Australian Government Civil Aviation SafetyAuthority



SUMMARY OF PROPOSED CHANGE

Proposed instrument CASA XX/23 - Flight Training and Flight Tests for Grant of Certain Endorsements (Sling, Winching and Rappelling, Firefighting) Approval

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 April 2023

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Introduction

CASA has been reviewing parts of the flight training and testing scheme that are not working as intended. Since the commencement in 2014 of Part 61 of the *Civil Aviation Safety Regulations 1998* (CASR) practical barriers to the efficient conduct of flight training and entry control assessment for some pilot endorsements including aerial mustering, sling, winch and rappelling operations and firefighting have emerged.. We have used the umbrella term *specialised endorsements* for these endorsements (listed in Figure 1), which relate to low-level operations mainly conducted under Parts 133, 137 and 138 of CASR:

Sling operations endorsement to the lowlevel rating. See item 8 of table 61.1075 of CASR Winch and rappelling endorsement to the lowlevel rating. See item 9 of table 61.1075 of CASR Firefighting (category specific) endorsement to the aerial application rating. See items 4 and 5 of table 61.1120 of CASR

Figure 1: Specialised endorsements relevant to the proposed instrument

Industry feedback has indicated difficulties in implementing the Part 141 flight training scheme for specialised endorsement training. In many respects, the intended approach to flight training in which the requirements for conducting lower risk activity authorisations were meant to require less rigorous training and testing compared to the higher risk activities has not materialised for these pilots, and an alternative approach is needed to better facilitate training and assessment for these endorsements.

This is believed to be one of the reasons for the limited availability of suitably qualified flight instructors, examiners and flight training operators to conduct training and assessment for specialised endorsements. This impacts the availability of suitably qualified pilots to conduct specialised operations. The demand for specialised pilots remains high so the availability of training and flight testing continues to be a limiting factor and consequently a source of frustration for specialised operators.

To address these difficulties, CASA proposes to establish a tailored system for training, assessment, grant and exercise of certain specialised endorsements.

CASA consulted between 1 and 16 December 2022 on and made an approval instrument, <u>CASA</u> <u>05/23</u>, which established an alternative pathway for training, assessment, grant and exercise of aerial mustering endorsements. The policy of <u>CASA 05/23</u> underpins this summary of proposed change (SPC).

This proposal addresses:

- entry criteria and prerequisites for new pilots seeking a specialised endorsement
- training and assessment requirements for the grant of specialised endorsements
- supervision requirements following completion of training, assessment and grant of endorsement
- maintenance of competency following grant of endorsement

- entry criteria and prerequisites for persons conducting training specialised endorsements for Part 138 or Part 137 operators
- maintenance of competency for persons conducting training for specialised endorsements
- requirements for Part 138 or Part 137 operators who elect to conduct the training and facilitate the assessment and grant of specialised endorsements.

In the first stage of this process, CASA is seeking industry and public comment on the attached consultation draft of the Flight Training and Flight Tests for Grant of Certain Endorsements (Sling, Winching and Rappelling, Firefighting) Approval 2023 instrument. This instrument proposes to establish an alternative pathway for the training, assessment and grant of specialised endorsements, as a first step and until the regulations are amended.

An explanation document also accompanies the draft instrument to explain the operation of the instrument and the intent of each provision.

Appendix A to this SPC is an explanation of the proposed changes for each relevant specialised endorsement.

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Attachments:

- Consultation draft CASA XX/23 Flight Training and Flight Tests for Grant of Certain Endorsements (Sling, Winching and Rappelling, Firefighting) Approval 2023
- Explanation document CASA XX/23 Flight Training and Flight Tests for Grant of Certain Endorsements (Sling, Winching and Rappelling, Firefighting) Approval 2023

Purpose and scope of the proposed amendments

Since Part 61 of CASR commenced on 1 September 2014, feedback from industry has indicated that there are practical barriers to the efficient conduct of flight training and entry control testing, such as the limited availability of instructors, examiners and flight training organisations to conduct training and testing for specialised endorsements.

The feedback specifically noted difficulties implementing the Part 141 flight training scheme and the Part 61 licensing scheme to authorise pilots to conduct training and flight tests for specialised endorsements. In many respects, the intended approach to flight training—in—has not materialised for specialised pilots.

In addition, the alignment in Part 61 of CASR of all previous trainer authorisations (such as instructor rating, approved pilot, approved training pilot and authorised person) into an overarching instructor rating was intended to simplify and regularise the system and apply fundamental training to all pilots conducting training. However, this approach has not been adopted in industry as widely as expected.

This is believed to be one of the reasons for the limited availability of suitably qualified flight instructors, examiners and flight training operators to conduct training and assessments for specialised endorsements. This impacts on the availability of suitably qualified pilots to conduct specialised operations.

To address these difficulties, CASA proposes to establish a tailored system for training, assessment, grant and exercise of specialised endorsements.

The purpose of the proposed instrument is to address the difficult areas outlined above related to specialised endorsements and aims to:

- develop entry standards for new pilots to ensure those seeking specialised endorsements are suitably qualified and have the essential basic competencies prior to receiving training
- create a more proportional system for specialised endorsements to be granted in practical operations
- recognise operational expertise to simplify the entry standards for persons delivering training for specialised endorsements
- expand the training and assessment activities permitted by operators to reduce time and cost of accessing training.

Pilots conducting these specialised activities need to have well developed threat and error management competencies and need to understand and apply the relevant aspects of human factors for the operation. Appropriate operational behaviours and a sound safety culture are essential. Training for each of the specialised endorsements is, by its nature, focussed on the operations so it relies on the new pilot having core knowledge and skills in relation to low flying operations. The new pilot's knowledge and skills in low flying operations can be transferred and utilised across the relevant specialised activity.

Initially, the proposal requires an approval instrument, accompanied by tailored guidance material. Longer term, CASA will consider whether the changes are appropriate to be embedded in Part 61 of CASR and the Part 61 Manual of Standards (MOS).

These proposed changes will improve the identified problems and meet the aims as outlined above.

Create an initial temporary legislative framework

An approval instrument will be created to establish a tailored alternative system for training and assessment of pilots to conduct specialised operations. Tables 1, 2 and 3 show the matters to be addressed in the instrument for each specialised endorsement.

Matter	Requirements	
Trainee for sling oper	ations endorsement	
Prerequisites – trainee pilot	 The trainee pilot must: hold a PPL, CPL or ATPL with the helicopter category rating hold the underlying low-level rating and helicopter low-level endorsement have at least 50 hours pilot in command experience flying an aircraft of the same category that the pilot will fly in sling operations. 	
Training – trainee pilot	 The training course for the trainee pilot must: include at least 10 sling operations, conducted during a minimum of 3 flights be conducted by a Part 138 operator that is authorised to conduct the training under the instrument and delivered by a "trainer" authorised to conduct the training under the instrument. 	
Assessment – trainee pilot	The trainer who conducts the training completes the training and certifies standard achieved, grants the sling operations endorsement and notifies CASA.	
	Note: The proposed instrument refers to this assessment as a flight test. This is to reflect the current regulatory structure. Consideration will be given to treating specialised pilot endorsements in the same way as flight activity endorsements in the future.	
Recurrent checks – trainee pilot	 Following completion of training and grant of endorsement, the trainee pilot must complete: If operating for a Part 138 operator: an annual operator check conducted by a designated pilot on behalf of the head of operations. This check requires competency checking of non-normal operations, upsets and emergency procedures On-the-job training and supervision managed by operators. Requirements in e.g., the Part 138 Manual of Standards continue to apply. Note: These matters will not be specifically addressed in the instrument. 	
Trainer for sling operations endorsement		
Prerequisites – trainer pilot	 The trainer pilot must have at least: a CPL with the helicopter category rating, low-level rating, and sling operations endorsement 2 years operational experience conducting sling load operations 1,000 hours experience as pilot in command of a helicopter conducted 100 sling load operations employed by a Part 138 operator to conduct the training. 	
Training – trainer pilot	The trainer pilot must:	

Table 1:	Sling	operations	endorsement
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Matter	Requirements		
	 complete a training course comprising at least 5 hours dual flight training in non-PIC seat. The training course must be conducted by a Part 141 flight training operator and delivered by a flight instructor with a grade 1 training endorsement or instructor rating training endorsement, and either the low-level rating training endorsement or the sling operations training endorsement. complete an approved course of training in principles and methods of instruction, or hold a Certificate IV in Training and Assessment, or hold a tertiary qualification in teaching. 		
	Note: Questions have been raised as to whether the instructor conducting the training needs to have competency conducting sling operations. We are seeking feedback on whether an instructor with either the Grade 1 training endorsement or the instructor rating training endorsement and the low-level rating training endorsement should also be required to have the sling operations endorsement.		
Assessment – trainer pilot	Training course to include an assessment of competency to deliver training for the sling operations endorsement, conducted by the instructor delivering the training course to the trainer.		
	Note: The trainer will not be issued with a flight instructor rating or related training endorsement. The trainer will be authorised to conduct certain activities under the proposed instrument.		
Recurrent checks – trainer pilot	Biennial check conducting training assessed by instructor with qualifications required to conduct the initial training and assessment of a trainer.		
Training operator for	Training operator for sling operations endorsement		
Prerequisites – training operator	 A commercial operator seeking to conduct training must: hold a Part 138 aerial work certificate authorising the operator to conduct sling load operations ensure the training is managed by the head of operations or head of training and checking include detail on the training course and the trainers authorised to deliver the training in the operations manual retain certain documents and provide course completion certificates. 		

Table 2: Winch and rappelling operations endorsement

Matter	Requirements
Trainee for winch and	rappelling operations endorsement
Prerequisites – trainee pilot	 The trainee pilot must: hold a CPL or ATPL with the helicopter category rating hold the underlying low-level rating and helicopter low-level endorsement have at least 100 hours pilot in command experience flying an aircraft of the same category that the pilot will fly in winching or rappelling operations.
Training – trainee pilot	 The training course for the trainee pilot must: include at least 5 winch or rappelling operations, conducted during a minimum of 3 flights be conducted by a Part 138 operator that is authorised to conduct the training under the instrument and delivered by a "trainer" authorised to

Matter	Requirements
	conduct the training under the instrument.
Assessment – trainee pilot	The trainer who conducts the training completes the training and certifies standard achieved, grants the winch and rappelling operations endorsement and notifies CASA.
	Note: The proposed instrument refers to this assessment as a flight test. This is to reflect the current regulatory structure. Consideration will be given to treating specialised pilot endorsements in the same way as flight activity endorsements in the future.
Recurrent checks – trainee pilot	Following completion of training and grant of endorsement, the trainee pilot must complete: If operating for a Part 138 operator:
	 an annual operator check conducted by a designated pilot on behalf of the head of operations. This check requires competency checking of non-normal operations, upsets and emergency procedures
	On-the-job training and supervision managed by operators. Requirements in e.g., the Part 138 Manual of Standards continue to apply.
	Note: These matters will not be specifically addressed in the instrument.
Trainer for winch and	rappelling operations endorsement
Prerequisites – trainer pilot	 The trainer pilot must have at least: a CPL with the helicopter category rating, low-level rating, and winch and rappelling operations endorsement 2 years operational experience conducting winch and rappelling operations 1,000 hours experience as pilot in command of a helicopter conducted 100 winch and rappelling operations employed by a Part 138 operator to conduct the training.
Training – trainer pilot	 The trainer pilot must: complete a training course comprising at least 5 hours dual flight training in non-PIC seat. The training course must be conducted by a Part 141 flight training operator and delivered by a flight instructor with a grade 1 training endorsement or instructor rating training endorsement, and the low-level rating training endorsement or winch and rappelling operations training endorsement. complete an approved course of training in principles and methods of instruction, or hold a Certificate IV in Training and Assessment, or hold a tertiary qualification in teaching.
	Note: Questions have been raised as to whether the instructor conducting the training needs to have competency conducting winch or rappelling operations. We are seeking feedback on whether an instructor with either the Grade 1 training endorsement or the instructor rating training endorsement and the low-level rating training endorsement should also be required to have the winch and rappelling operations endorsement.
Assessment – trainer pilot	Training course to include an assessment of competency to deliver training for the winch and rappelling operations endorsement, conducted by the instructor delivering the training course to the trainer.
	Note: The trainer will not be issued with a flight instructor rating or related training endorsement. The trainer will be authorised to conduct certain activities under the proposed instrument.
Recurrent checks – trainer pilot	Biennial check conducting training assessed by instructor with qualifications required to conduct the initial training and assessment of a trainer.

Matter	Requirements
Training operator for	winch and rappelling operations endorsement
Prerequisites – training operator	 A commercial operator seeking to conduct training must: hold a Part 138 aerial work certificate authorising the operator to conduct winching or rappelling activities ensure the training is managed by the head of operations or head of training and checking include detail on the training course and the trainers authorised to deliver the training in the operations manual retain certain documents and provide course completion certificates.

Table 3: Firefighting endorsements

Matter	Requirements	
Trainee for firefighting	g endorsement	
Prerequisites – trainee pilot	 The trainee pilot must: hold a PPL, CPL or ATPL with the relevant category rating hold the underlying low-level rating and low-level endorsement for the relevant category have at least 200 hours of flight time as pilot of an aircraft of the relevant category. 	
Training – trainee pilot	 The training course for the trainee pilot must: include at least 5 hours of dual instruction in an aircraft of the relevant category while receiving training in firefighting operations include at least 5 firefighting operations, conducted during a minimum of 3 flights be conducted by a Part 138 or Part 137 operator that is authorised to conduct the training under the instrument and delivered by a "trainer" authorised to conduct the training under the instrument. 	
Assessment – trainee pilot	The trainer who conducts the training completes the training and certifies standard achieved, grants the firefighting endorsement and notifies CASA.	
	Note: The proposed instrument refers to this assessment as a flight test. This is to reflect the current regulatory structure. Consideration will be given to treating specialised pilot endorsements in the same way as flight activity endorsements in the future.	
	Note: Trainees will also be eligible for the grant of the aerial application rating, if not already held by the pilot. This can be included as part of the training course for the endorsement.	
Recurrent checks – trainee pilot	 Following completion of training and grant of endorsement, the trainee pilot must complete: If operating for a Part 138 or Part 137 operator: an annual operator check conducted by a designated pilot on behalf of the head of operations. This check requires competency checking of non-normal operations, upsets and emergency procedures. On-the-job training and supervision managed by operators. Requirements in existing rules and regulations (e.g., the Part 138 Manual of Standards) continue to apply. 	
	Note: These matters will not be specifically addressed in the instrument.	

Matter	Requirements		
Trainer for firefighting	gendorsement		
Prerequisites – trainer pilot	 The trainer pilot must have at least: a CPL with the relevant category rating, aerial application rating, firefighting endorsement for the relevant category 2 years operational experience conducting firefighting operations 300 hours experience as pilot conducting firefighting operations, including at least 50 hours as pilot in command of an aircraft of the relevant category employed by a Part 138 or Part 137 operator to conduct the training. 		
Training – trainer pilot	 The trainer pilot must: complete a training course comprising at least 5 hours dual flight training in non-PIC seat. The training course must be conducted by a Part 141 flight training operator and delivered by a flight instructor with a grade 1 training endorsement or instructor rating training endorsement, and the low-level rating training endorsement or the aerial application rating (day) training endorsement (category specific) complete an approved course of training in principles and methods of instruction, or hold a Certificate IV in Training and Assessment, or hold a tertiary qualification in teaching. Note: Questions have been raised as to whether the instructor conducting the training needs to have competency conducting aerial application and/or firefighting operations. We are seeking feedback on whether an instructor with either the Grade 1 training endorsement or the instructor rating training endorsement and the low-level rating training endorsement for the relevant category of aircraft. 		
Assessment – trainer pilot	 Training course to include an assessment of competency to deliver training for the firefighting endorsement, conducted by the instructor delivering the training course to the trainer. Note: The trainer will not be issued with a flight instructor rating or related training endorsement. The trainer will be authorised to conduct certain activities under the proposed instrument. 		
Recurrent checks – trainer pilot	Biennial check conducting training assessed by instructor with qualifications required to conduct the initial training and assessment of a trainer.		
Training operator for	Training operator for firefighting endorsement		
Prerequisites – training operator	 A commercial operator seeking to conduct training must: for the helicopter firefighting endorsement - hold a Part 138 aerial work certificate authorising the operator to conduct firefighting activities in a helicopter for the aeroplane firefighting endorsement - hold a Part 137 AOC authorising the operator to conduct firefighting activities in an aeroplane ensure the training is managed by the head of operations, head of training and checking, or head of flight operations include detail on the training course and the trainers authorised to deliver the training in the operations manual retain certain documents and provide course completion certificates. 		

Make amendments to CASR and associated MOS

For the longer-term, a review of the proposal will be undertaken that may lead to amendments to Part 61, Part 137 and/or Part 138 of CASR or their associated MOS.

The amendments may require significant changes to the current operational rating and endorsement scheme and may result in the creation of a new type of specialised pilot flight activity endorsements, including for mustering.

Amendments may also be required for the prerequisites for pilots, instructors and examiners.

Consideration will also be given to whether amendments are necessary for Part 138 and/or Part 141 of CASR to allow these operators to manage specialised pilot training.

Previous consultations

The issues which the proposal seeks to address were identified by the Flight Crew Licensing Technical Working Group (TWG) after commencement of the flight crew licensing regulations in 2014 and have subsequently been subject to extensive discussion with industry representatives at industry meetings and at the TWG.

CASA held meetings with industry in early 2017 to ascertain from operators their views on the current training situation specifically for mustering and how the requirements could be improved. CASA subsequently worked extensively with the Australian Helicopter Industry Association (AHIA) to develop a draft proposal specifically for aerial mustering, which consulted through the TWG in 2019.

In 2022, CASA collaborated with the AHIA and the TWG to develop and refine the initial proposal. The TWG was also presented with a generalised pathway for specialised pilot endorsements. These stakeholders are supportive of the proposal as it relates more broadly to specialised pilot endorsements. However, as a first step, they endorsed making an instrument specific to aerial mustering endorsements.

CASA consulted on the proposal as it related to aerial mustering endorsement in December 2022. Feedback to that consultation indicated support for the instrument and subsequently it was made in March 2023.

In addition, CASA engaged with a number of industry stakeholders in late 2022 to refine the proposal as it relates to the sling, winch and rappelling, and firefighting endorsements.

These stakeholders have been engaged in the development of the policy proposal from its inception and they have been consulted on the earliest drafts of the instrument throughout its development process.

Impact on industry

Trainee pilots

The proposed instrument is expected to have positive impacts for trainee pilots, as there will be an alternative pathway for trainees to become qualified to conduct specialised activities. There will also be increased numbers of persons available to conduct training and assessment for the specialised endorsements. Trainees will be able to access the training, assessment and subsequent on-the-job training and supervision through their employer.

However, as trainees will be required to meet more stringent pre-requisites before commencing training, it is likely that some people wanting to become specialised pilots will need to gain additional experience before utilising the proposed pathway.

Commercial operators

The policy will have positive impacts for operators conducting specialised operations, as the policy allows operators to leverage their expertise in conducting these operations and manage their pilots. Operators will be able to conduct training and assessment in-house using appropriately qualified and experienced pilots.

It is anticipated that operators will be able to access the proposal without significant effort as Parts 133, 137 and 138 of CASR involve some recurrent training and checking activities. Operators would be able to use sample training syllabi issued by CASA.

In addition, the proposal is anticipated to improve aviation safety by imposing more stringent experience and training requirements which will be desirable to operators. The proposal 'operationalises' the training to ensure that trainee pilots gain adequate experience, knowledge and skill in conducting the relevant specialised pilot activity. Operators will therefore have more appropriately skilled and qualified pilots to conduct operations, resulting in improved safety.

There is expected to be limited or no impact on larger commercial operators as they are more likely to already have the capabilities to conduct endorsement training covered by this proposal.

Flight training operators

Currently, a significant proportion of this training is conducted using approval instruments under Part 141 and Part 61 of CASR. Part 141 flight training operators delivering this training will likely see mixed impacts from the proposal. Flight training operators (FTO) who conduct training for specialised endorsements may see reduced business as operators can utilise the alternative pathway in the proposal to offer competitive training for the endorsements.

However, FTO may have increased business in conducting training in principles and methods of instruction (PMI) and basic train-the-trainer training for the pilots who wish to be authorised to conduct training under the proposal. Those adding PMI training to their scope of training would be required to submit the change to CASA for approval.

Flight instructor and examiner rating holders

As above, flight instructors and examiners other than those with regulation 61.040 and regulation 141.035 approvals may see reduced demand for their services because relevant operators are allowed to conduct training and assessment activities in-house without relying on instructors and examiners.

Safety risk analysis

Conducting sling, winch and rappelling, and firefighting operations involves exposure to more risk compared to many other kinds of operations. This is primarily due to the operations being undertaken at very low-levels, subject to local environmental conditions which can, in some cases, be volatile. In many situations, there is minimal opportunity at low-level to recover an aircraft after a partial or complete malfunction, loss of pilot control or other undesired state.

For these operations, a pilot must have task-specific practical knowledge, with a focus on managing the associated risks, greater situational awareness and more highly responsive and well-honed practical flying skills compared to those required for the more routine low-level operations. The conditions in which the operation is conducted can vary significantly – for example, operating in wide open and flat areas is a very different proposition to operating in hilly, timbered and high elevation areas.

While the accident and incident rate of these specialised operations is relatively high, since they are normally conducted as a single pilot no passenger activity in small aircraft, the consequences of accidents and incidents are limited relative to many other aviation activities, for example passenger transport. However, this does not reduce the need for regulatory oversight or diminish concerns about the human and economic consequences of mishaps.

Some operations may be conducted multi-crew for example, firefighting, search and rescue involving winching and rappelling operations or with other persons on board for example medical transport operation involving winching and rappelling operations with medical transport specialists, passenger(s) or other crew on board.

Personal risk management and commercial factors such as contractual terms and risk management are critical factors that ordinarily incentivise good training of specialised pilots. For example, contracts for the provision of aerial firefighting services typically include very stringent experience requirements. This proposal endeavours to build on that.

During training operations, there can be conditions of heightened risk, although they can be adequately mitigated with safety measures which are addressed by this proposal through improved standards for trainers. Following initial training, new pilots are typically mentored and closely supervised while they expand their awareness and hone their skills to take on more challenging conditions.

Overall, this proposal aims to achieve high safety outcomes and ensure the risks discussed above are adequately managed by:

- implementing a relevant, reliable and well-structured training system for trainers and trainee specialised pilots
- implementing a robust skills and knowledge maintenance scheme

- effective engagement by operators to manage new pilots once they are qualified through safe operational behaviour
- careful operational supervision, including on-the-job supervision once a pilot is qualified.

Regulation impact statement

The proposed instrument is covered by a standing agreement between CASA and OBPR under which a regulation impact statement is not required for approval instruments (OBPR id: 14507). As discussed above in 'Impact on Industry' section, CASA does not anticipate negative impact on industry. A formal regulation impact analysis will be conducted in the next stage of the project to incorporate the proposal into CASR.

Closing date for comment

CASA will consider all comments received as part of this consultation process and incorporate changes as appropriate. Comments on the draft instrument should be submitted through the online response form by midnight 30 April 2023.

Appendix A

Explanation of the proposed requirements

Explanation of the proposed requirements

Trainee pilot for specialised pilot endorsement

Prerequisites – rationale

The trainee must hold a low-level rating for the aircraft category to ensure that the trainee has core knowledge and skills relating to conducting low-level operations, before applying these skills and knowledge into the specialised area.

The trainee should have a minimum number of hours experience for non-technical skills to be practiced and refined during flight. This experience is intended to develop threat and error management competencies as well as understanding and applying the relevant aspects of human factors for the specialised operation. The minimum experience also recognises that the trainee may be receiving training from a person who is not an instructor, and helps to ensure the trainee has a level of independent experience they can draw upon.

Sling operations endorsement	Winch and rappelling operations endorsement	Firefighting endorsement (category specific)
 PPL, CPL or ATPL with helicopter category rating low-level rating relevant category low-level endorsement have at least 50 hours pilot in command experience flying an aircraft of the same category that the pilot will fly in the sling operations 	 CPL or ATPL with helicopter category rating low-level rating relevant category low-level endorsement have at least 100 hours pilot in command experience flying an aircraft of the same category that the pilot will fly in the winch or rappelling operations 	 CPL or ATPL with relevant category rating low-level rating relevant category low-level endorsement have at least 200 hours of flight time as pilot of an aircraft of the relevant category (this aligns with existing Part 61 requirement)

Training course – rationale

Part 61 currently requires a minimum of 5 hours of dual flight in an aeroplane or helicopter while receiving training in low-level operations and 5 hours of dual flight in an aeroplane or helicopter while receiving training in firefighting operations for the firefighting endorsement (category specific), and no minimum hours for the sling and winch and rappelling endorsements.

In principle, a competency-based training and assessment qualification scheme should ensure that trainees receive the amount of training required to become competent in an activity.

Explanation of the proposed requirements

The purpose of imposing minimum hour or training requirements is to ensure that a "floor" is put on the training and ensure that trainees receive an adequate amount of training. The principles of CBT continue to apply, and it is expected that some trainees will require additional hours of training in order to achieve the qualification standard.

Any difference between the requirements in the Part 61 and Part 141 flight training pathway is to recognise that the training is being conducted by a person who does not hold an instructor rating.

Sling operations endorsement	Winch and rappelling operations endorsement	Firefighting endorsement
 The training course for the trainee must: include at least 10 sling operations, conducted during a minimum of 3 flights be conducted by a Part 138 operator that is authorised to conduct the training under the instrument, and delivered by a "trainer" authorised to conduct the training under the instrument 	 The training course for the trainee must: include at least 5 winch or rappelling operations, conducted during a minimum of 3 flights be conducted by a Part 138 or Part 133 operator that is authorised to conduct the training under the instrument, and delivered by a "trainer" authorised to conduct the training under the instrument 	 The training course for the trainee must: include at least 5 hours of dual flight in an aircraft of the relevant category while receiving training in firefighting operations include at least 5 firefighting operations, conducted during a minimum of 3 flights be conducted by a Part 137 or Part 138 operator that is authorised to conduct the training under the instrument, and delivered by a "trainer" authorised to conduct the training under the instrument

Assessment – rationale

An assessment at the completion of training ensures the trainee has achieved the required competency.

Due to the existing regulatory structure, this assessment will be a flight test but may be conducted by the authorised "trainer" rather than an examiner.

• .	Trainer who conducts the training completes the training and certifies standard achieved, grants the specialised pilot endorsement and notifies CASA. Notes: 1. The proposed instrument refers to this assessment as a flight test. This is to reflect the current regulatory	
Winch and rappelling operations endorsement		
Firefighting endorsement	1.	structure.

Explanation of the proposed requirements		
	2: The trainer will be able to assess and grant the aerial application rating in conjunction with the firefighting endorsement.	
Recurrent checks – rationale The intent of recurrent checks is to ensure that bring the pilot back to standard.	t a pilot continues to be competent conducting operations or activities, and provide any training required to	
Currently, an annual aerial application rating p for the low-level rating.	roficiency check is required for the aerial application rating. A biennial low-level rating flight review is required	
annual operator check (involving competency	ualified through this pathway and is operating for a Part 137, Part 138 or Part 133 operator to complete an checking of non-normal operations, upsets and emergency procedures) conducted by a designated pilot on rator proficiency check requirements in Parts 137, 138 and 133 are intended to satisfy this.	
Existing Part 61 recurrent checks continue to	apply.	
Sling operations endorsement	Following completion of training and grant of endorsement, the trainee pilot must complete:	
Winch and rappelling operations endorsement	 if operating for a Part 137, Part 138 or Part 133 operator: an annual operator check conducted by a designated pilot on behalf of the head of operations. This check requires competency checking of non- normal operations, upsets and emergency procedures 	
Firefighting endorsement	on-the-job training and supervision managed by operators. Requirements in e.g. the Part 138 Manual of Standards continue to apply.	
	Note: We do not expect to include these requirements in the instrument.	

Explanation of the proposed requirements

Trainer pilot for specialised pilot endorsement

Prerequisites – rationale

Training for the specialised endorsements is often best conducted in real-life operations.

Industry feedback indicates that experienced pilots may be better suited to conducting training for the specialised endorsements. These trainer pilots should have significant experience conducting the specialised activity to ensure the trainer has received wide exposure to different conditions and operations, and is well versed in the specific operator's operations.

For these reasons, we propose the following criteria to ensure that highly experienced and appropriately qualified pilots conduct the training under the proposed instrument. The trainer pilot should be highly qualified and have recent experience conducting the activity, and be nominated by the operator to conduct the training.

Sling operations endorsement	Winch and rappelling operations endorsement	Firefighting endorsement
 a commercial pilot licence (H) and low-level rating and sling operations endorsement 2 years operational experience conducting sling load operations At least 1000 hours PIC At least 100 sling operations conducted Be employed or engaged by a Part 138 operator to conduct the training 	 a commercial pilot licence (H) and low-level rating and winch and rappelling operations endorsement 2 years operational experience conducting winch and rappelling operations At least 1000 hours PIC At least 100 winch and/or rappelling operations conducted Be employed or engaged by a Part 133 or Part 138 operator to conduct the training 	 a commercial pilot licence (category specific) and aerial application rating, and firefighting endorsement (category specific) 2 years operational experience conducting firefighting operations minimum 300 hours, of which at least 50 hours must be PIC, conducting firefighting operations Be employed or engaged by a Part 137 or Part 138 operator to conduct the training

Training and assessment – rationale

As the trainee pilot for each of the endorsements is expected to hold the low-level rating, the trainer pilot is not required to deliver training for that rating. The scope of training is reduced and focussed on the specialised activity.

Training efficiency is dependent on quality training for the person conducting the training. However, for safety reasons, the training at the very least must

Explanation of the proposed requirements

ensure the new trainer can manage the safety aspects especially in managing non-normal, emergency and upsets that can arise during training activities. In particular, the trainer needs to be competent to manage the training and potential safety risks from a control seat that they may not typically occupy in normal operations. Poor training practices can lead to negative training outcomes and that needs to be avoided. This training involves becoming familiar with the principles and methods of instruction.

Trainer pilots must have some familiarity with instructional techniques, however this does not need to be the full instructor rating course. For this reason, we propose the trainer must complete the training course outlined below at a Part 141 flight training operator and conducted by an instructor with either the Grade 1 training endorsement or instructor rating training endorsement and relevant training endorsement.

endorsement a grade 1 training endorsement or instructor rating training endorsement, and either the low-level ratraining endorsement Firefighting endorsement Firefighting endorsement Firefighting endorsement endorsement for sling operations endorsement, winch and rappelling operations training endorsement for winch and rappelling operations endorsement, aerial application rating (day) training endorsement (category specific) for firefighting endorsement). • complete an approved course of training in principles and methods of instruction, or hold a Certificat IV in Training and Assessment, or a tertiary qualification in teaching. • Training course to include an assessment of competency to deliver training for specialised pilot endorsement, conducted by the instructor delivering the training course to the trainer. We are aware that some potential trainers may have previous training experience, and we expect the Pat 141 operator delivering the PMI course to decide on any appropriate recognition of prior learning.	endorsement.		
Winch and rappelling operations endorsement course must be conducted by a Part 141 flight training operator and delivered by a flight instructor we a grade 1 training endorsement or instructor rating training endorsement, and either the low-level rating training endorsement, or the relevant specialised pilot training endorsement (i.e. sling operations training endorsement for sling operations endorsement, winch and rappelling operations training endorsement for winch and rappelling operations endorsement, aerial application rating (day) training endorsement (category specific) for firefighting endorsement). • complete an approved course of training in principles and methods of instruction, or hold a Certificat IV in Training course to include an assessment, or a tertiary qualification in teaching. • Training course to include an assessment of competency to deliver training for specialised pilot endorsement, conducted by the instructor delivering the training experience, and we expect the Pai 141 operator delivering the PMI course to decide on any appropriate recognition of prior learning. Note: The trainer will not be issued with a flight instructor rating or related training endorsement. The trainer	Sling operations endorsement		
Firefighting endorsement training endorsement for sling operations endorsement, winch and rappelling operations training endorsement for winch and rappelling operations endorsement, aerial application rating (day) training endorsement (category specific) for firefighting endorsement). • complete an approved course of training in principles and methods of instruction, or hold a Certificat IV in Training and Assessment, or a tertiary qualification in teaching. • Training course to include an assessment of competency to deliver training for specialised pilot endorsement, conducted by the instructor delivering the training experience, and we expect the Pattern delivering the PMI course to decide on any appropriate recognition of prior learning. Note: The trainer will not be issued with a flight instructor rating or related training endorsement. The trainer		 course must be conducted by a Part 141 flight training operator and delivered by a flight instructor with a grade 1 training endorsement or instructor rating training endorsement, and either the low-level rating training endorsement, or the relevant specialised pilot training endorsement (i.e. sling operations training endorsement for sling operations endorsement, winch and rappelling operations training endorsement for winch and rappelling operations endorsement, aerial application rating (day) training endorsement (category specific) for firefighting endorsement). complete an approved course of training in principles and methods of instruction, or hold a Certificate IV in Training and Assessment, or a tertiary qualification in teaching. Training course to include an assessment of competency to deliver training for specialised pilot 	
Note: The trainer will not be issued with a flight instructor rating or related training endorsement. The trainer will not be issued with a flight instructor rating or related training endorsement.	Firefighting endorsement		
		Note: The trainer will not be issued with a flight instructor rating or related training endorsement. The trainer will	

In addition, the training course should contain some form of assessment to ensure that the trainer is competent to conduct training for the relevant endorsement.

Recurrent checks – rationale

Part 61 requires a biennial instructor proficiency check for instructor ratings, and they are conducted by the holder of flight examiner rating with instructor rating testing endorsement. The intent of recurrent checks for persons conducting these activities is to ensure that they continue to be competent conducting

Explanation of the proposed requirements

training and assessing trainees, as authorised under the instrument.

It is important that trainers authorised under the proposed instrument demonstrate ongoing competency conducting the training and assessment activities. For this reason, we propose a recurrent check outlined below.

Sling operations endorsement	Biennial check conducting training assessed by instructor with qualifications required to conduct the initial training and assessment of a trainer.
Winch and rappelling operations endorsement	
Firefighting endorsement	

Training operator for specialised pilot endorsement

Requirements – rationale

The proposal recognises that operators conducting the specialised activities are often best positioned to train their employees for the endorsements, noting the amount of on-the-job training and supervision associated with the specialised activities.

The training must be detailed in the operator's manuals or exposition and approved by CASA to ensure that the training is sufficient.

We also propose for the operator to retain certain documents and course completion certificates for a number of years for audit/inspection and quality control purposes.

Sling operations endorsement	A commercial operator seeking to conduct training must:
Winch and rappelling operations endorsement	 hold either a Part 138 aerial work certificate, a Part 133 AOC or a Part 137 AOC authorising the operator to conduct the relevant specialised operation (i.e. Part 138 aerial work certificate for an operator conducting sling operations).
Firefighting endorsement	 ensure the training is managed by the head of operations, head of flying operations, head of flight operations, or head of training and checking (as relevant). include detail on the training course and the trainers authorised to deliver the training in the operations manual or exposition (as relevant). retain training records and provide course completion certificates.