



**Australian Government**  
**Civil Aviation Safety Authority**

---

I, SHANE PATRICK CARMODY, Director of Aviation Safety, on behalf of CASA, make this instrument under regulation 101.028 of the *Civil Aviation Safety Regulations 1998*.

**[Signed S. Carmody]**

Shane Carmody  
Director of Aviation Safety

19 December 2019

**Part 101 Manual of Standards (Miscellaneous Amendments) Instrument 2019 (No. 1)**

---

**1 Name of instrument**

This instrument is the *Part 101 Manual of Standards (Miscellaneous Amendments) Instrument 2019 (No. 1)*.

**2 Commencement**

This instrument commences on the day it is registered.

**3 Amendment of the Part 101 Manual of Standards**

Schedule 1 amends the *Part 101 (Unmanned Aircraft and Rockets) Manual of Standards Instrument 2019*.

**Schedule 1 Amendments**

**[1] Subsection 1.04 (2), definition of *documented practices and procedures*, the Note**

*substitute*

*Note* See also subsection 1.04 (3). An operator is required to have suitable documented practices and procedures. Documented practices and procedures are considered suitable only if CASA approves them.

**[2] Subsection 1.04 (2), paragraph (b) of the definition of *examiner*, for a medium or large RPA**

*omit*

RPA's

*insert*

RPA operator's

**[3] Paragraph 2.05 (4) (a)**

*after*

Common units

*insert*

, except when the RePL training course is for a RePL upgrade provided for in section 2.21, 2.23 or 2.25

**[4] Paragraph 2.06 (6) (a)**

*after*

Common units

*insert*

, except when the RePL training course is for a RePL upgrade provided for in section 2.21, 2.23 or 2.25

**[5] Section 2.07**

*after*

CASR Dictionary

*insert*

, in relation to the issue of an initial RePL

**[6] Subsection 2.10 (1), the Note**

*substitute*

- (1A) If the number of correctly answered questions that would be exactly 85% of the total number set would otherwise involve a decimal point, the number must be rounded upwards or downwards to the nearest whole number, as the case requires, to achieve 85% for the purposes of this MOS.

*Note* To achieve a pass mark of 85%, the applicant must have at least 68 correct answers for an examination of 80 questions; at least 73 correct answers for an examination of 85 questions; at least 77 correct answers for an examination of 90 questions (despite the fact that 85% of 90 is 76.5) and so on.

**[7] Subsection 2.15 (2)**

*omit*

6

*insert*

4

**[8] Section 2.17, the heading**

*omit*

**practice**

*insert*

**practices**

**[9] Subsection 2.18 (1)**

*after*

CASR Dictionary

*insert*

, in relation to the issue of an initial RePL

**[10] Division 2.5, before section 2.19**

*insert*

**2.19AA Aeronautical knowledge examinations and assessment of practical competencies for a RePL training course to upgrade a RePL**

This Division is for subparagraphs 101.295 (2) (a) (iii) and 101.295 (2) (b) (i) of CASR and the definition of ***RPL training course*** in the CASR Dictionary, in relation to the issue of an upgraded RePL.

**[11] Subsection 2.20 (4)**

*omit*

Despite paragraph 2.30 (2) (a), the person who supervises

*insert*

The person who supervises

**[12] Subsection 2.21 (2), including the Note**

*substitute*

- (2) Subject to subsection (3), the aeronautical knowledge component of the RePL training course must require the applicant to complete training, and pass an examination, in all of the units of knowledge that are required for the relevant RPA under Schedule 4, except:
- (a) for an applicant who successfully completed the Common units to obtain an initial RePL — the Common units; and
  - (b) for an applicant:
    - (i) who was issued with an initial RePL at least 3 years before 10 April 2020; and
    - (ii) whose initial RePL has not been cancelled or suspended; and
    - (iii) who is an involved participant;  
the Common units; and
  - (c) for all applicants — those units for which the holder passed the aeronautical knowledge examination:
    - (i) not more than 3 years before applying for a RePL for the relevant RPA;  
or
    - (ii) more than 5 years before applying for a RePL for the relevant RPA provided the applicant is an involved RPA participant.

*Note* ***Involved RPA participant*** is defined in subsection (7).

**[13] Subsection 2.21 (5)**

*substitute*

- (5) The practical competency component of the RePL training course must require the applicant to complete training, and be assessed as competent, in all of the units of practical competency that are required for the relevant RPA under Schedule 5 (including in the manual mode of operation if the case so requires), except:
- (a) for an applicant who successfully completed the Common units to obtain an initial RePL — the Common units; and
  - (b) for an applicant:
    - (i) who was issued with an initial RePL at least 3 years before 10 April 2020; and
    - (ii) whose initial RePL has not been cancelled or suspended; and
    - (iii) who is an involved participant;  
the Common units; and
  - (c) for all applicants — those units of practical competency for which the holder was assessed as competent:
    - (i) not more than 3 years before applying for a RePL for the relevant RPA;  
or
    - (ii) more than 5 years before applying for a RePL for the relevant RPA provided the applicant is an involved RPA participant.

**[14] Subsection 2.23 (2), including the Note**

*substitute*

- (2) Subject to subsection (3), the aeronautical knowledge component of the RePL training course must require the applicant to complete training, and pass an examination, in all of the units of knowledge that are required for the relevant RPA under Schedule 4, except:
- (a) for an applicant who successfully completed the Common units to obtain an initial RePL — the Common units; and
  - (b) for an applicant:
    - (i) who was issued with an initial RePL at least 3 years before 10 April 2020; and
    - (ii) whose initial RePL has not been cancelled or suspended; and
    - (iii) who is an involved participant;  
the Common units; and
  - (c) for all applicants — those units for which the holder passed the aeronautical knowledge examination:
    - (i) not more than 3 years before applying for a RePL for the relevant RPA;  
or
    - (ii) more than 5 years before applying for a RePL for the relevant RPA provided the applicant is an involved RPA participant.

*Note* ***Involved RPA participant*** is defined in subsection (8).

**[15] Subsection 2.23 (5)**

*substitute*

- (5) The practical competency component of the RePL training course must require the applicant to complete training, and be assessed as competent, in all of the units of practical competency that are required for the relevant RPA under Schedule 5 (including in the manual mode of operation if the case so requires), except:
- (a) for an applicant who successfully completed the Common units to obtain an initial RePL — the Common units; and
  - (b) for an applicant:
    - (i) who was issued with an initial RePL at least 3 years before 10 April 2020; and
    - (ii) whose initial RePL has not been cancelled or suspended; and
    - (iii) who is an involved participant;  
the Common units; and
  - (c) for all applicants — those units of practical competency for which the holder was assessed as competent:
    - (i) not more than 3 years before applying for a RePL for the relevant RPA;  
or
    - (ii) more than 5 years before applying for a RePL for the relevant RPA provided the applicant is an involved RPA participant.

**[16] Subsection 2.25 (2), including the Notes**

*substitute*

- (2) Subject to subsection (3), the aeronautical knowledge component of the RePL training course must require the applicant to complete training, and pass an examination, in all of the units of knowledge that are required for the relevant RPA under Schedule 4, except:
- (a) for an applicant who successfully completed the Common units to obtain an initial RePL — the Common units; and
  - (b) for an applicant:
    - (i) who was issued with an initial RePL at least 3 years before 10 April 2020; and
    - (ii) whose initial RePL has not been cancelled or suspended; and
    - (iii) who is an involved participant;  
the Common units; and
  - (c) for all applicants — those units for which the holder passed the aeronautical knowledge examination:
    - (i) not more than 3 years before applying for a RePL for the relevant RPA;  
or
    - (ii) more than 5 years before applying for a RePL for the relevant RPA provided the applicant is an involved RPA participant.

*Note 1* **Involved RPA participant** is defined in subsection (7).

*Note 2* Under subsection 2.25 (2), the aeronautical knowledge component would include training and examination in a liquid-fuel system if the holder is applying for the first time to be a RePL holder for RPA with a liquid-fuel system.

**[17] Subsection 2.25 (5), including the Note**

*substitute*

- (5) The practical competency component of the RePL training course must require the applicant to complete training, and be assessed as competent, in all of the units of practical competency that are required for the relevant RPA under Schedule 5 (including in the manual mode of operation if the case so requires), except:
- (a) for an applicant who successfully completed the Common units to obtain an initial RePL — the Common units; and
  - (b) for an applicant:
    - (i) who was issued with an initial RePL at least 3 years before 10 April 2020; and
    - (ii) whose initial RePL has not been cancelled or suspended; and
    - (iii) who is an involved participant;  
the Common units; and
  - (c) for all applicants — those units of practical competency for which the holder was assessed as competent:
    - (i) not more than 3 years before applying for a RePL for the relevant RPA;  
or
    - (ii) more than 5 years before applying for a RePL for the relevant RPA provided the applicant is an involved RPA participant.

*Note* Under subsection 2.25 (5), the practical competencies component would include training and demonstration of competence in a liquid-fuel system if the holder is applying for the first time to be a RePL holder for RPA with a liquid-fuel system.

**[18] Subparagraph 2.30 (2) (c) (iv), the Note**

*omit*

the Part 61 Manual of Standards

*insert*

the Part 61 Manual of Standards

**[19] Section 4.02, definition of *defined unmanned aircraft***

*substitute*

***defined unmanned aircraft*** means an unmanned aircraft operated in accordance with:

- (a) an approval of an approved area under regulation 101.030 of CASR; or
- (b) a permission mentioned in regulation 101.075 that permits operation of the aircraft within the no-fly zone of a controlled aerodrome.

**[20] Section 4.03**

*substitute*

**4.03 RPA flight in the no-fly zone of a controlled aerodrome**

- (1) Subject to this section, a person must not:
- (a) conduct RPA operations; or
  - (b) fly an RPA;

- in the no-fly zone of a controlled aerodrome.
- (2) A person who is:
    - (a) a certified RPA operator: or
    - (b) the remote pilot of a certified RPA operator;may conduct, or fly as the remote pilot in, an RPA operation in the no-fly zone of a controlled aerodrome if the operation is a tethered operation in accordance with section 4.04.
  - (3) A person may fly an RPA in the no-fly zone of a controlled aerodrome if the flight is exclusively an indoors operation.
  - (4) A person may fly a micro RPA in the no-fly zone of a controlled aerodrome if the aircraft does not enter an approach and departure path described in paragraph (b) of the definition of ***no-fly zone of a controlled aerodrome***.
  - (5) A person must not fly a model aircraft that has a gross weight of more than 250 g in the no-fly zone of a controlled aerodrome.
  - (6) A person may fly a model aircraft that has a gross weight of no more than 250 g in the no-fly zone of a controlled aerodrome if the aircraft does not enter an approach and departure path described in paragraph (b) of the definition of ***no-fly zone of a controlled aerodrome***.
  - (7) A person may fly a defined unmanned aircraft in the no-fly zone of a controlled aerodrome.

## **[21] Section 5.01**

*substitute*

### **5.01 Application**

- (1) This Chapter applies only for RPA operations of a certified RPA operator.
- (2) Only a certified RPA operator may be granted an approval under paragraph 101.029 (2) (b) of CASR:
  - (a) for subparagraph 101.300 (4) (b) (i) — to operate an unmanned aircraft beyond the operator’s visual line of sight; or
  - (b) for subparagraph 101.300 (4) (b) (ii) — for a RePL holder who is a member of the operator’s personnel to operate an unmanned aircraft beyond the RePL holder’s visual line of sight.

*Note* An approval would be granted to the certified RPA operator only if the requirements of Chapter 5 are met — see paragraph 101.029 (2) (b) of CASR.

- (3) Only a RePL holder:
  - (a) who is a certified RPA operator holding an approval for paragraph (2) (a); or
  - (b) who is a member of the personnel of a certified RPA operator holding an approval for paragraph (2) (b);may be granted an approval under paragraph 101.029 (2) (b) of CASR for subregulation 101.073 (2) to operate an unmanned aircraft beyond the RePL holder’s visual line of sight.

*Note* An approval for a RePL holder would only be granted in association with the grant of a relevant approval for a certified RPA operator.

**[22] Section 5.02**

*substitute*

**5.02 Requirements for RPA operations do not apply in certain approved areas**

- (1) Subject to subsection (2), this Chapter applies to any area that is an area approved by CASA for regulation 101.030 of CASR.
- (2) This Chapter does not apply to an EVLOS operation if the area approval permits an EVLOS operation that is in accordance with alternative requirements specified in the approval.

**[23] Sub-subparagraph 5.06 (c) (i) (B)**

*substitute*

- (B) a person certified to conduct an RPL training course which includes a proficiency check for the purpose of this section; or
- (C) CASA; and

**[24] Subsection 5.15 (1)**

*omit*

by using

*substitute*

by using, or, subject to subsection (1A), by directing a certified and appropriately trained visual observer to use,

**[25] After subsection 5.15 (1)**

*insert*

- (1A) Despite a direction given under subsection (1), the remote pilot for the EVLOS operation is at all times responsible for ensuring that the operation of the RPA complies with regulation 101.055 — Hazardous operation prohibited.

**[26] Subsection 9.03 (3)**

*omit*

Subject to subsection (4), a person who is not a certified RPA operator may

*insert*

A person who is not a certified RPA operator may

**[27] Subsection 9.03 (4)**

*omit*

A person may fly

*insert*

Subject to subsection (3), a person may fly

**[28] After subparagraph 10.07 (1) (c) (ii)**

*insert*

and

- (iii) the maximum and the minimum gross weight of the RPA for operations (including with payload where applicable);



**[29] Subparagraph 10.07 (1) (d) (ii)**

*omit*

2 kg

*insert*

25 kg

**[30] Subparagraphs 10.07 (1) (d) (iii) and (iv)**

*omit*

**[31] After subparagraph 10.12 (2) (a) (ii)**

*insert*

and

- (iii) the maximum and the minimum gross weight of the RPA for operations (including with payload where applicable);

**[32] Chapter 11**

*substitute*

**CHAPTER 11 NOTIFICATION OF CHANGE TO OPERATE EXCLUDED RPA**

**11.01 Notice to CASA of operation of excluded RPA**

For paragraph 101.028 (b) of CASR, the following form and manner of a notification for subregulation 101.372 (1) are approved:

- (a) the notification to CASA must be made through the CASA online notification system for excluded RPA;
- (b) the notification must contain the following information:
  - (i) if the person is an individual — the person's full name;
  - (ii) if the person has a trading name — the person's trading name;
  - (iii) the person's street, postal and email addresses;
  - (iv) a description of the kind of excluded RPA that are the subject of the notification.

*Note* Under subregulation 101.372 (1) of CASR, before the first operation of the excluded RPA, the operator must notify CASA of the operation in accordance with subsection 11.01.

**11.02 Change relating to operating excluded RPA**

For paragraph 101.373 (1) (b) of CASR, the following kinds of changes are prescribed for a person who has given notice, in accordance with regulation 101.372 of CASR, in relation to an excluded RPA mentioned in regulation 101.371:

- (a) if the person is an individual — any change to the person's full name;
- (b) if the person has a trading name — any change to the person's trading name;
- (c) any changes to the person's street, postal or email addresses;
- (d) any changes to the excluded RPA that were the subject of the notice given under subregulation 101.372 (1) of CASR.

**[33] Schedule 4, Appendix 1, Unit 1, item 2, column 3, Priority**

*omit*

**A**

*insert*

**B**

**[34] Schedule 4, Appendix 1, Unit 1, item 4, column 3, Priority**

*omit*

**A**

*insert*

**B**

**[35] Schedule 4, Appendix 1, Unit 1, item 6, column 3, Priority**

*omit*

*A and B respectively*

*insert*

*B and C respectively*

**[36] Schedule 4, Appendix 1, Unit 3, item 2, column 3, Priority**

*omit*

**C**

*insert*

**B**

**[37] Schedule 4, Appendix 1, Unit 4, item 9, column 3, Priority**

*insert*

**B**

**[38] Schedule 4, Appendix 1, Unit 7, item 2, column 3, Priority**

*omit*

**A**

*insert*

**B**

**[39] Schedule 4, Appendix 5, Unit 12, item 3, paragraph (e)**

*substitute*

(e) induced airflow;

(f) ground effect;

(g) recirculation.

**[40] Schedule 4, Appendix 5, Unit 12, item 6**

*substitute*

6	RESERVED	
---	----------	--

**[41] Schedule 4, Appendix 5, Unit 12, item 7, column 3, Priority**

*insert*

**A**

**[42] Schedule 6, Appendix 4, subclause 1.1**

*omit*

aeroplane category

*insert*

powered-lift category

**[43] Schedule 6, Appendix 4, after subclause 1.4**

*insert*

- 1.5 A non-vertical landing manoeuvre, otherwise required under Unit code RP5 in clause 3 to demonstrate the RPA landing, is not required if such a landing is likely to cause damage to the aircraft, provided that a successful go-around is conducted instead from a position where a non-vertical landing, if made, would otherwise be assured.

**[44] Schedule 6, the respective Appendices 1 to 4, the respective clauses 3, Practical flight standards tables, the respective columns 1, Unit code**

*insert a new column headed **Item**, to the left of the Unit code column in each clause 3 table, with cells corresponding to the Unit code cells, and in the relevant cell of the new column, item number each corresponding Unit code consecutively from number 1 through to the end of the clause*

---