



# Australian Government

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## Civil Aviation Safety Authority

Instrument number CASA EX104/15

I, TERENCE LINDSAY FARQUHARSON, Deputy Director of Aviation Safety, a delegate of CASA, make this instrument under regulation 11.160 of the *Civil Aviation Safety Regulations 1998 (CASR 1998)*.

**[Signed T. Farquharson]**

Terry Farquharson  
Deputy Director of Aviation Safety

22 June 2015

### Exemption – operation of UAV near people, over populous areas, and at night – Overall Photography Pty Ltd

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#### 1 Revocation

Instrument CASA EX35/15 is revoked.

#### 2 Definitions

(1) In this instrument:

*event* means a gathering or activity, or a series of gatherings or activities, during which the UAV is operated within 30 metres of a person who is not one of the operator's personnel.

*operator's personnel* means a person employed or engaged by the operator to assist in the operation of the UAV.

*type of event* includes the following:

- (a) cricket matches or training;
- (b) rugby league matches or training;
- (c) Australian rules football matches or training;
- (d) music concerts.

(2) In this instrument, the distance from the UAV is measured from a point on the ground vertically below the UAV.

#### 3 Application

This instrument applies to the operation of a remotely piloted multi-rotor (the *UAV*) by Overall Photography Pty Ltd, Aviation Reference Number (*ARN*) 832608 (the *operator*), when used for aerial photography, aerial spotting or aerial surveying.

#### **4 Exemptions**

- (1) The operator is exempt from compliance with paragraph 101.095 (1) (b) of CASR 1998 when operating the UAV.
- (2) The operator is exempt from compliance with regulations 101.245 and 101.280 of CASR 1998 when operating the UAV.

#### **5 Conditions**

- (1) The exemption in subsection 4 (1) is subject to the conditions mentioned in Schedule 1.
- (2) The exemption in subsection 4 (2) is subject to the conditions mentioned in Schedule 2.
- (3) The exemptions are subject to the general conditions mentioned in Schedule 3.

#### **6 Expiry**

This instrument expires at the end of October 2015, as if it had been revoked by another instrument.

#### **Schedule 1 Conditions of exemption — operation of UAV at night**

- 1 Ground station software must be used to assist in assessing the UAV's position.
- 2 The take-off and landing areas must be illuminated, for example by street lighting, so that the position and orientation of the UAV can be established and maintained by the UAV controller by visual reference.
- 3 The UAV must have orientation lighting, such as LED lights on the front and rear arms of the UAV.
- 4 The UAV controller must ensure that:
  - (a) visual line of sight contact with the UAV is maintained at all times; and
  - (b) the UAV is flown in V.M.C.

#### **Schedule 2 Conditions of exemption — operation of UAV near people and over populous areas**

- 1 The UAV must only be flown by Mitchell Bannink, ARN 583296 (the *Chief UAV Controller*).
- 2 The operator must not operate the UAV at an event over a populous area unless the operator has given CASA a clearly documented written procedure of its UAV operations for the type of event and CASA has approved the procedure for the operation of the UAV over a populous area at that type of event.
- 3 The wind speed, including gusts, at a height of 2 metres AGL at the location of the operation, must not exceed 15 knots.
- 4 The operator must establish exclusion zones appropriate for the safe operation of the UAV and ensure adequate measures have been taken to prevent members of the public encroaching on the exclusion zones at all times.
- 5 The operator must ensure that the UAV controller is positioned so that the UAV controller is:
  - (a) directly behind the UAV and can observe the entire forward flight path; or
  - (b) close enough to the subject of the photography to ensure adequate depth perception.

- 6 The UAV must be fitted with a dual parallel redundant battery system with duplicated battery mountings.
- 7 The UAV must have demonstrated the ability to fly safely with 1 motor inoperative at the maximum take-off weight for the operation.
- 8 Before operating the UAV within 30 metres of a person who is not one of the operator's personnel, the operator must ensure that the person:
  - (a) is briefed in accordance with the operator's operations manual;
  - (b) is informed of the responses required in an emergency; and
  - (c) after he or she has been briefed and informed as mentioned in paragraphs (a) and (b), has provided consent to the operator operating the UAV between 15 and 30 metres of the person.
- 9 Subject to clause 10, the operator must not operate the UAV within 15 metres of a person who is not one of the operator's personnel.
- 10 If:
  - (a) the UAV is in transit during its launch or recovery phase; and
  - (b) the UAV is not higher than 2 metres AGL; and
  - (c) a person who is not one of the operator's personnel, after he or she has been briefed and informed as mentioned in paragraphs 8 (a) and (b), has provided consent to the operator operating the UAV between 5 and 15 metres of the person;the operator may operate the UAV within 15 metres, but not within 5 metres, of the person.

### **Schedule 3      General conditions**

- 1 A risk assessment must be carried out by the Chief UAV Controller before any operation under this exemption.
  - 2 Subject to clause 3, the operator must conduct operations in accordance with its operations manual.
  - 3 If it is impossible for the operator to comply with a provision in the operator's operations manual and a condition in the Schedules, the operator must comply with the condition in the Schedules.
  - 4 The UAV must be a multi-rotor UAV operated by the operator that:
    - (a) has a GPS hold and return to home function; and
    - (b) is fitted with equipment for the reception of at least 7 GNSS satellites.
  - 5 Details of the exemptions and conditions must be included in the operator's operations manual.
  - 6 The operator must not operate the UAV outdoors:
    - (a) in rain; or
    - (b) if thunderstorms are observed or reported within 5 kilometres of the location of the proposed operation.
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