



# Australian Government

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## Civil Aviation Safety Authority

Instrument number CASA EX82/18

I, SHANE PATRICK CARMODY, Director of Aviation Safety, on behalf of CASA, make this instrument under regulations 11.160 and 11.205 of the *Civil Aviation Safety Regulations 1998*.

**[Signed S. Carmody]**

Shane Carmody  
Director of Aviation Safety

29 June 2018

### **CASA EX82/18 — Remotely Piloted Aircraft Operation Over Bonython (Unmanned Systems Australia Pty Ltd) Exemption 2018**

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#### **1 Name**

This instrument is *CASA EX82/18 — Remotely Piloted Aircraft Operation Over Bonython (Unmanned Systems Australia Pty Ltd) Exemption 2018*.

#### **2 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, including: *remote pilot licence*, *RPA*.

In this instrument:

***Bonython*** means the Canberra suburb of Bonython approved by CASA under paragraph 101.030 (1) (a) of CASR as an area for the operation of the relevant aircraft by Unmanned Systems Australia.

*Note* For the CASA approved operating area of Bonython — see Instrument Number RPAS2018-1746.

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

***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 Unmanned Systems Australia 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 of Unmanned Systems Australia.

***Project Wing flight manual*** means *Unmanned Systems Australia Pty Ltd RPAS Operational Procedures*, dated 2018, version 6.

**relevant aircraft** means a Hummingbird V2.0 Powered Lift Unmanned Aerial Vehicle operated by Unmanned Systems Australia under its certification as an RPA operator.

*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.

**trial** 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 in connection with the delivery of goods to persons who have:

- (a) applied in writing to Unmanned Systems Australia to become a trial participant; and
- (b) been approved by Unmanned Systems Australia as a trial participant; and
- (c) requested a specific delivery via the Google smart phone application to a pre-approved delivery location located within Bonython.

**Unmanned Systems Australia** means Unmanned Systems Australia Pty Ltd, ARN 827475.

### **3 Application**

This instrument applies in relation to Unmanned Systems Australia if it operates a relevant aircraft in or over Bonython for the purposes of the trial.

### **4 Exemption — operating near people**

- (1) The following persons, while operating a relevant aircraft in or over Bonython, 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) Unmanned Systems Australia;
  - (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 regulation 202.461 (3) of CASR.

- (2) The exemption is subject to the conditions that apply to the person that are mentioned in sections 7 and 8.

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

- (1) The following persons, while operating a relevant aircraft over Bonython, 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) Unmanned Systems Australia;
  - (b) the operator remote pilot of the relevant aircraft.
- (2) The exemption is subject to the conditions that apply to the person that are mentioned in sections 7 and 8.

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

- (1) Unmanned Systems Australia is exempt from paragraph 101.340 (1) (e) of CASR to the extent that the paragraph requires Unmanned Systems Australia to comply with a requirement of its documented practices and procedures that is inconsistent with a requirement under this instrument.

*Note* CASA considers that the Unmanned Systems Australia documented practices and procedures include at least the Project Wing flight manual and the *Unmanned Systems Australia Pty Ltd Operations Manual*, dated 6 April 2018, version 6.

- (2) The exemption in subsection (1) is subject to the condition mentioned in paragraph 8 (1) (b).
- (3) An operator remote pilot is exempt from regulation 101.370 of CASR to the extent that the paragraph requires the operator remote pilot to comply with a requirement of the documented practices and procedures of Unmanned Systems Australia 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 Unmanned Systems Australia chief remote pilot in writing of the inconsistency, within 1 business day of becoming aware of the inconsistency.

## **7 Operational conditions**

- (1) Unmanned Systems Australia and the operator remote pilot must ensure that:
  - (a) the relevant aircraft is not operated in or over Bonython when a total fire ban is in place; and
  - (b) 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 Project Wing flight manual; and
  - (c) 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
  - (d) the relevant aircraft is not operated:
    - (i) more than 400 feet above ground level; or
    - (ii) at night; or
    - (ii) outside public gatherings; or
    - (iii) over Athllon Drive, Drakeford Drive or Woodcock Drive; or
    - (iv) less than 5 metres overhead a person, or 2 metres horizontal distance from a person; or
    - (v) within 3 nautical miles of the boundary of Canberra airport plus a reasonable operational buffer to avoid any unintended incursion into that airspace.
- (2) Unmanned Systems Australia must not use a launch and intended recovery site unless the location of the site has been notified to CASA in writing.

- (3) Unmanned Systems Australia and the operator remote pilot must not operate a relevant aircraft in or over Bonython outside the hours of:
  - (a) 7:00am to 8:00pm Monday to Saturday; and
  - (b) 8:00am to 8:00pm Sunday and public holidays.

*Note* Under ACT legislation, there are ACT government restrictions relating to suburban noise that may also apply to Unmanned Systems Australia.

- (4) Unmanned Systems Australia must not, at a particular time, operate more than 15 aircraft in or over Bonython from each remote pilot station.

## **8 Regulatory conditions**

- (1) In the event of an inconsistency between the documented practices and procedures of Unmanned Systems Australia and this instrument, Unmanned Systems Australia 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) Unmanned Systems Australia must, within 30 days of the end of each calendar month during which this instrument is in force, provide CASA with a report that contains the information mentioned in subsection (3) in relation to operations for the trial during the month.
- (3) For subsection (2), the information is the following:
  - (a) total number of flights conducted for the trial;
  - (b) total number of flights which were deliveries for the trial;
  - (c) total hours of operation for the trial;
  - (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 recovery site.
- (4) Unmanned Systems Australia must not amend its documented practices and procedures, or implement a change to the procedures mentioned in paragraph 7 (1) (b), unless the change has been approved in writing by CASA.

*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.

## **9 Repeal**

This instrument is repealed at the end of 31 May 2019.