



# Australian Government

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## Civil Aviation Safety Authority

Instrument number CASA EX171/20

I, CHRISTOPHER PAUL MONAHAN, Executive Manager, National Operations & Standards, a delegate of CASA, make this instrument under regulations 11.160 and 11.205 of the *Civil Aviation Safety Regulations 1998*.

**[Signed Christopher P. Monahan]**

Christopher P. Monahan  
Executive Manager, National Operations & Standards

22 December 2020

### **CASA EX171/20 — Remotely Piloted Aircraft Operation over Approved Area of Canberra (Wing Aviation) Instrument 2020**

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#### **1 Name**

This instrument is *CASA EX171/20 — Remotely Piloted Aircraft Operation over Approved Area of Canberra (Wing Aviation) Instrument 2020*.

#### **2 Repeal of instrument CASA EX28/20**

*CASA EX28/20 — Remotely Piloted Aircraft Operation over Approved Area of Canberra (Wing Aviation) Instrument 2020* is repealed.

#### **3 Definitions**

*Note* In this instrument, certain terms and expressions have the same meaning as they have in the *Civil Aviation Act 1988* and the regulations. These include: **AGL**, **night**, **obstacle limitation surface**, **remote pilot licence** and **RPA**.

In this instrument:

**approved operating area** means the operating area approved by CASA under paragraph 101.030 (1) (a) of CASR as an area for the operation in Canberra of relevant aircraft by Wing Aviation.

*Note* At the commencement of this instrument, the approved operating area is specified in CASA instrument number RPAS2018-4194-2 and contains the Canberra suburbs of Mitchell, Crace, Harrison, Palmerston and Franklin.

**buffer area**, for a relevant aircraft, means an area:

- (a) that is outside the approved operating area; and
- (b) in which it is reasonably considered the relevant aircraft may safely come to the ground if fail-safe actions by the operator remote pilot of the aircraft cannot contain the aircraft within the approved operating area.

**Canberra aerodrome** means Canberra aerodrome, certificate number CASA.ADCERT.0015.

**chief remote pilot** means a person performing the functions and duties mentioned in regulation 101.342 of CASR.

**contingency area**, for a relevant aircraft, means an area:

- (a) that is within the approved operating area; and
- (b) in which fail-safe actions aimed at preventing the relevant aircraft from entering the buffer area must be immediately implemented by the operator remote pilot of the aircraft if the aircraft enters the contingency area.

**delivery activity** means the Google Project Wing research and development activity for the Google Project Wing “Drone delivery” program that is limited to the operation of relevant aircraft for, or in connection with, the delivery of goods to persons who have:

- (a) applied in writing to Wing Aviation to become a participant in the delivery activity; and
- (b) been approved by Wing Aviation as participants in the delivery activity; and
- (c) requested a specific delivery via the Google smart phone application to a pre-approved delivery location located within the approved operating area.

**documented practices and procedures** has the same meaning as in paragraph 101.335 (1) (d) of CASR.

**intended**, in relation to a recovery site, means a site intended by Wing Aviation to be used for the recovery of a relevant aircraft.

**operator remote pilot** means a holder of a remote pilot licence who is an employee, or another person acting under the instruction, of Wing Aviation.

**recovery site** means a site to be used for the recovery of a relevant aircraft.

**relevant aircraft** means any of the following aircraft operated by Wing Aviation under its certification as an RPA operator:

- (a) a Hummingbird Quiet Hover Propulsion aircraft;
- (b) any other RPA that is of a kind approved in writing by CASA for this instrument.

*Note* A person who was certified as a UAV operator as at 28 September 2016 is taken to have been certified as an RPA operator — see subregulation 202.462 (3) of CASR.

**remote pilot station** means the laptop, control unit and avionic interfaces:

- (a) approved by CASA as a remote pilot station; and
- (b) used to control and command a relevant aircraft.

**Wing Aviation** means Wing Aviation Pty Ltd, ARN 1046704.

**Wing Aviation flight manual** means *RPAS Operational Procedures Wing Aviation Pty Ltd*, release date 26 January 2019, version 2.

#### **4 Application**

This instrument applies in relation to Wing Aviation if it operates a relevant aircraft in or over the approved operating area, for the purposes of the delivery activity.

#### **5 Exemption — operating near people**

- (1) The following persons, while operating a relevant aircraft in or over the approved operating area, are exempt from compliance with subregulation 101.245 (1) of CASR to the extent that the subregulation requires that a person must not operate

a relevant aircraft within 30 metres of a person who is not directly associated with the operation of the relevant aircraft:

- (a) Wing Aviation;
- (b) the operator remote pilot of the relevant aircraft.

*Note* A person who was certified as a UAV controller as at 28 September 2016 is taken to have been granted a remote pilot licence under regulation 101.295 of CASR — see subregulation 202.461 (3) of CASR.

- (2) The exemption in subsection (1) is subject to the conditions that apply to the person that are mentioned in sections 8, 9 and 10.
- (3) The exemption in subsection (1) ceases to be in force at the end of 30 November 2022.

## **6 Exemption — operating over populous areas**

- (1) The following persons, while operating a relevant aircraft over the approved operating area, are exempt from compliance with subregulation 101.280 (2) of CASR to the extent that the subregulation requires that a person must not operate a relevant aircraft at a height less than the height from which, if any of its components fails, it would be able to clear the area:
  - (a) Wing Aviation;
  - (b) the operator remote pilot of the relevant aircraft.
- (2) The exemption in subsection (1) is subject to the conditions that apply to the person that are mentioned in sections 8, 9 and 10.
- (3) The exemption in subsection (1) ceases to be in force at the end of 30 November 2022.

## **7 Exemption — compliance with documented practices and procedures**

- (1) Wing Aviation is exempt from paragraph 101.340 (1) (e) of CASR to the extent that the paragraph requires Wing Aviation to comply with a requirement of its documented practices and procedures that is inconsistent with a requirement under this instrument.
- (2) The exemption in subsection (1) is subject to the condition mentioned in subsection 10 (1).
- (3) An operator remote pilot is exempt from regulation 101.370 of CASR to the extent that the regulation requires the operator remote pilot to comply with a requirement of the documented practices and procedures of Wing Aviation that is inconsistent with a requirement under this instrument.
- (4) The exemption in subsection (3) is subject to the condition that the operator remote pilot notify the Wing Aviation chief remote pilot in writing of the inconsistency, within 24 hours of becoming aware of the inconsistency.
- (5) The exemptions in subsections (1) and (3) cease to be in force at the end of 30 November 2022.

## **8 Operational conditions — Wing Aviation and operator remote pilot**

- (1) Wing Aviation and the operator remote pilot of the relevant aircraft must ensure that:
  - (a) the relevant aircraft is equipped and operated with an active fail-safe mode that will ensure that, in the event of a data-link loss, the aircraft will land or

otherwise terminate the flight in accordance with the procedures mentioned in the Wing Aviation flight manual; and

- (b) any site from which the relevant aircraft is launched, or intended to be recovered, must not be located within 15 metres of a sealed road, and any launch or recovery operation for the relevant aircraft must not pose an unreasonable level of distraction to motorists; and
  - (c) the relevant aircraft is not operated:
    - (i) more than 400 feet AGL; or
    - (ii) over public gatherings; or
    - (iii) over the Barton Highway, the Federal Highway or Horse Park Drive; or
    - (iv) less than both 5 metres overhead a person and 2 metres horizontal distance from a person.
- (2) Wing Aviation and the operator remote pilot of the relevant aircraft must not operate the relevant aircraft as follows:
- (a) at night;
  - (b) in or over the approved operating area outside the hours of:
    - (i) 7:00 a.m. to 8:00 p.m. Monday to Saturday; and
    - (ii) 8:00 a.m. to 8:00 p.m. Sunday and public holidays.

*Note 1* The term **night** is defined in the CASR Dictionary to mean the period between the end of evening civil twilight and the beginning of the following morning civil twilight.

*Note 2* As at commencement of this instrument, the beginning of morning civil twilight and the end of evening civil twilight for a particular location can be calculated on the Geoscience Australia website at <http://www.ga.gov.au>. See <http://www.ga.gov.au/geodesy/astro/sunrise.jsp> where these times, within which a relevant aircraft may operate at the location, are referred to as “times of civil twilight”.

*Note 3* Under ACT legislation, there are ACT government restrictions relating to suburban noise that may also apply to Wing Aviation.

- (3) Wing Aviation and the operator remote pilot of the relevant aircraft must ensure that any operation of the relevant aircraft within Class C airspace remains below the greater of the following:
- (a) 200 feet AGL;
  - (b) the obstacle limitation surface of Canberra aerodrome.
- (4) Wing Aviation and the operator remote pilot of the relevant aircraft must ensure that:
- (a) if the relevant aircraft enters the contingency area — fail-safe actions aimed at preventing the aircraft entering the buffer area are immediately implemented; and
  - (b) if the relevant aircraft leaves the approved operating area — the aircraft is immediately brought to ground in the buffer area.

## **9 Operational conditions — Wing Aviation**

- (1) Wing Aviation must not use a launch site, or intended recovery site, unless the location of the site has been notified to CASA in writing.
- (2) Wing Aviation must ensure that any operations of the relevant aircraft have a designated contingency area and a designated buffer area.
- (3) Wing Aviation must not operate simultaneously more than 15 aircraft in or over the approved operating area from each remote pilot station.

- (4) Wing Aviation must implement a written stakeholder engagement plan that has been approved in writing by CASA.

*Note* The condition to implement a stakeholder engagement plan is limited to matters within the scope of CASA's functions and powers, including the matters mentioned in section 9A of the *Civil Aviation Act 1988*.

## **10 Regulatory conditions — Wing Aviation**

- (1) In the event of an inconsistency between the documented practices and procedures of Wing Aviation and this instrument, Wing Aviation must:
- (a) comply with this instrument to the extent of the inconsistency; and
  - (b) notify CASA in writing of the inconsistency, within 2 business days of becoming aware of the inconsistency.
- (2) Wing Aviation must email to CASA, within 30 days of the end of each month during which the exemptions in sections 5 to 7 are in force, a report containing the information mentioned in subsection (3).
- (3) For subsection (2), the information is the following information relating to operations for the delivery activity during the month:
- (a) total number of flights conducted for the delivery activity;
  - (b) total number of flights which were deliveries for the delivery activity;
  - (c) total hours of operation for the delivery activity;
  - (d) number of incidents;
  - (e) number of accidents;
  - (f) in relation to each incident and accident:
    - (i) a description, analysis of causal factors, corrective actions identified, and the extent to which corrective actions have been implemented; and
    - (ii) if a relevant aircraft was recovered from a site other than an intended recovery site notified to CASA — the location of the site at which the aircraft was recovered.
- (4) Wing Aviation must not amend its documented practices and procedures, or implement a change to the procedures mentioned in paragraph 8 (1) (a), unless Wing Aviation has notified CASA of the change at least 14 days before making the change.

*Note* A change to the matters mentioned in this subsection will result in the reissue of this instrument to give effect to the amended matters.

## **11 Repeal**

This instrument is repealed at the end of 31 January 2023.

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