

Explanatory Statement

Civil Aviation Safety Regulations 1998

Part 101 Manual of Standards (Modified Licensing Standards for Advancing RPA Technology, and Other Matters) Amendment Instrument 2022 (No. 1)

Purpose

The *Part 101 (Unmanned Aircraft and Rockets) Manual of Standards 2019* (the **principal MOS**) was the first issue of a Manual of Standards (**MOS**) in relation to unmanned aircraft and rockets (including kites, fireworks, unmanned tethered and free balloons). The power to issue the MOS was conferred on the Civil Aviation Safety Authority (**CASA**) by the *Civil Aviation Legislation Amendment (Part 101) Regulation 2016* (the **amendment regulations**).

The principal MOS prescribed a range of miscellaneous matters in relation to the safety and regulatory oversight of remotely piloted aircraft (**RPA**), including training and competency standards for remote pilot licences (**RePL**).

In particular, the principal MOS prescribed requirements for:

- RePL training courses in the aeronautical knowledge and practical competencies required for the issue of a RePL, or for the purpose of upgrading an existing RePL
- RePL training organisations to deliver RePL training courses and assess applicants
- the flight testing of applicants for a RePL.

In order to appropriately apply the currently comprehensive range of practical training standards and competency requirements in the principal MOS to emerging new technology in the development, manufacture and deployment of medium RPA and large RPA, the *Part 101 Manual of Standards (Modified Licensing Standards for Advancing RPA Technology, and Other Matters) Amendment Instrument 2022 (No. 1)* (the **MOS amendment**) provides CASA with a power to approve, for individual RPA training organisations, modified practical competencies and standards.

The approvals would disapply some Part 101 MOS training standards, which it would otherwise be impossible, impracticable, or unsafe for particular RPA to meet, and, instead, add or substitute other applicable training standards, where appropriate, to compensate.

It is expected that within the next 18 months, CASA will have developed new, generic, outcome-based training standards for technologically advanced medium RPA and large RPA, and amended the principal MOS accordingly.

The abbreviation **RePL** is used in the MOS and in this Explanatory Statement to avoid confusion with a “recreational pilot licence” which is usually abbreviated to “RPL”. Also, references below to a provision with the prefix “101.” are to the provision in Part 101 of CASR.

Legislation — the Act

Under subsection 98 (1) of the *Civil Aviation Act 1988* (the **Act**), the Governor-General may, among other things, make regulations prescribing matters required, permitted, necessary or convenient for the Act and in the interests of the safety of air

navigation. Part 101 of the *Civil Aviation Safety Regulations 1998 (CASR)* deals with the operation of unmanned aircraft, rockets and fireworks.

Legislation — Part 101 of CASR

Under regulation 101.028, CASA may issue a MOS prescribing matters required or permitted by the regulations to be prescribed, or necessary or convenient to be prescribed for carrying out or giving effect to Part 101.

This power is complemented by other provisions in Part 101 which empower CASA to prescribe specific matters in the MOS. Where relevant, these complementary provisions are described in Appendix 2 in the context of the explanations of provisions that rely on them.

In particular, under the CASR Dictionary, a ***RPL training course*** relevantly means training in the operation of RPA for the grant of a remote pilot licence that is conducted “in accordance with any standards or requirements prescribed by the Part 101 Manual of Standards”.

Under subsection 33 (3) of the *Acts Interpretation Act 1901*, where an Act confers a power to make, grant or issue any instrument of a legislative or administrative character (including rules, regulations or by-laws), the power shall be construed as including a power exercisable in the like manner and subject to the like conditions (if any) to repeal, rescind, revoke, amend, or vary any such instrument.

Background

Medium RPA and large RPA

Items 4 and 5 of the Table in regulation 101.022 in Part 101 of CASR define medium RPA and large RPA as follows:

4	<i>medium RPA</i>	<ul style="list-style-type: none"> (a) an RPA with a gross weight of more than 25 kg, but not more than 150 kg; or (b) a remotely piloted airship with an envelope capacity of not more than 100 m³.
5	<i>large RPA</i>	<ul style="list-style-type: none"> (a) a remotely piloted aeroplane with a gross weight of more than 150 kg; or (b) a remotely piloted powered parachute with a gross weight of more than 150 kg; or (c) a remotely piloted rotorcraft with a gross weight of more than 150 kg; or (d) a remotely piloted powered-lift aircraft with a gross weight of more than 150 kg; or (e) a remotely piloted airship with an envelope capacity of more than 100 m³.

Commercial and scientific developments in RPA

Commercial and scientific developments in RPA technology, design, and functionality, in particular affecting the autonomy and safety system design of medium RPA and large RPA — that is RPA of more than 25 kg gross weight — are advancing rapidly, and in many cases unpredictably, for these categories of RPA. Commercial enterprises and public utility organisations continue to deploy these advanced remotely controlled aircraft into more diverse activities where unconventional functionality is required.

These developments, while not yet so radical as to be beyond the reach or relevance of the overall content of the principal MOS, are in practice outstripping, in unforeseen and unpredictable ways, aspects of the fixed training and flight testing syllabi established in 2019 for a person to qualify for an RePL to fly such an RPA.

This is progressively giving rise to the need for, in effect, unique training and testing, and practical competencies and standards, for unique forms of RePL that are limited to highly-specific RPA, performing highly-specific functions.

For example, fixed flight RPA, designed to be, in effect, incapable of deviation from their programmed trajectory and flight termination, might be deployed for mapping, surveying, exploration or search and rescue operations. For the purposes of training and flight testing, the applicant for a RePL for this highly-specialised form of remote unmanned aviation will not be able to satisfy certain manoeuvrability standards and competencies prescribed in the MOS for the category of RPA, while otherwise being capable of satisfying other more relevant practical competency standards.

In this example, the imposition of, and insistence upon, certain manoeuvrability standards and competencies would, in fact, create unsafe conditions for trainers and controllers during training. However, the absence of compliance with these requirements will not adversely affect an acceptable level aviation safety, or may be mitigated by the imposition of other requirements not normally required.

CASA disapplication approval mechanism

In order to ensure the delivery of appropriate RePL training courses for emerging technology in the development and manufacture of medium RPA and large RPA, CASA has used the MOS amendment to create alternative RePL training course requirements. These new requirements enable CASA to approve modified combinations of practical competency units and standards. These approvals would disapply certain MOS practical units of competency which it would otherwise be impossible or impracticable for particular RPA to meet, and would substitute other practical training standards to compensate.

This mechanism will allow continuing technological developments in RPA autonomy and safety system design, and consequential broader commercial functionality and deployment, by enabling licence applicants to qualify for RePLs, or to upgrade existing RePLs that are specifically focused on a particular medium or large RPA, its functionality and its limitations.

Aviation safety

An acceptable level of aviation safety will be preserved because relevant CASA approvals will still require relevant and applicable safety standards and competencies to be satisfied, including, where appropriate, those specifically required for particular types or kinds of medium RPA or large RPA.

Aeronautical knowledge standards

With one exception, the MOS amendment will not affect *aeronautical knowledge standards* requirements. The exception relates to RePL upgrade training courses from small RPA to medium or large RPA of the same category, and RePL upgrade training courses from medium or large RPA to include another medium or large RPA of the same category.

Previously, the aeronautical knowledge components (and practical competency components) of the RePL training course (including examination and assessment) for these upgrades had to comply with the requirements in a proposed standalone CASA syllabus that was incorporated into the Part 101 MOS, namely, the *CASA RePL Upgrade Supplement for the Part 101 MOS*, as in force from time to time.

In place of this, the MOS amendment substitutes specific aeronautical knowledge requirements drawn from Schedule 4 of the principal MOS.

The MOS amendment

The details of the MOS amendment are set out in Appendix 2. They are necessarily relatively complex in order to create an acceptable approval mechanism that makes safety the highest priority while being flexible enough to deal with unforeseen and unpredictable technological advances.

The opportunity is also taken in the MOS amendment to make a small number of corrections to typographical and other errors in the principal MOS.

Legislation Act 2003 (the LA)

Under subsection 8 (4) of the LA, an instrument is a legislative instrument if it is made under a power delegated by the Parliament, and any provision determines the law or alters the content of the law, and it has the direct or indirect effect of affecting a privilege or interest, imposing an obligation, creating a right, or varying or removing an obligation or right. The principal MOS satisfied these requirements and, consequentially, the MOS amendment does so also.

Under paragraph 98 (5A) (a) of the Act, regulations made “for” that same provision may empower CASA to issue instruments in relation to matters affecting the safe navigation and operation of aircraft.

Under subsection 98 (5AA) of the Act, an instrument (like the principal MOS) issued under paragraph 98 (5A) (a) is taken to be a legislative instrument if it is expressed to apply in relation to a class of persons or aircraft or aeronautical products.

The principal MOS was an instrument empowered by regulation 101.028 made by the amendment regulations “For subsection 98 (5A) of the Act”.

The standards set by the principal MOS apply not to a particular remote pilot or a particular RPA but to the class of such pilots and aircraft. The principal MOS was, therefore, by virtue of subsection 98 (5AA), a legislative instrument and subject to registration, and tabling and disallowance in the Parliament, under sections 15G, and 38 and 42, of the LA.

Consequentially, the same provisions and conclusions apply to the MOS amendment.

Sunsetting

As the instrument relates to aviation safety and is made under CASR, Part 4 of Chapter 3 of the LA (the sunseting requirement) does not apply to the instrument (as per item 15 of the table in section 12 of the *Legislation (Exemptions and Other Matters) Regulation 2015*). The instrument deals with aviation safety matters that, once identified, require a risk response or treatment plan. As such, the instrument is intended to have enduring operation and it would not be appropriate for it to be subject to sunseting.

The exemption from the sunseting provisions affects parliamentary oversight by not requiring the instrument to be remade at the end of the sunseting period (remaking would have the effect that the whole instrument must be retabled and would become subject to disallowance in the Parliament under sections 38 and 42 of the LA). However, it is likely that, long before the end of the sunseting period, further MOS amendments will be made, affecting the policy embodied in the MOS amendment and these will be subject to tabling and disallowance in the Parliament in the normal way.

Incorporation by reference

The MOS amendment, as such, does not incorporate by reference any new documents.

Consultation

Under section 16 of the Act, in performing its functions and exercising its powers, CASA must consult government, industrial, commercial consumer and other relevant bodies and organisations insofar as CASA considers such consultation to be appropriate.

Under section 17 of the LA, before a legislative instrument is made, CASA must be satisfied that it has undertaken any consultation it considers appropriate and practicable in order to draw on relevant expertise and involve persons likely to be affected by the proposals.

Under regulation 11.280 in Subpart 11.J of CASR, if CASA intends to issue a MOS, CASA must, in effect, engage in public consultation on the actual draft MOS. This requirement also applies to a MOS amendment.

Non-consultation Determination

However, under paragraphs 11.275 (1) (a) and (d) of CASR, CASA is not obliged to consult if the Director of Aviation Safety (the **Director**) determines that it is necessary to issue the MOS as soon as practicable in the interests of aviation safety, or if the MOS is of a minor or machinery nature that does not substantially alter existing arrangements. In such circumstances, under subregulation 11.275 (2), CASA must publish the Director's determination, and a statement of reasons for it, on the internet within 28 days after making the determination.

It is necessary that the MOS amendment be issued as soon as practicable in the interests of safety because attempts by RPA training organisations to deliver training courses that meet the existing RePL, or RePL upgrade, training standards for the relevant medium or large RPA are liable to create unsafe training, operating, and flying practices, with no off-setting safety benefits.

Therefore, in the interests of aviation safety, the Director has determined that the proposed MOS amendment is necessary for the purposes of paragraph 11.275 (1) (a) of CASR.

In addition to this, the number of medium RPA and large RPA that would currently, or in the near future, require modified training courses, remains small, although it is increasing. Nevertheless, based on the current modest impact that the disapplication approval process will have, it may be said that, as a matter of practice the MOS amendment does not substantially alter the existing arrangements.

Rather, for a small number of RPA training organisations, it allows those arrangements to continue to apply in a more flexible way to avoid the unnecessary ineligibility of certain applicants to train and test for a RePL. Those applicants would otherwise be, in effect, disqualified because of the inherent limitations, or specific functionalities, of the RPA for which, exclusively, they sought a RePL.

The purpose of the MOS amendment is to ensure that practical competencies and standards are available for a person to qualify for a medium or large RPA RePL, or RePL upgrade, in particular cases of advancing RPA technology.

The MOS amendment makes machinery amendments to the principal MOS to enable CASA to approve relevant practical competencies and standards that keep pace with advancing RPA technology.

Therefore, the Director has determined that the proposed MOS amendment is of a minor or machinery nature for the purposes of paragraph 11.275 (1) (d) of CASR.

The Director has made the above determinations in CASA 20/22 with an associated Statement of Reasons and these have been uploaded to the CASA website.

Informal consultation

While there is, therefore, no express obligation to consult on the MOS amendment, there has been considerable informal consultation with the relevant aviation industry both before and in the course of preparation of the MOS amendment. Feedback was received from various such sources arguing that there was a pressing need, as a matter of priority, to address CASA's lack of a specialised RePL licensing powers because of the lack of flexibility in the principal MOS to encompass more technologically advanced RPA in the medium RPA and large commercial categories. The MOS amendment is CASA's response to address these concerns.

Office of Best Practice Regulation (OBPR)

Following preparation of a preliminary impact statement for the amendment regulations mentioned above, OBPR issued CASA with an exemption from the requirement to prepare a Regulatory Impact Statement (**RIS**) with respect to those amendment regulations (OBPR id: 16320). The amendment regulations specifically empowered the making of the principal MOS so that, insofar as the principal MOS imposed obligations or requirements, those obligations and requirements arose from the amendment regulations. In these circumstances, the OBPR exemption extended to the principal MOS also.

The MOS amendment extends, in a beneficial way, the applicability of the principal MOS and is not expected to increase any regulatory impact addressed by the previous RIS. Rather, it is expected to reduce regulatory impact by enabling the licensing of RePL applicants who might otherwise have been unable to qualify for a RePL through a failure to satisfy practical competency units that had no practical, operational or safety relevance to the particular RPA for which they sought a RePL.

Sector risk, economic and cost impact

Economic and cost impact

Subsection 9A (1) of the Act states that, in exercising its powers and performing its functions, CASA must regard the safety of air navigation as the most important consideration. Subsection 9A (3) of the Act states that, subject to subsection (1), in developing and promulgating aviation safety standards under paragraph 9 (1) (c), CASA must:

- (a) consider the economic and cost impact on individuals, businesses and the community of the standards; and
- (b) take into account the differing risks associated with different industry sectors.

The cost impact of a standard refers to the direct cost (in the sense of price or expense) which a standard would cause individuals, businesses, and the community to incur. The economic impact of a standard refers to the impact a standard would have on the production, distribution, and use of wealth across the economy, at the level of the individual, relevant businesses in the aviation sector, and the community more broadly. The economic impact of a standard could also include the general financial impact of that standard on different industry sectors.

In terms of economic and cost impacts for subsection 9A (3) of the Act, the MOS amendment should, in practice reduce RePL training costs for applicants and overhead costs for RPA training organisations. This should be the case because of the training syllabus flexibilities which the MOS amendment will permit and which expressly overseen by CASA approvals will ensure that an acceptable level of aviation safety is preserved.

Sector risks

There are no increased, or differential, sector risks arising from the MOS amendment.

Regional and remote Australia impacts

The Minister's Statement of Expectations for the CASA Board states: "I expect that CASA will: ... (b) fully consider the impact of new regulations on general aviation, with a particular focus on regional and remote Australia. All Explanatory Statements drafted by CASA for subordinate legislation should identify the impact on the various categories of operations as well as on communities in regional and remote Australia served by those operations and how these impacts have been considered."

There are no identified regional and remote impacts that differ in any material way from the general economic and cost impacts described above. RePL applicants and trainers located in regional and remote Australia should benefit as above in the same way as metropolitan applicants and trainers.

Statement of Compatibility with Human Rights

The Statement of Compatibility with Human Rights at Appendix 1 has been prepared in accordance with Part 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*. The legislative instrument indirectly engages some of the applicable rights and freedoms, but, in the context of aviation safety, does so in a reasonable, necessary and proportionate way to ensure safety and is, therefore, compatible with human rights, as it does not improperly infringe any human rights.

Commencement and making

The MOS commences on the day after it is registered.

The MOS amendment has been made by the Director of Aviation Safety, on behalf of CASA, in accordance with subsection 73 (2) of the Act.

Statement of Compatibility with Human Rights

*Prepared in accordance with Part 3 of the
Human Rights (Parliamentary Scrutiny) Act 2011*

Part 101 Manual of Standards (Modified Licensing Standards for Advancing RPA Technology, and Other Matters) Amendment Instrument 2022 (No. 1)

The *Part 101 Manual of Standards (Modified Licensing Standards for Advancing RPA Technology, and Other Matters) Amendment Instrument 2022 (No. 1)* (the **MOS amendment**) is compatible with the human rights and freedoms recognised or declared in the international instruments listed in section 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*.

Overview of the legislative instrument

The *Part 101 (Unmanned Aircraft and Rockets) Manual of Standards 2019* (the **principal MOS**) was the first issue of a Manual of Standards (**MOS**) in relation to unmanned aircraft and rockets (including kites, fireworks, unmanned tethered and free balloons). The power to issue the MOS was conferred on the Civil Aviation Safety Authority (**CASA**) by the *Civil Aviation Legislation Amendment (Part 101) Regulation 2016* (the **amendment regulations**).

The principal MOS prescribed a range of miscellaneous matters in relation to the safety and regulatory oversight of remotely piloted aircraft (**RPA**), including training and competency standards for remote pilot licences (**RePL**).

In particular, the principal MOS prescribed requirements for:

- RePL training courses in the aeronautical knowledge and practical competencies required for the issue of a RePL, or for the purpose of upgrading an existing RePL
- RePL training organisations to deliver RePL training courses and assess applicants
- the flight testing of applicants for a RePL.

In order to appropriately apply the currently comprehensive range of practical training standards and competency requirements in the principal MOS to emerging new technology in the development, manufacture and deployment of medium RPA and large RPA, the *Part 101 Manual of Standards (Modified Licensing Standards for Advancing RPA Technology, and Other Matters) Amendment Instrument 2022 (No. 1)* (the **MOS amendment**) provides CASA with a power to approve, for individual RPA training organisations, modified practical competencies and standards.

The approvals would disapply some Part 101 MOS training standards, which it would otherwise be impossible, impracticable, or unsafe for particular RPA to meet, and, instead, add or substitute other applicable training standards, where appropriate, to compensate..

It is expected that within the next 18 months, CASA will have developed new, generic, outcome-based training standards for technologically advanced medium RPA and large RPA, and amended the principal MOS accordingly.

Human rights implications

The right to work

The MOS may engage the right to work that is protected under Article 6 (1) of the *International Covenant on Economic, Social and Cultural Rights* (the ICESCR). This right includes the right of everyone to the opportunity to gain their living by work which they freely choose or accept.

The right to work may be engaged because, in the absence of the CASA disapplication approval power provided by the MOS amendment, persons seeking employment or engagement in the operation of specialised medium or large RPA would be seriously impeded in obtaining the requisite RePL, or RePL upgrade, due to the inapplicability of inflexible training and flight testing standards whose criteria had no operational or safety relevance to the specialised functioning of the relevant RPA.

The approval power will permit persons completing modified RePL training courses to be issued with RePLs that are essential for relevant RPA controller work. It will allow relevant training to the highest reasonable standard of competency and proficiency for the specific functionality of the medium or large RPA. The approval power will also allow RPA training organisations to expand training opportunities to the relevant medium or large RPA.

Therefore, in the circumstances, the requirements in the MOS amendment are positive in nature and effect, and a reasonable, necessary and proportionate response that ensures the continued integrity of the aviation safety system. The right of relevant persons to the opportunity to gain their living by work is recognised, which might otherwise be jeopardised or lost.

Conclusion

This legislative instrument is compatible with human rights and, to the extent that it may limit human rights, those limitations are reasonable, necessary and proportionate to ensure the safety of aviation operations and to promote the integrity of the aviation safety system.

Part 101 Manual of Standards (Modified Licensing Standards for Advancing RPA Technology, and Other Matters) Amendment Instrument 2022 (No. 1)

1 Name of instrument

This section names the instrument.

2 Commencement

This section commences the instrument on the day after it is registered.

3 Amendment of the Part 101 Manual of Standards

This section provides that Schedule 1 amends the *Part 101 (Unmanned Aircraft and Rockets) Manual of Standards 2019* (the **principal MOS**).

Schedule 1 Amendments

[1] Paragraph 1.06 (2) (a)

This amendment clarifies that the relevant Act is the *Civil Aviation Act 1988*.

[2] Paragraph 2.05 (4) (a)

This amendment corrects erroneous references to sections in Division 2.5. The effect is that, for the circumstances reflected in the correct references, the Common Units of the aeronautical knowledge standards do not need to be repeated for certain RePL upgrade training courses.

[3] Paragraph 2.05 (7) (b)

This amendment corrects a typographical error in that the word “not” was inadvertently omitted where the intention was to create a concessional aeronautical knowledge training and examination exemption for certain RePL applicants who had previously passed a relevant aeronautical knowledge examination **not** more than 5 years before their application for a RePL.

[4] Paragraph 2.06 (6) (a)

This amendment corrects erroneous references to sections in Division 2.5. The effect is that, for the circumstances reflected in the correct references, the Common Units of the aeronautical knowledge standards do not need to be repeated for certain RePL upgrade training courses.

[5] Division 2.2, after section 2.06

New section 2.06A

Under new subsection 2.06A (1), a practical training course for a particular medium RPA or large RPA may be comprised of **relevant practical competency units and standards**, meaning requirements sourced from some or all of the following:

- (a) part only of the MOS units of practical competency that would, but for this subsection, be required under subsection 2.06 (6) to be completed for the RPA;
- (b) all or part of another set of MOS units of practical competency, being units that would, but for this subsection, otherwise not be required to be completed;

- (c) alternative practical competency standards, behaviours, and flight test standards, including where appropriate, tolerances and variables, approved by CASA that are specifically devised and applicable in relation to a particular type or kind of medium RPA or large RPA.

However, subsection (1) does not apply unless the relevant practical competency units and standards described there are approved by CASA on the basis that specific training in them:

- is necessary for establishing the competency of a person to hold a RePL for the RPA; and
- is necessary because unique, unusual, or other characteristics in the system design or other features of the RPA make completion of the units of practical competency otherwise prescribed for the RPA under subsection 2.06 (6) impossible or impracticable to meet; and
- will enable the person to achieve an acceptable level of competency for the operation of the RPA; and
- will not have any adverse effects on aviation safety.

CASA may grant an approval on written application by a RePL training organisation that provides CASA with a detailed safety case, or on CASA's own initiative.

A Note explains that a training organisation's safety case should at least include a description of the unique, unusual, or other characteristics in the system design or other features of the RPA which make completion of the units of practical competency otherwise prescribed for the RPA under subsection 2.06 (6) impossible or impracticable to meet.

The safety case should also describe any alternative practical competency standards, flight test standards, tolerances, or variables that the training organisation considers would substitute or compensate for the practical competency standards, flight test standards, tolerances, or variables prescribed in the MOS that cannot be met.

[6] Subsection 2.18 (2)

This amendment is consequential on Amendment and 7.

[7] Division 2.4, after section 2.18

New section 2.18A

Under new section 2.18A, to complete the RePL training course component for the operation of an RPA to which section 2.06A applies, the applicant must be assessed as competent in the relevant practical competency units and standards.

That assessment must be for the relevant RPA category and be conducted for the automated operation mode or for both the automated operation mode and the manual mode.

To be assessed as competent, the applicant must demonstrate to a RePL training instructor all of the behaviours mentioned in each item of the relevant practical competency unit unless CASA approves in writing that the innovative RPA system design makes demonstration for a particular item impossible or impracticable.

The RePL training instructor must be satisfied that all of the behaviours for the relevant practical competency units are demonstrated, within the relevant tolerances and variables unless CASA approves in writing that the innovative RPA system design makes demonstration for a particular tolerance or variable impossible or impracticable.

The applicant must then also pass a RePL training course flight test in the relevant RPA.

Behaviours must be demonstrated, as prescribed, relevantly and appropriately. If a variable was not selected for demonstration because operating conditions made it impossible to demonstrate the variable, the RePL training instructor must require the applicant to provide a satisfactory computerised simulation of the flight characteristics of the RPA under the variable or a detailed oral explanation of the variable. These options must be certified by the examiner.

A behaviour demonstrated outside a relevant tolerance may be considered to have been demonstrated within the tolerance if the RePL training instructor is satisfied that failure to demonstrate the behaviour is the unavoidable impact of the relevant operating conditions and, in the circumstances, the behaviour that was demonstrated was not so far outside the tolerance as to indicate a lack of competence. These outcomes must be certified.

The training course flight test must be in accordance with some or all of the relevant flight test standards in Schedule 6 as CASA approves in writing, and any other relevant standards that CASA specifically approves for a particular type or kind of medium RPA or large RPA.

New section 2.18B

Under new section 2.18B, CASA approvals for section 2.06A must identify the relevant practical competency units and standards that must be completed.

Approvals must identify each item of the relevant practical competency units that it is impossible or impracticable to demonstrate, and each tolerance or variable that it is impossible or impractical to demonstrate.

Approvals must identify any relevant flight test standards that it is impossible or impracticable to meet.

Approvals may be expressed to apply in relation to a RePL training organisation, in respect of a particular RePL applicant, or a class of such applicants, for the medium RPA or large RPA for the operation of which the relevant applicant proposes to seek a RePL.

Each approval that is for a particular RePL training organisation must be contained in a single instrument for the organisation or the operator and may only be granted if CASA considers that it will preserve an acceptable level of aviation safety.

A Note explains that a CASA decision to grant or refuse to grant an approval is subject to judicial review under the *Administrative Decisions (Judicial Review) Act 1977*. A decision to refuse to grant an approval is subject to merits review by the Administrative Appeals Tribunal under section 31 of the *Civil Aviation Act 1988*.

[8] After section 2.19AA – new section 2.19AB

The amendment uses a drafting device to apply the same approval mechanism under Amendments 5 and 7 to specific RePL upgrades.

[9] Subparagraph 2.21 (2) (c) (ii)

This amendment corrects a typographical error in that the word “not” was inadvertently omitted where the intention was to create a concessional aeronautical knowledge training and examination exemption for certain RePL applicants who had previously passed a relevant aeronautical knowledge examination **not** more than 5 years before their application for a RePL.

[10] Subsection 2.21 (4), including the Note

This amendment, in effect, only removes, for small RPA upgrades, an unnecessary requirement (which does not exist for other upgrades) for an aeronautical knowledge examination to be carried out by the same person who conducts the RePL applicant’s flight test.

[11] Subparagraph 2.21 (5) (c) (ii)

This amendment corrects a typographical error in that the word “not” was inadvertently omitted where the intention was to create a concessional aeronautical knowledge training and examination exemption for certain RePL applicants who had previously passed a relevant aeronautical knowledge examination **not** more than 5 years before their application for a RePL.

[12] Subsection 2.22 (2)

This amendment is, in effect, consequential on amendment 13.

[13] Subsections 2.22 (3) and (4)

This amendment replaces subsections 2.22 (3) and (4) by providing that, without affecting liquid-fuel system training requirements for first-time RePL applicants, the aeronautical knowledge and practical competency components of the RePL training course (including examination and assessment) for a RePL upgrade from a small RPA to include a medium or large RPA of the same category must comply with the requirements in subsections 2.21 (2) to (7) as if they applied for the relevant RPA.

This amendment reflects the aeronautical knowledge standards exception mentioned above (under Background).

However, it also has the effect of prescribing the practical competency standards for the relevant RPA because, previously, these too were expressed to be dependent on the now superseded *CASA RePL Upgrade Supplement*.

The consequence is that, for the relevant RePL upgrade, the relevant requirements of Schedule 4 (aeronautical knowledge), Schedule 5 (practical competency units) and Schedule 6 (flight test standards) will be applicable (but also variable in accordance with the effect of section 2.19AB).

[14] Subparagraph 2.23 (2) (c) (ii)

This amendment corrects a typographical error in that the word “not” was inadvertently omitted where the intention was to create a concessional aeronautical knowledge training and examination exemption for certain RePL applicants who had previously passed a relevant aeronautical knowledge examination **not** more than 5 years before their application for a RePL.

[15] Subparagraph 2.23 (5) (c) (ii)

This amendment corrects a typographical error in that the word “not” was inadvertently omitted where the intention was to create a concessional aeronautical knowledge training and examination exemption for certain RePL

applicants who had previously passed a relevant aeronautical knowledge examination **not** more than 5 years before their application for a RePL.

[16] Subsection 2.24 (2)

This amendment is, in effect, consequential on amendment 17.

[17] Subsections 2.24 (3) and (4)

This amendment replaces subsections 2.24 (3) and (4) by providing that, without affecting liquid-fuel system training requirements for first-time RePL applicants, the aeronautical knowledge and practical competency components of the RePL training course (including examination and assessment) for a RePL upgrade from medium or large RPA to include another medium or large RPA of the same category must comply with the requirements in subsections 2.25 (2) to (7) as if they applied for the relevant RPA.

This amendment reflects the aeronautical knowledge standards exception mentioned above (under Background).

However, it also has the effect of prescribing the practical competency standards for the relevant RPA because, previously, these too were expressed to be dependent on the now superseded CASA RePL Upgrade Supplement.

The consequence is that, for the relevant RePL upgrade, the relevant requirements of Schedule 4 (aeronautical knowledge), Schedule 5 (practical competency units) and Schedule 6 (flight test standards) will be applicable (but also variable in accordance with the effect of section 2.19AB).

[18] Subparagraph 2.25 (2) (c) (ii)

This amendment corrects a typographical error where the word “not” was omitted in creating a concessional aeronautical knowledge training and examination exemption for certain RePL applicants who had previously passed a relevant aeronautical knowledge examination “not” more than 5 years before their application for a RePL.

[19] Subparagraph 2.25 (5) (c) (ii)

This amendment corrects a typographical error in that the word “not” was inadvertently omitted where the intention was to create a concessional aeronautical knowledge training and examination exemption for certain RePL applicants who had previously passed a relevant aeronautical knowledge examination **not** more than 5 years before their application for a RePL.

[20] Subsection 2.31 (2)

This amendment is consequential on Amendment 17.

[21] After subsection 2.31 (2)

Under new subsection 2.31 (2A), if a relevant RePL is the subject of a CASA approval under subsection 2.18B (3), the competency standards for the flight test may be those in the relevant Appendix as varied by the CASA approval made under subsection 2.18B (3) which identifies any relevant flight test standards in the relevant Appendix that the relevant large or medium RPA cannot meet, and the standards specified by CASA that are to be met.

[22] After subsection 2.31 (3)

This amendment is consequential on Amendment 17.

- [23] After subsection 2.31 (6)**
This amendment is consequential on Amendment 17.
- [24] Paragraph 2.31 (7) (b)**
This amendment is consequential on Amendment 17.
- [25] Paragraph 2.31 (8) (e)**
This amendment is consequential on Amendment 17.
- [26] Subsection 2.31 (10)**
This amendment is consequential on Amendment 17.
- [27] Section 9.06, Figure 9.06 (1)-1, including the caption**
This amendment revises Figure 9.06 (1)-1 to delete the previous misleading references to “CASA approval required”.
- [28] Section 11.03, second occurring, the heading**
This amendment corrects a numbering error in the principal MOS.