



Australian Government

Civil Aviation Safety Authority

Instrument number CASA 01/17

I, SHANE PATRICK CARMODY, Acting Director of Aviation Safety, on behalf of CASA, make this instrument under regulations 11.056 and 101.029 and subregulation 101.095 (1A) of the *Civil Aviation Safety Regulations 1998*.

[Signed S. Carmody]

Shane Carmody
Acting Director of Aviation Safety

22 February 2017

Approval — operation of RPA at night

1 Commencement

This instrument commences on the day of registration.

2 Repeal

Instrument CASA 103/16 with unique identifier F2016N00022 is repealed.

3 Application

This instrument applies to the operation of an RPA, other than a large RPA, by a person who holds a certificate as an RPA operator (the *operator*).

4 Definitions

In this instrument:

authorised remote pilot means the operator's chief remote pilot, or a person authorised by the operator's chief remote pilot to operate the RPA in accordance with clauses 8 and 9 of Schedule 1.

RPAS Sample Operations Manual means the RPAS Sample Operations Manual published by CASA as existing at the time when his instrument commences.

Note At the time when this instrument commences, the RPAS Sample Operations Manual published by CASA, with Revision Date 06 Feb 17, can be found at:

<https://www.casa.gov.au/files/sampleoperationsmanualdocx>.

5 Approval

- (1) The operator is approved to operate the RPA at night.
- (2) An authorised remote pilot is approved to operate the RPA at night.

6 Conditions

- (1) The approval in subsection 5 (1) is subject to the conditions mentioned in Schedules 1 and 2.
- (2) The approval in subsection 5 (2) is subject to the conditions mentioned in Schedule 2.

Schedule 1 Conditions — operator

- 1 The operator must have documented practices and procedures, that are approved in writing by CASA or by a Manager or Team Leader of CASA with responsibility for regulatory oversight of RPA operations, for training and testing of individuals in relation to operating RPA at night.

Note At the date of this instrument, the Manager and Team Leader of CASA with responsibility for regulatory oversight of RPA operations are the National Assurance Manager and the RPAS Team Leader in Safety Assurance Branch, Aviation Group.

- 2 For clause 1, the practices and procedures mentioned in the RPAS Sample Operations Manual for training and testing of individuals in relation to operating RPA at night are taken to be approved by CASA.

Note Practices and procedures for training and testing of individuals in relation to operating RPA at night include those in Part C, Section 3.5.1 (Remote Pilot Training for Specialised Operations) of the RPAS Sample Operations Manual and Appendix 8 (Night VLOS Training Syllabus) of the RPAS Operational Procedures (Library), which is Appendix 4 of the RPAS Sample Operations Manual.

- 3 The operator must have documented practices and procedures, that are approved in writing by CASA or by a Manager or Team Leader of CASA with responsibility for regulatory oversight of RPA operations, for:
 - (a) making records detailing the training and testing undertaken by authorised remote pilots; and
 - (b) retention of those records.

- 4 For clause 3, the practices and procedures mentioned in the RPAS Sample Operations Manual for making and retention of records detailing the training and testing undertaken by personnel involved in RPA operations are taken to be approved by CASA.

Note Practices and procedures for making and retention of training and testing records include those in Section 3.2 (Record Keeping) of the RPAS Sample Operations Manual.

- 5 The operator must have documented practices and procedures, that are approved in writing by CASA or by a Manager or Team Leader of CASA with responsibility for regulatory oversight of RPA operations, for risk assessment and mitigation processes for operation of RPA at night.
- 6 For clause 5, the practices and procedures for risk assessment and mitigation mentioned in the RPAS Sample Operations Manual are taken to be approved by CASA.

Note Practices and procedures for risk assessment and mitigation include those in Section 4.2 (Feasibility Check and Job Safety Assessment (JSA)) and Appendix 3 (Risk Assessment) of the RPAS Sample Operations Manual.

- 7 A copy of this instrument must be included in the operator's documented practices and procedures.

Note For operators using the RPAS Sample Operations Manual, a copy of this instrument and a copy of any other written correspondence with CASA which indicates that the operator is approved to operate under this instrument should be included in Appendix 2 (Permissions, Exemptions and Approvals).

- 8 The operator must ensure that the RPA is operated by only:
 - (a) the operator's chief remote pilot; or
 - (b) a person authorised by the operator's chief remote pilot.
- 9 Before authorising a person to operate the RPA, the operator's chief remote pilot must be satisfied that the person:
 - (a) holds a remote pilot licence that authorises the person to operate the RPA; and
 - (b) has the knowledge and practical abilities to operate the RPA; and

- (c) has been approved by the operator to operate the RPA in accordance with the operator's documented practices and procedures and this instrument; and
 - (d) either:
 - (i) has received appropriate training and testing in relation to the operation of the RPA at night; or
 - (ii) will only operate the RPA while receiving training or taking a test in operating RPA at night.
- 10 Before any operation under this approval, the operator must ensure that a risk assessment is carried out by the operator's chief remote pilot in accordance with the documented practices and procedures mentioned in clause 5.

Schedule 2 Conditions — operator and authorised remote pilot

- 1 The operator and an authorised remote pilot must comply with a request from CASA for CASA to test the pilot on the pilot's knowledge and practical abilities to operate the RPA in accordance with this instrument.
 - 2 The operator and the authorised remote pilot must ensure that the launch and landing and recovery areas are illuminated so that the position of the RPA can be established and maintained by the authorised remote pilot by visual reference.
Note For example, the areas may be illuminated by portable lighting or airfield lighting.
 - 3 The operator and the authorised remote pilot must ensure that the RPA is fitted with all of the following:
 - (a) serviceable equipment for a GPS hold and return to home function;
 - (b) serviceable equipment for a GPS lock with a minimum of 7 GPS satellites.
 - 4 The operator and the authorised remote pilot must ensure that the RPA displays orientation lighting when the RPA is in flight.
Note For example, the orientation lighting may consist of LED lights on the front and rear arms of a multi-rotor RPA.
 - 5 The operator and the authorised remote pilot must ensure that ground station software is used to enable the authorised remote pilot to assess the RPA's position.
 - 6 The operator and the authorised remote pilot must not operate the RPA 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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