
Consultation - Proposed Part 101 (Unmanned aircraft and rockets) Manual of Standards 2018 – (CD 1807US)

Overview

CASA is seeking feedback on new rules for remotely piloted aircraft systems (RPAS) operations (popularly known as drones).

The proposed new rules aim to:

- prescribe requirements for RePL training course administration including requirements for RePL training instructors
- prescribe aeronautical knowledge and practical competency standards, for RePL practical training courses
- impose examination requirements for RePL training course theory components
- prescribe requirements relating to the operation of an RPA or model aircraft below 400 ft in controlled airspace or near controlled aerodromes
- prescribe requirements for extended visual line of sight (EVLOS) operations
- impose recordkeeping and notification requirements for the operator of an RPA including excluded RPA.

The proposed new rules and standards are described in the draft manual of standards (MOS) of Part 101 of *Civil Aviation Safety Regulations 1998 (CASR)*.

MOS standards are legal rules that are authorised by regulation. When implemented, the MOS will harmonise and standardise some of the current conditions on RPAS operator certificates. This will provide a benchmark for operators and for CASA surveillance and auditing purposes.

Note: If you 'fly for fun', all the essential/fundamental drone rules remain the same. A small section of the proposed new rules – clarifying the requirements to operate in controlled and non-controlled airspace – may affect some recreational users.

Why we are consulting

We are consulting to ensure that the proposed new rules are clearly articulated and will work in practice as they are intended.

Comments are sought from every sector of the community. This includes the general public, government agencies and in particular, all sectors of the aviation industry, whether as an aviator, aviation consumer and/or provider of related products and services.

We understand regulations can be difficult to read. We have made it easier for you to have your say. On the contents page there is a list of different audiences with the questions that may be of particular interest to them. You can decide how many or how few of the questions you want to answer. Each question will include a link to the relevant section of the MOS, so you don't have to read the entire document.

All documents related to this consultation are attached at the bottom of the page. They are:

- Summary of proposal document, which provides background on the proposed standards
- Exposure Draft Part 101 Manual of Standards (MOS)
- a downloadable Word copy and PDF of this consultation for ease of distribution and feedback within your organisation.

Previous consultations

Prior to the release of this Summary of proposal, CASA has consulted internally and externally via a new [Technical Working Group](#) (TWG), consisting of representatives from CASA and the RPAS industry. Alterations and additions were made to the draft MOS as a result of these consultations.

Drafts of the training syllabus were previously distributed by CASA to certified RPAS training organisations. In terms of the development of training standards, these organisations were very supportive of CASA's intended direction.

What happens next

All comments on the draft MOS of Part 101 of CASR consultation will be considered. Relevant feedback that improves upon the proposed standards and is consistent with the regulations and other CASA policy, will be incorporated into the final ruling.

CASA has set a tentative date of the fourth quarter of 2018 to make the proposed rules, some of which will come into effect by the second quarter of 2019. The feedback we receive from this consultation will also assist CASA in developing adequate implementation and transition timeframes.

CASA proposes a transition period of six months for the training aspects of the MOS to ensure that industry has sufficient time to adapt to the new requirements. To facilitate RPAS operations by industry, it is likely that other aspects of the MOS may commence sooner. Timeframes may change depending on the date the draft rules are signed, registered and implemented by CASA.

Post-implementation review

CASA will monitor and review the new rules during the transition phase and on an ongoing basis. As the industry develops, CASA will also continue work on proposed further changes to the Part 101 regulations to better support RPAS operations.

Please read the *Summary of proposed change (CD 1807US)* consultation document before providing your feedback in the online survey.

Consultation Contents

The draft Part 101 of CASR MOS details technical material and requirements, including specifications and standards that complement those set out in the regulations. It includes standards for training operations and general administration by operators.

We recognise that not all respondents will be interested in commenting on the entire rule set. There are 32 MOS-related questions, but unless an answer is required or mandatory, you can answer as few or as many of the questions as you like.

FACT BANK: Question guide to assist in identification of areas of particular interest.

Audience	Questions of particular interest
Aerodrome operators	18-20
Air navigation service providers	1-26
Air transport safety investigators	1-20, 27-30
Defence	1-26
Excluded RPA operators	18-32
Flight crew	18-26
Instrument procedures designers	18-20
Manned flight training organisations	11
Remote pilots	1-32
Commercial RPAS operators	1-32
RePL flight training organisations	1-17
Sports aviation operators	18-20
Recreational model aircraft/drone flyers	18-20, 31-32

When you have completed the consultation, click the **'Finish'** button at the bottom right of this page.

Personal information

First name?

(Required)

Last name?

(Required)

Email address?

If you enter your email address then you will automatically receive an acknowledgement email when you submit your response.

Email

Do your views officially represent those of an organisation?

(Required)

Please select only one item

- Yes
- No

If yes, please specify the name of the organisation.

Which of the following group descriptors best describes the group you represent?

(Please select one of the options below)

(Required)

Please select only one item

- ReOC holder/RPAS operator
- Excluded RPA operator
- RePL holder (but not a ReOC holder)
- Commercial aircraft operator (not RPAS)
- Aircraft pilot (no RPAS connections)
- Other aviation industry (non-government)
- Model aircraft association

- Recreational model aircraft/drone pilot
- Government agency in infrastructure portfolio (Airservices, ATSB etc)
- Other Federal Government agency
- Other government agency
- Educational institution
- RPAS manufacturer
- Non-aviation industry commercial business
- Other (Please specify below)

Please specify 'Other' if selected

Please enter your Post Code below

Consent to publish your submission

In order to promote debate and transparency, we intend to publish all responses to this consultation. This may include both detailed responses/submissions in full and aggregated data drawn from the responses received.

Where you consent to publication, we will include:

- your name, if the submission is made by you as an individual or the name of the organisation on whose behalf the submission has been made
- your responses and comments

We will not include any other personal or demographic information in a published response.

Do you give permission for your response to be published?

(Required)

Please select only one item

- Yes - I give permission for my response/submission to be published.
- No - I would like my response/submission to remain confidential but understand that de-identified aggregate data may be published.
- I am a CASA officer.

Information about how we consult and how to make a confidential submission is available on the **CASA website** <<https://www.casa.gov.au/rules-and-regulations/landing-page/consultation-process>> .

Page 3: Aeronautical Theory Syllabus and Exams

1. Do you agree with the proposed aeronautical knowledge/theory syllabus for the remote pilot licence (RePL)?

Fact bank: Divisions 2.1, 2.2; Sections 2.07- 2.11; Schedules 2 and 4

Radio buttons

- Agree
- Agree with changes (please specify suggested changes below)
- Disagree (please set out your reasoning and alternative suggestions below)
- Undecided / Not my area of expertise

Comment

2. Do you agree that the syllabus for aeronautical knowledge has the right level of detail?

Fact bank: Schedules 2 and 4

Radio buttons

- Agree
- Agree with changes (please specify suggested changes below)
- Disagree (please set out your reasoning and alternative suggestions below)
- Undecided / Not my area of expertise

Comment

3. Do you agree with the proposed structure and requirements for the examination of aeronautical knowledge, including the knowledge deficiency process?

Fact bank: Division 2.3

Radio buttons

- Agree
- Agree with changes (please specify suggested changes below)
- Disagree (please set out your reasoning and alternative suggestions below)
- Undecided / Not my area of expertise

Comment

4. Once the Syllabus is implemented should new applicants for a RePL continue to get credit for the aeronautical knowledge component of the RePL course based on air traffic control, flight crew or military ATC/flight crew qualifications history?

Note: this is not in the proposed MOS

Radio buttons

- Yes
- Yes, but only for certain qualifications (please specify)
- No (please specify why)
- Undecided/Not my area of expertise

Comment

Page 4: Practical operation Syllabus and testing

5. Do you agree with the proposed practical operation syllabus for the RePL?

Fact bank: [Divisions 2.1, 2.4; Schedules 3 and 5](#)

Radio buttons

- Agree
- Agree with changes (please specify suggested changes below)
- Disagree (please set out your reasoning and alternative suggestions below)
- Undecided / Not my area of expertise

Comment

6. Do you agree that the syllabus for practical operation has the right level of detail?

Fact bank: [Schedules 3 and 5](#)

Radio buttons

- Agree
- Agree with changes (please specify suggested changes below)
- Disagree (please set out your reasoning and alternative suggestions below)
- Undecided / Not my area of expertise

Comment

7. Do you agree that there is an appropriate emphasis on practical flying ability in the practical competencies syllabus, or should there be less, and more emphasis placed on non-technical skills (NTS)?

Fact bank: [Schedules 3 and 5](#)

Radio buttons

- Yes, there is an appropriate amount of emphasis on practical flying ability
- Yes, but there should be more on NTS
- No, there should be more on NTS and less on practical flying skills
- Undecided / Not my area of expertise

Comment

8. Do you agree that prescribing a trial introductory flight in a manned aircraft, for the practical competencies syllabus, would provide sufficient and suitable exposure to the aviation system in general?

(Note, this is not in the proposed MOS)

Radio buttons

- Agree
- Agree with changes (please specify suggested changes below)
- Disagree (please set out your reasoning and any alternative suggestions below)
- Undecided / Not my area of expertise

Comment

9. Do you agree with the proposed flight test schedules for the RePL?

Fact bank: [Divisions 2.8; Schedule 6](#)

Radio buttons

- Agree
- Agree with changes (please specify suggested changes below)
- Disagree (please set out your reasoning and alternative suggestions below)
- Undecided / Not my area of expertise

Comment

Page 5: RePL upgrades standards

10. For the proposals relating to RePL upgrades, do you agree with the policy to allow applicants with passes in the common units of knowledge to gain credit for those units within five years of passing the exam?

Fact bank: [Subsection 2.05\(6\)](#)

Radio buttons

- Agree
- Agree with changes (please specify suggested changes below)
- Disagree (please set out your reasoning and alternative suggestions below)
- Undecided / Not my area of expertise

Comment

11. Do you agree with the exemption from the five-year limit for those who can show ongoing operational participation in the industry?

Fact bank: [Subsection 2.05\(7\)](#)

Fact bank: [Subsection 2.05\(8\)](#)

Radio buttons

- Agree
- Agree with changes (please specify suggested changes below)
- Disagree (please set out your reasoning and alternative suggestions below)
- Undecided / Not my area of expertise

Comment

12. With respect to a RePL, which upgrades should only be delivered by an approved RePL training organisation, and which upgrades should regular ReOC holders (ie, non-specialist trainers) be allowed to deliver?

Fact bank: [Division 2.5](#)

Please indicate your recommendations about who should deliver each upgrade by selecting the check box under the provider/s you believe are appropriate.

Upgrade type	Approved RePL training organisation only	Approved RePL training organisation and regular ReOC holder with internal staff training procedures
Upgrade a RePL for a small RPA whose weight is less than 7 kg to include another small RPA of the same category whose weight is 7 kg or more	<input type="checkbox"/>	<input type="checkbox"/>
Upgrade a RePL for a small RPA to include a different category of small RPA	<input type="checkbox"/>	<input type="checkbox"/>
Upgrade a RePL for a small RPA to include a medium or large RPA of the same category	<input type="checkbox"/>	<input type="checkbox"/>
Upgrade a RePL for a small RPA to include a medium or large RPA of a different category	<input type="checkbox"/>	<input type="checkbox"/>

Upgrade a RePL for a medium or large RPA to include another medium or large RPA of the same category

Upgrade a RePL for a medium or large RPA to include another medium or large RPA of a different category

Comments

13. Do you agree with the policy to limit RePL holders to RPA with a gross weight under 7 kg, unless they have demonstrated their practical flying ability on an aircraft at or above this weight?

(This is current CASA policy that would be codified by the implementation of the proposed MOS.)

Fact bank: [Section 2.20](#)

Radio buttons

- Agree
- Agree with changes (please specify suggested changes below)
- Disagree (please set out your reasoning and alternative suggestions below)
- Undecided/Not my area of expertise

Comment

Page 6: Requirements for RePL training organisations

14. Do you agree with the alleviation from the instructor-student ratio standard for a knowledge course where the training organisation can demonstrate a high level of quality and organisational integrity to CASA (For example, a university course)?

Fact bank: [Section 2.27](#)

Radio buttons

- Agree
- Agree with changes (please specify suggested changes below)
- Disagree (please set out your reasoning and alternative suggestions below)
- Undecided / Not my area of expertise

Comment

15. Do you agree with the requirements for delivering a RePL training course?

Fact bank: [Sections 2.12 – 2.17](#); [Divisions 2.6 and 2.7](#).

Radio buttons

- Agree
- Agree with changes (please specify suggested changes below)
- Disagree (please set out your reasoning and alternative suggestions below)
- Undecided / Not my area of expertise

Comment

16. If you are responding as an RPAS training organisation, what is the minimum time you think it would take (in hours and days) to deliver a course to beginner students based on the new a.) aeronautical knowledge and b.) practical operation syllabi?

Fact bank: [Schedules 4 and 5](#)

Radio Buttons

Aeronautical Knowledge

- 22.5 hours (3 days)
- 30 hours (4 days)
- 37.5 hours (5 days)
- Other (Specify and give your reasons)

Practical operation

- 22.5 hours (3 days)
- 30 hours (4 days)
- 37.5 hours (5 days)
- Other (Specify and give your reasons)

Comment

17. If you are responding as a RPAS training organisation, do you agree that six months (after the MOS is signed into law) is sufficient time for you to transition to the new standards to deliver the courses?

Fact bank: [Sections 2.12 – 2.17](#); [Divisions 2.6 and 2.7](#); [Schedules 2 to 5](#)

Radio buttons

- Agree
- Agree with changes (please specify suggested changes below)
- Disagree (please set out your reasoning and alternative suggestions below)
- Undecided / Not my area of expertise

Comment

PAGE 7: Controlled and non-controlled airspace standards

18. Do you agree with the formalising of no-fly areas around controlled aerodromes (noting that including these areas in the MOS would make it an offence to not comply)?

Fact bank: [Chapter 4](#)

Radio buttons

- Agree
- Agree with changes (please specify suggested changes below)
- Disagree (please set out your reasoning and alternative suggestions below)
- Undecided / Not my area of expertise

Comment

19. Do you agree with the alleviation from the no-fly area provisions near non-controlled aerodromes for RPA that are tethered to the ground in accordance with the standards in 9.02(2)(b)?

Fact bank: [Divisions 9.1](#)

Radio buttons

- Agree
- Agree with changes (please specify suggested changes below)
- Disagree (please set out your reasoning and alternative suggestions below)
- Undecided / Not my area of expertise

Comment

20. When flying near controlled aerodromes in non-controlled airspace, do you agree with the requirement to remain at least 100 ft below overlying controlled airspace that is less than 500 ft AGL (ie, a reduction in the general 400-foot maximum height in specific areas)?

Fact bank: [Divisions 9.2](#)

Radio buttons

- Agree
- Agree with changes (please specify suggested changes below)
- Disagree (please set out your reasoning and alternative suggestions below)
- Undecided / Not my area of expertise

Comment

PAGE 8: Extended Visual Line of Sight (EVLOS)

21. Do you agree with the formula for determining the maximum distance from the remote pilot station for EVLOS operations?

Fact bank: [Subsection 5.11](#)

Fact bank: [Subsections 5.01 to 5.04](#)

Radio buttons

- Agree
- Agree with changes (please specify suggested changes below)
- Disagree (please set out your reasoning and alternative suggestions below)
- Undecided / Not my area of expertise

Comment

22. Do you agree with the maximum 1500 m distance that the RPA may be flown from the relevant observer for EVLOS operations?

Fact bank: [Subsection 5.11](#)

Fact bank: [Subsections 5.01 to 5.04](#)

Radio buttons

- Agree
- Agree with changes (please specify suggested changes below)
- Disagree (please set out your reasoning and alternative suggestions below)
- Undecided / Not my area of expertise

Comment

23. Do you agree with the RPA height referencing standard for EVLOS operations?

Fact bank: [Subsection 5.11\(3\)](#)

Fact bank: [Subsections 5.01 to 5.04](#)

Radio buttons

- Agree
- Agree with changes (please specify suggested changes below)
- Disagree (please set out your reasoning and alternative suggestions below)
- Undecided / Not my area of expertise

Comment

24. Do you agree with the proposed eyesight standard for EVLOS operations?

Fact bank: [Subsection 5.12](#)

Radio buttons

- Agree
- Agree with changes (please specify suggested changes below)
- Disagree (please set out your reasoning and alternative suggestions below)
- Undecided / Not my area of expertise

Comment

25. Do you agree with the proposed 12-month currency requirement for EVLOS remote pilots?

Fact bank: [Subsection 5.06](#)

Radio buttons

- Agree
- Agree with changes (please specify suggested changes below)
- Disagree (please set out your reasoning and alternative suggestions below)
- Undecided / Not my area of expertise

Comment

26. Do you have any other comments with respect to EVLOS operations?

Fact bank: Chapter 5

Comments

PAGE 9: Recordkeeping and notification requirements

27. Do you agree with the recordkeeping requirements for ReOC holders?

Fact bank: Division 10.2

Radio buttons

- Agree
- Agree with changes (please specify suggested changes below)
- Disagree (please set out your reasoning and alternative suggestions below)
- Undecided / Not my area of expertise

Comment

28. Do you agree with the recordkeeping requirements for excluded RPA operators?

Fact bank: Division 10.3

Radio buttons

- Agree
- Agree with changes (please specify suggested changes below)
- Disagree (please set out your reasoning and alternative suggestions below)
- Undecided / Not my area of expertise

Comment

29. Do you agree with the notification requirements for excluded RPA operators (This is current CASA policy that will be formalised by the implementation of the MOS.)?

Fact bank: Subsections 10.14 – 10.16; Chapter 11

Radio buttons

- Agree
- Agree with changes (please specify suggested changes below)
- Disagree (please set out your reasoning and alternative suggestions below)
- Undecided / Not my area of expertise

Comment

30. Do you agree with the change notification requirements for ReOC holders?

Fact bank: Subsection 10.17

Radio buttons

- Agree
- Agree with changes (please specify suggested changes below)
- Disagree (please set out your reasoning and alternative suggestions below)
- Undecided / Not my area of expertise

Comment

PAGE 10: General

31. What other standards do you think the MOS should contain (noting that there are already placeholders in Chapters 3, 6 and 7 for non-RePL training, night operations, and operations near people respectively)?

Please select as many of the suggested standards below you consider a useful addition to the MOS.

Check boxes:

- Operations above 400 ft in controlled airspace
- Operations above 400 ft in non-controlled airspace
- Operations within 3 nm of a controlled aerodrome (outside the approach and departure paths)
- Operations at or within 3 nm of a non-controlled aerodrome/HLS with manned traffic operating in the area
- Operations with multiple RPA controlled by a single RePL holder
- Tethered operations
- Other (please specify below)

Comment

32. Do you have any additional comments about the proposed MOS?

(Please note, this should not include points you have already raised in this consultation)

Comment