



SUMMARY OF PROPOSED CHANGE



Proposed Instrument CASA xx/22 — Flight Training and Flight Tests for Grant of Aerial Mustering Endorsements (Approvals and Directions)

Date December 2022
File ref D22/446428

Introduction

CASA has been reviewing parts of the flight training and testing scheme that are not working as intended. Practical barriers to the efficient conduct of flight training and entry control assessment for aerial mustering endorsements have emerged since the commencement in 2014 of Part 61 of the *Civil Aviation Safety Regulations 1998* (CASR). These endorsements relate to low-level operations conducted under Part 138 of CASR.

Industry feedback has indicated difficulties in implementing the Part 141 flight training scheme for aerial mustering training. The intended approach to flight training has not materialised for these pilots in many respects, and an alternative approach is needed to better facilitate training and assessment for these endorsements.

These barriers are 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 aerial mustering endorsements. This impacts on the availability of suitably qualified pilots to conduct mustering operations. The demand for aerial mustering pilots remains high so the availability of training and flight testing continues to be a limiting factor and consequently a source of frustration for mustering operators.

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

More broadly, CASA is also considering whether the proposed pathway (or elements of the pathway) could be extended to address other “specialised pilot endorsements” including sling operations, winch and rappelling operations and firefighting endorsements. This broader matter is not addressed in this SPC however CASA intends to publicly consult in the near future.

This proposal addresses:

- entry criteria and prerequisites for new pilots seeking an aerial mustering endorsement
- training and assessment requirements for the grant of aerial mustering 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 for aerial mustering endorsements for Part 138 operators
- maintenance of competency for persons conducting training for aerial mustering endorsements
- requirements for Part 138 operators who elect to conduct the training and facilitate the assessment and grant of aerial mustering 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 Aerial Mustering Endorsements (Approvals and Directions) 2022* instrument. This instrument proposes to establish an alternative pathway for the training, assessment and grant of aerial mustering endorsements, as a first step and until the regulations are amended.

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A plain English document also accompanies the draft instrument to explain the operation of the instrument and the intent of each provision.

Appendix A to this SPC compares the matters addressed in this proposal with the existing CASR requirements.

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Purpose and scope of the proposed instrument

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 aerial mustering endorsements.

That feedback has specifically noted difficulties in implementing the Part 141 flight training scheme and the Part 61 licensing scheme to authorise pilots to conduct training and flight tests for aerial mustering endorsements. 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 mustering pilots in many respects.

In addition, the alignment in Part 61 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 aerial mustering endorsements. This impacts on the availability of suitably qualified pilots to conduct mustering operations.

To address these problems, CASA proposes to establish a tailored system for training, assessment, grant and exercise of aerial mustering endorsements. The purpose of the proposed instrument is to address the problematic areas outlined above related to aerial mustering endorsements and aims to:

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

Pilots conducting the mustering activities mentioned above need to have well developed threat and error management competencies as well as understand and apply the relevant aspects of human factors for the operation. Appropriate operational behaviours and a sound safety culture are essential. Training for the aerial mustering endorsements is, by 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 can be transferred and utilised across mustering activities.

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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 MOS.

There are two specific proposed changes:

- Create an initial temporary legislative framework.
- Make amendments to CASR and associated MOS.

These proposed changes will improve the identified problems and meet the aims as described below.

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 aerial mustering operations.

The instrument proposes to deal with the following matters:

| Matter | Requirements |
|---|--|
| <i>Trainee for aerial mustering endorsement</i> | |
| Prerequisites – trainee pilot | <p>The trainee pilot must:</p> <ul style="list-style-type: none"> • hold the underlying low-level rating, relevant category rating and low-level endorsement for relevant category • have at least 100 hours pilot in command experience flying an aircraft of the same category that the pilot will fly in mustering operations. |
| Training – trainee pilot | <p>The training course for the trainee pilot must:</p> <ul style="list-style-type: none"> • include at least 20 hours of dual instruction while receiving training in mustering operations while flying an aircraft of the same type as that to be used in the mustering activity • 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, or a pilot with a flight instructor rating and low-level rating training endorsement. <p>Note: The proposed instrument does not currently include the option for an appropriately qualified flight instructor to conduct the training. This will be added to the final instrument following consultation.</p> |
| Assessment – trainee pilot | <p>The trainer who conducts the training completes the training and certifies standard achieved, grants the aerial mustering endorsement and notifies CASA.</p> <p>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 aerial mustering endorsements (and specialised pilot endorsements, more broadly) in the same way as flight activity endorsements in the future.</p> |
| Recurrent checks – trainee pilot | <p>Following completion of training and grant of endorsement, the trainee pilot must complete:</p> <p>If operating for a Part 138 operator:</p> <ul style="list-style-type: none"> • 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 <p>If operating in a non-Part 138 certificate operation:</p> <ul style="list-style-type: none"> • an annual check by a person authorised to conduct training for the aerial mustering endorsement and a regular aircraft rating flight review |

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| Matter | Requirements |
|---|---|
| | On-the-job training and supervision managed by operators. Requirements in e.g., the Part 138 Manual of Standards continue to apply. |
| Trainer for aerial mustering endorsement | |
| Prerequisites – trainer pilot | <p>The trainer pilot must have at least:</p> <ul style="list-style-type: none"> • a commercial pilot licence (category specific) and low-level rating, and relevant aerial mustering endorsement • 3 years operational experience conducting mustering operations - not aircraft category dependent • 2,000 hours pilot in command experience conducting aerial mustering operations in the same category of aircraft • employed by a Part 138 operator to conduct the training. |
| Training – trainer pilot | <p>The trainer pilot must:</p> <ul style="list-style-type: none"> • 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. • 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. |
| Assessment – trainer pilot | <p>Training course to include an assessment of competency to deliver training for the aerial mustering endorsement, conducted by the instructor delivering the training course to the trainer.</p> <p>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.</p> |
| 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 aerial mustering endorsement | |
| Prerequisites – training operator | <p>A commercial operator seeking to conduct training must:</p> <ul style="list-style-type: none"> • hold a Part 138 aerial work certificate authorising the operator to conduct aerial mustering activities • ensure the training is managed by the head of 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 and 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 the TWG. CASA held meetings with industry in early 2017 to ascertain from operators their views on the current training situation and how the requirements for authorising mustering pilots 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 endorse making an instrument specific to aerial mustering 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 aerial mustering activities. There will also be increased numbers of persons available to conduct training and assessment for the mustering endorsements. Trainees will be able to access the training, assessment and subsequent on-the-job training and supervision through their employer. As trainees will be required to meet more stringent pre-requisites before commencing training, it is likely that some people wanting to become mustering pilots will need to gain additional experience before utilising the proposed pathway.

Commercial operators

The policy will have positive impacts for operators conducting mustering 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 Part 138 of CASR involves some recurrent training and checking activities. Operators would be able to use sample training syllabi issued by CASA. Part 138 of CASR provides simpler safety requirements, including requirements for the safe operation of aerial work operations, carriage of flight crew and training and checking requirements. Relevantly, operators are required to:

- include details of each plan, process, procedure, program and system implemented by the operator to safely conduct and manage their aerial work operations in compliance with the civil aviation legislation in their operations manual (paragraph 138.155 (1) (h) of CASR)
- keep personnel training and checking records for a nominated time (regulation 138.170 of CASR)
- ensure each flight crew member is appropriately authorised under Part 61 of CASR to operate the aircraft and meet the training and checking requirements set out in the Part 138 MOS (regulation 138.475 of CASR)
- specify the training required for new or inexperienced flight crew members (regulation 138.480 of CASR) and ensure each flight crew member assigned has been assessed by the operator as competent (regulation 138.485) and is authorised to act as pilot in command (regulation 138.500 of CASR)
- ensure the recurrent training and checking is conducted by certain persons (regulation 138.505 of CASR).

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, and result 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) that conduct training for aerial mustering 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 Part 138 operators are allowed to conduct training and assessment activities in-house without relying on instructors and examiners.

Safety risk analysis

Conducting aerial mustering operations involves exposure to more risk compared to many other kinds of operations. This is primarily due to the operation being undertaken at very low-levels and is 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 mustering 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 needed 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 mustering 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 (e.g., passenger transport). However, this does not reduce the need for regulatory oversight or diminish concerns about the human and economic consequences of mishaps.

Personal risk management and the potential to harm stock are both critical factors that ordinarily incentivise good training of mustering pilots. 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 in 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 aerial mustering 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 16 December 2022.

Appendix A

Change comparison

PROPOSED INSTRUMENT CASA XX/22 — FLIGHT TRAINING AND FLIGHT TESTS FOR GRANT OF AERIAL MUSTERING ENDORSEMENTS (APPROVALS AND DIRECTIONS)

| Matter | Current CASR requirements | Proposed requirements |
|---|--|--|
| Trainee for aerial mustering endorsement | | |
| Prerequisites – trainee pilot | The trainee pilot must: <ul style="list-style-type: none"> meet the existing CASR requirements for the relevant endorsement hold the underlying low-level rating relevant to the endorsement | The trainee pilot must: <ul style="list-style-type: none"> hold the underlying low-level rating, relevant category rating and low-level endorsement for relevant category have at least 100 hours pilot in command experience flying an aircraft of the same category that the pilot will fly in mustering operations. |
| Training – trainee pilot | The training course for the trainee pilot must: <ul style="list-style-type: none"> for aerial mustering endorsement: include at least 5 hours of dual instruction while receiving training in aerial mustering in relevant category of aircraft be conducted by either a Part 141 operator that is authorised to conduct the training, and delivered by an appropriately authorised flight instructor. | The training course for the trainee pilot must: <ul style="list-style-type: none"> include at least 20 hours of dual instruction while receiving training in mustering operations while flying an aircraft of the same type as that to be used in the mustering activity 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, or a pilot with a flight instructor rating and low-level rating training endorsement. <p>Note: The proposed instrument does not currently include the option for an appropriately qualified flight instructor to conduct the training. This will be added to the final instrument following consultation.</p> |
| Assessment – trainee pilot | Flight examiner or 61.040 approval holder conducts the flight test, grants the endorsement and notifies CASA. | The trainer who conducts the training completes the training and certifies standard achieved, grants the aerial mustering endorsement and notifies CASA. <p>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 aerial mustering endorsements (and specialised pilot endorsements, more broadly) in the same way as flight activity endorsements in the future.</p> |
| Recurrent checks – trainee pilot | Following completion of training and grant of endorsement, the trainee pilot must complete: <ul style="list-style-type: none"> biannual low-level rating flight review annual recent experience (20 hours for aerial mustering endorsement (CASA EX73/20 — Low-level Rating Exemption 2020 (legislation.gov.au)), or flight review | Following completion of training and grant of endorsement, the trainee pilot must complete: <p>If operating for a Part 138 operator:</p> <ul style="list-style-type: none"> 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 <p>If operating in a non-Part 138 certificate operation:</p> <ul style="list-style-type: none"> an annual check by a person authorised to conduct training for the aerial mustering endorsement and a regular aircraft rating flight review |

PROPOSED INSTRUMENT CASA XX/22 — FLIGHT TRAINING AND FLIGHT TESTS FOR GRANT OF AERIAL MUSTERING ENDORSEMENTS (APPROVALS AND DIRECTIONS)

| Matter | Current CASR requirements | Proposed requirements |
|---|--|---|
| | | On-the-job training and supervision managed by operators. Requirements in e.g., the Part 138 Manual of Standards continue to apply. |
| Trainer for aerial mustering endorsement | | |
| Prerequisites – trainer pilot | <p>The flight instructor must have at least:</p> <ul style="list-style-type: none"> • a flight instructor rating and low-level rating training endorsement | <p>The trainer pilot must have at least:</p> <ul style="list-style-type: none"> • a commercial pilot licence (category specific) and low-level rating, and relevant aerial mustering endorsement • 3 years operational experience conducting mustering operations - not aircraft category dependent • 2,000 hours pilot in command experience conducting aerial mustering operations in the same category of aircraft • employed by a Part 138 operator to conduct the training. |
| Training – trainer pilot | <p>The flight instructor must:</p> <ul style="list-style-type: none"> • complete training under a Part 141 operator for a flight instructor rating and low-level rating training endorsement. No specified hours, and is not specific to mustering. Includes training in principles and methods of instruction. | <p>The trainer pilot must:</p> <ul style="list-style-type: none"> • 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. • 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. |
| Assessment – trainer pilot | <p>The flight instructor must:</p> <ul style="list-style-type: none"> • successfully complete a flight test conducted by an examiner or 61.040 approval holder for the instructor rating and/or relevant training endorsement • rating and/or endorsement entered on licence and notified to CASA by examiner. | <p>Training course to include an assessment of competency to deliver training for the aerial mustering endorsement, conducted by the instructor delivering the training course to the trainer.</p> <p>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.</p> |
| Recurrent checks – trainer pilot | Biennial instructor proficiency check conducted by CASA, flight examiner or 61.040 approval holder. | Biennial check conducting training assessed by instructor with qualifications required to conduct the initial training and assessment of a trainer. |
| Training operator for aerial mustering endorsement | | |
| Prerequisites – training operator | <ul style="list-style-type: none"> • Part 141 certificate holder or 141.035 approval holder authorised to conduct training for the relevant endorsement • Part 141 operator manages instructors conducting the training • Operations manual provides | <p>A commercial operator seeking to conduct training must:</p> <ul style="list-style-type: none"> • hold a Part 138 aerial work certificate authorising the operator to conduct aerial mustering activities • ensure the training is managed by the head of operations • include detail on the training course and the |

PROPOSED INSTRUMENT CASA XX/22 — FLIGHT TRAINING AND FLIGHT TESTS FOR GRANT OF
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| Matter | Current CASR requirements | Proposed requirements |
|--------|---------------------------|---|
| | detail on the training. | trainers authorised to deliver the training in the operations manual <ul style="list-style-type: none">• retain certain documents and provide course completion certificates. |