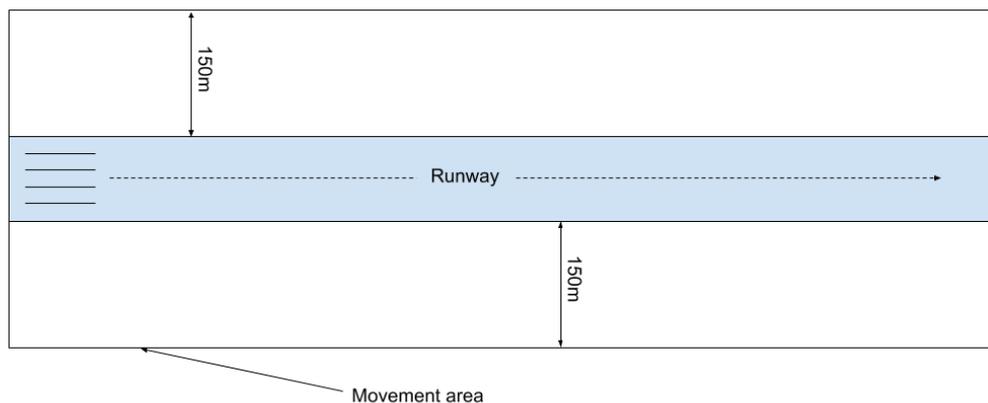
## Attachment C – Definition of movement area

Movement areas are generated by a lateral extrapolation of the runway centrelines as defined in Dataset 6 - Runway Thresholds. Steps to produce the movement area:

1. Runway centreline produced by generating a straight line between the runway thresholds. Laterally extrapolating the centreline 50 m in either direction defines the runway.



2. The movement area is the box obtained by extrapolating the long sides of the runway a further 150 m away from the centreline, on each side.



If there are multiple runways at an aerodrome, perform steps 1 and 2 for all runway thresholds, and merge the shapes together to create the overall movement area.