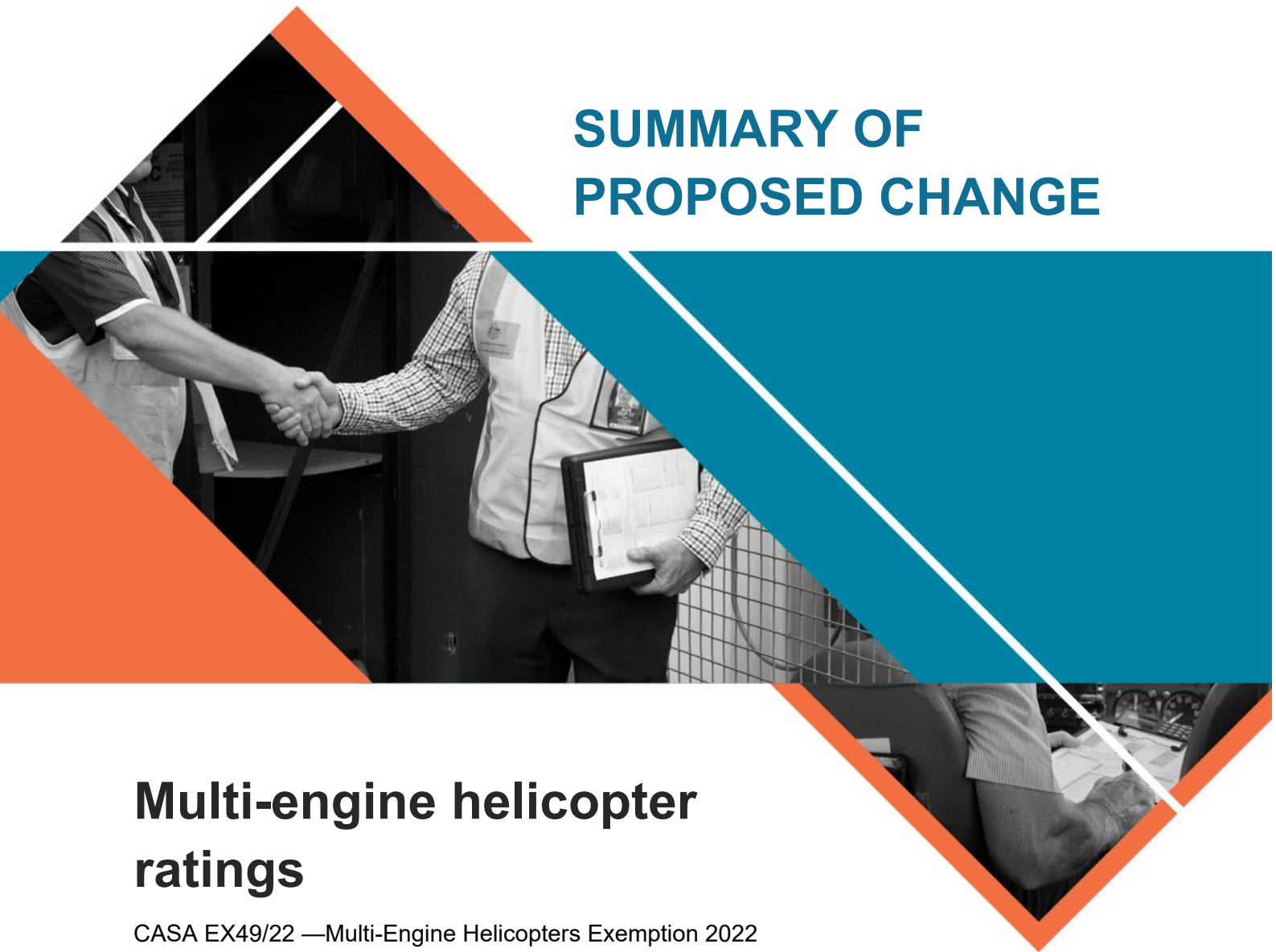




# SUMMARY OF PROPOSED CHANGE



## Multi-engine helicopter ratings

CASA EX49/22 —Multi-Engine Helicopters Exemption 2022

<b>Date</b>	June 2022
<b>File ref</b>	D22/225429

## Introduction

Industry feedback identified that the Part 61 flight training and testing scheme for less complex multi-engine helicopters certified for single-pilot operation is not working as efficiently as intended, with practical barriers to the efficient conduct of training and entry control testing.

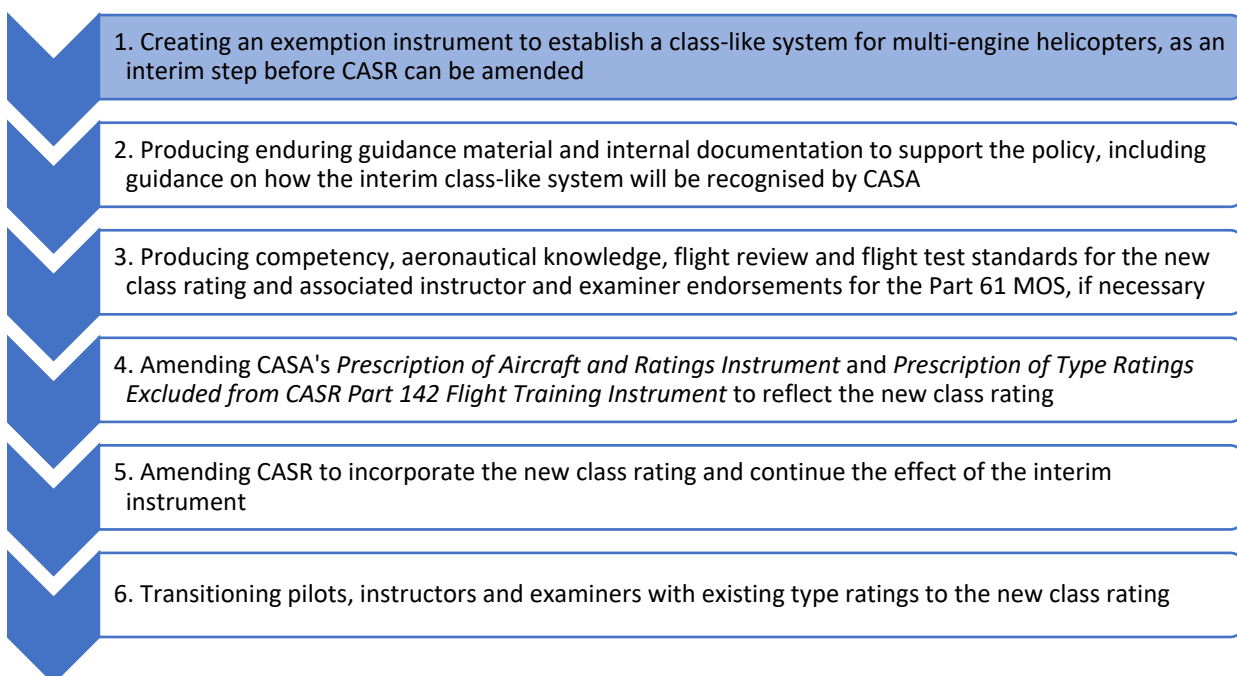
The current approach to prescribe a type rating for each multi-engine helicopter is believed to be a key reason for the limited availability of suitably qualified flight instructors, examiners, and flight training operators (FTOs) to conduct training and assessments. This has led to increased costs and time to access training and assessment and impacts on the availability of suitably qualified pilots. The problem is exacerbated by the very small number of these types of helicopters in Australia.

An alternative approach is proposed to better facilitate training, testing, entry and continuation for pilots conducting operations using non-complex single-pilot certified multi-engine helicopters.

To this end, CASA intends to create a new multi-engine helicopter class rating to allow:

- pilots who operate certain less complex multi-engine helicopters certified for single-pilot operations to operate under the new class rating
- flight instructors and examiners who hold a multi-engine helicopter class rating training or testing endorsement to conduct training or testing for the class rating and training and flight review for subsequent types of multi-engine helicopter in the class, without holding a type-specific training or testing endorsement
- Part 141 FTOs to conduct training for the new class and manage the instructors permitted to conduct the training.

The pathway to implementing the new class rating will require:



In the first stage of this process, CASA is seeking industry and public comment on the attached consultation draft of the *Multi-Engine Helicopters Exemption 2022* instrument. This instrument will create a class-like system as a step to implementing the new class rating, and will allow multi-engine helicopters to operate in the system until the regulations are changed to formally create the class rating. A plain English document also accompanies the draft instrument to explain the operation of the instrument and the intent of each provision.

# Contents

<b>Introduction</b>	<b>2</b>
<b>Purpose and scope of the proposed instrument</b>	<b>5</b>
<b>Principal changes that would occur</b>	<b>7</b>
<b>Previous consultations</b>	<b>8</b>
<b>Impact on industry</b>	<b>9</b>
Helicopter pilots	9
Flight and simulator instructor rating holders	9
Flight examiner rating holders	9
Flight training operators	10
Commercial operators	10
Manual of Standards	10
Overall	10
<b>Safety risk analysis</b>	<b>12</b>
<b>Regulation impact statement</b>	<b>14</b>
<b>Closing date for comment</b>	<b>15</b>

## Purpose and scope of the proposed instrument

The flight crew licensing regulations that were introduced by Part 61 included an expanded use of class ratings. Under the previous Civil Aviation Regulations, the concept of a class rating was narrower and, apart from the single-engine aeroplane class, mostly dealt with small groupings of similar types. In Part 61, aircraft are covered by a class rating unless the type is prescribed as being covered by a type rating. Generally, type ratings apply to aircraft that are certificated as multi-crew aircraft, have operating characteristics that require type-specific training or are otherwise complex.

Some aircraft are covered by a class rating but require initial type-specific training and a flight review before a person is authorised to operate the aircraft. These aircraft are prescribed for regulation 61.062 of CASR in the [Prescription of Aircraft and Ratings — CASR Part 61 \(Edition 8\) Instrument 2021](#). Regulation 61.747 applies to limit the exercise of privileges of class ratings for aircraft prescribed for regulation 61.062 and requires a person to have completed flight training in accordance with the MOS units of competency and completed a flight review before the person can operate an aircraft prescribed for regulation 61.062 of CASR.

The regulations prescribe a class rating for multi-engine aeroplanes however they do not prescribe a class rating for multi-engine helicopters. All multi-engine helicopters are currently prescribed with a type rating.

As outlined above, the prescription of a type rating for all multi-engine helicopters has led to practical barriers to the efficient conduct of training and entry control testing of less complex multi-engine helicopters certified for single-pilot operation. The current approach is believed to be a key reason for the limited availability of suitably qualified flight instructors, examiners, and FTOs to conduct training and assessments for some multi-engine helicopters, which leads to increased costs and time to access training and assessment and impacts on the availability of suitably qualified pilots.

The purpose of the proposed instrument is to carry out the first stage of implementing the new multi-engine helicopter class rating, and allow pilots to operate multi-engine helicopters in a class-like system until the regulations are changed to formally create the class rating.

The proposed instrument aims to:

- Improve training pathways for new pilots operating single-pilot multi-engine helicopters and reduce barriers to gaining the authorisations
- Improve access to existing suitably qualified and competent pilots to conduct training, flight reviews, flight testing and ongoing checking of pilots operating single-pilot multi-engine helicopters
- For pilots, instructors, examiners and operators, reduce costs by requiring fewer flight tests to be completed to be able to operate multiple models
- Support the development and delivery of competency-based training and assessment for the multi-engine helicopters
- Increase the number of FTOs who are permitted to conduct the training, which will provide increased access to training and potentially lower time and costs to access training
- Transfer responsibility for ensuring the competency of flight instructors to conduct training on a specific multi-engine helicopter from the licensing scheme to the FTO.

The aim of the proposal is to replicate other aircraft class ratings. To understand how the interim arrangement works, the first type rating for one of the listed multi-engine helicopters can be likened to qualifying for the class rating in the future. Also, holding a type rating training endorsement or type rating examiner endorsement can be likened to holding the class rating endorsement in the future. Holding one of the listed type rating training or examiner endorsements will work in the same way that the future class rating endorsements would work.

The types of multi-engine helicopters to be covered by the interim class-like system and future class rating are those listed in the [Prescription of Type Ratings Excluded from CASR Part 142 Flight Training Instrument](#), which prescribes flight training to be conducted by a Part 141 FTO.

## Principal changes that would occur

The proposed instrument would establish a new class-like rating system for the operation of multi-engine helicopters. The aircraft proposed to be included in the system were selected based on the training for type ratings prescribed in the [Prescription of Type Ratings Excluded from CASR Part 142 Flight Training \(Edition 6\) Instrument 2018](#). That instrument allows training to be conducted on the basis that training for the prescribed single-pilot type ratings is less complex and can be done adequately by the holder of a Part 141 certificate. The training does not require the additional organisational systems and processes that are required under Part 142. This training has been conducted at Part 141 FTOs for several years without negative safety impacts.

The list of aircraft can be found in the proposed *Multi-Engine Helicopters Exemption 2022* instrument.

The instrument would allow:

- Pilots who hold at least one of the prescribed multi-engine helicopter type ratings to operate any of the other prescribed multi-engine helicopters so long as the pilot completes training and a flight review for each of the other models they wish to operate. This means that pilots are not required to obtain and maintain multiple type ratings. Importantly, a pilot who completes the training and flight review for another model of helicopter does not need to complete the type rating flight test for the subsequent types and will not be granted the relevant type rating.
- Flight instructors who hold a type-specific training endorsement for at least one of the prescribed multi-engine helicopters to also conduct training for any other prescribed multi-engine helicopters that they are authorised to fly, without holding a type-specific training endorsement. Importantly, an instructor must have logged a minimum of 25 hours pilot in command (PIC) experience on the particular type of helicopter before the instructor can conduct training for that multi-engine helicopter. The FTO responsible for the training is responsible for ensuring the instructor is competent conducting the training.
- Flight examiners who hold a type-specific testing endorsement for at least one of the prescribed multi-engine helicopters to also conduct testing for any other prescribed multi-engine helicopter that they are authorised to fly, without holding a type-specific testing endorsement. In addition, a flight examiner will need to be authorised to conduct flight training for a multi-engine helicopter prescribed in the instrument. This reflects the principle that a person should only test what they are competent to train. A flight examiner will be authorised to conduct the flight training in accordance with the requirements for an instructor described above which includes having at least 25 hours experience on type.
- Part 141 FTOs to conduct training for subsequent multi-engine helicopters and manage the instructors permitted to conduct the training and flight review. The FTO must have an approved training course for the relevant aircraft type as part of their flight training suite.

## Previous consultations

The issues which the policy seeks to resolve were identified by and have been subject to discussion with industry representatives at the Standards Consultative Committee FCL Subcommittee and the Flight Crew Licensing Technical Working Group. Another helicopter-focused sub-group has also been engaged to understand the technical aspects as they relate to the specific aircraft and training environments.

These stakeholders have been engaged in the development of the policy proposal from the inception of the concept and have indicated their support of the exemption instrument being delivered as a first step in the process. They have also been consulted on the earliest drafts of the instrument throughout the development process.

Formal public consultation has not been previously conducted.



## Impact on industry

Regulation Impact Statement analysis has not yet been conducted, however CASA understands that the following stakeholders may be impacted:

### Helicopter pilots

The policy is anticipated to have a positive impact for pilots who intend to operate any of the prescribed types of multi-engine helicopters. Time and cost to gain authorisation to operate a different type of helicopter will decrease, as the pilot will only need to complete flight training and a flight review for the specific type (or model where differences training is already required) rather than training and a flight test. Additionally, pilots will have a greater pool of instructors and examiners available to conduct the training and assessment required.

The policy might impact a pilot's ability to use their licence overseas as the completion of training and a flight review on a second type of helicopter will not result in the grant of a second type rating. Rather, the instrument authorises a pilot to operate the second type of helicopter with the existing type rating. That said, if they choose, pilots can still gain an additional type rating through existing means (i.e., training and flight test). Once the class rating is incorporated into CASR in the future, the class rating rather than specific type ratings will be endorsed on licences.

Pilots who operate helicopters overseas relying on their Australian licence may have difficulty proving to foreign NAAs the models of aircraft they are authorised to operate, demonstrating competency and recency, and satisfying the foreign NAA that they can safely operate the aircraft. However, it is noted that this has not appeared to create insurmountable barriers for USA-based helicopter pilots who are not granted specific type-ratings (as type-ratings do not exist for comparable aircraft in the US system).

### Flight and simulator instructor rating holders

The policy is anticipated to have a positive impact for instructors. Broadly, the policy will expand the training they can conduct without needing to attain type-specific training endorsements for each helicopter type covered by the system. Instructors with a training endorsement for a specific type of helicopter included in the proposal will be able to conduct training for any other type of helicopter included in the proposal so long as the instructor is authorised to fly the helicopter and meets the minimum experience requirements outlined above. This will reduce costs to become authorised to conduct training, and may lead to increased employment opportunities.

### Flight examiner rating holders

The policy is anticipated to have mixed impact for flight examiners. Broadly, the policy will expand the testing that examiners can conduct without attaining type-specific flight test endorsements. Examiners with a type-specific flight test endorsement for a helicopter included in the proposal will be able to conduct testing for any other model of helicopter included in the proposal that they are authorised to fly. This will reduce costs to become authorised to conduct testing, and may lead to increased employment opportunities. Pilots seeking their first multi-engine helicopter type rating will still be required to complete a flight test for the type rating

before using the proposed instrument to operate subsequent types, as will any pilots who wish for one of the relevant type ratings to appear on their licence document.

However, the reduction of authorisations that require flight tests will likely impact demand for flight examiners. Pilots will be authorised to operate multiple types of helicopter without completing flight tests for each type. The number of flight tests required will reduce significantly.

## Flight training operators

Implementation of the policy via the legislative instrument is not anticipated to have significant impact on FTOs. The [Prescription of Type Ratings Excluded from CASR Part 142 Flight Training Instrument](#) currently prescribes training for type ratings, and differences training for variants, to be Part 141 flight training rather than Part 142 flight training. That instrument permits training for all the types proposed to be included in the class-like system to already be conducted by Part 141 FTOs.

Part 141 FTOs will need to have an approved course of training for each of the types they wish to conduct training for. This will not be a change from the current scheme. Part 141 FTOs will be able to have instructors authorised to operate a type of helicopter via the proposed instrument to conduct training for the helicopter.

Once the class rating is incorporated into CASR in the future, Part 141 FTOs will benefit from being able to conduct training for additional types of aircraft under the new class rating. Training for type-rated aircraft is classified as Part 142 training, whereas training for class-rated aircraft is Part 141 training.

## Commercial operators

The new system should allow operators flying more than two single-pilot multi-engine types to benefit from the reduced recurrent checking to maintain a class rating compared to that required to maintain multiple type ratings.

## Manual of Standards

Once CASR is amended to reflect the new class rating, amendment to the Part 61 Manual of Standards to accommodate the new class and a new standard for the flight review and flight test will be required. The new standards are expected to be very similar to the extant standards for the multi-engine helicopter type rating. A model training course is also expected to be available in the future.

## Overall

The policy will reduce the delays and difficulties associated with completing the flight training required to operate a range of single-pilot multi-engine helicopters and increase access for trainee pilots to a greater number of suitably qualified instructors and FTOs. This is achieved by removing the requirements for instructors and examiners to hold type specific training and flight examiner endorsements.

Additionally, the policy aims to encourage the retention of flight instructors with FTOs and ultimately a greater number of flight instructors for single-pilot multi-engine helicopters. Industry

feedback will be useful in determining whether the proposal increases the attractiveness of becoming an instructor, while CASA data will help to identify whether retention of instructors in industry is improved.

The policy will also reduce reliance on flight examiners and enact a more proportionate approach to training and testing. This will improve access to testing activities for the grant of an initial multi-engine helicopter type rating and will reduce costs. CASA will monitor the volume of relevant ratings being granted and/or the number of flight training organisations offering the training to determine how effective the instrument has been in addressing the problem.

## Safety risk analysis

All multi-engine helicopters are currently prescribed with a type rating. Generally, there is significant variation between types of multi-engine helicopter including in the aircraft handling, technological, configuration of the instruments and displays, operating systems, cockpit layout and performance capability. There can be significant differences between different manufacturers, and between variants of aircraft from the same manufacturer. There is less commonality between multi-engine helicopter types when compared to the multi-engine aeroplane class.

The aircraft proposed to be included in the system were selected based on the training for type ratings prescribed in the [Prescription of Type Ratings Excluded from CASR Part 142 Flight Training \(Edition 6\) Instrument 2018](#). That instrument allowed training to be conducted on the basis that training for the prescribed single-pilot type ratings is less complex and the training can be done adequately by the holder of a Part 141 certificate. The training does not require the additional organisational systems and processes that are required under Part 142. This training has been conducted at Part 141 FTOs for several years without negative safety impacts.

CASA also considered a number of other options for the list of aircraft proposed to be included in the new multi-engine helicopter class, including:

- Prescribing aircraft that meet the USA FAR 27 standards, in that the aircraft are certificated for single-pilot operation and with a MTOW of less than 3,175 kg. Helicopters certified to the FAR 27 standards are less complex and do not require duplication of systems as is required to provide redundancy in transport category FAR 29 standards. This option was not considered viable due to the limitations on the range of aircraft that would be covered.
- Prescribing aircraft with 9 or less passenger seats. This would likely include aircraft with MTOW of ~3,800 kg and below. This option would cover more aircraft compared to the FAR 27 standard, however would not cover as many aircraft as the type ratings prescribed in the Prescription of Type Ratings Excluded from CASR Part 142 Flight Training Instrument.
- Prescribing aircraft with a MTOW of 5,700 kg or less. This option is not preferred as it would include aircraft that are multi-crew certified, with highly complex systems and would include aircraft that must be trained at Part 142 FTOs.

Changes to the list of aircraft proposed to be included in the new multi-engine helicopter class - including potential expansion to the higher MTOW - will be considered as part of the policy review to be completed prior to regulatory amendment.

Allowing pilots to operate multiple kinds of multi-engine helicopters without completing the assessment needed to attain a type rating for each may have an impact on aviation safety. Entry control standards for multi-engine helicopter operations may become more variable due to reduced training and assessment requirement. However, the policy places a greater emphasis on operators taking responsibility for ensuring the safe operation of multi-engine helicopters and provides an important mitigator any increased safety risk.

Independent flight testing and the resultant feedback provided to the training operator is an important component of the training and testing scheme, however for these types of aircraft, the extent of the independence is low mainly due to much of this training and testing being

conducted by the same person – a result of the small number of qualified instructors and examiners and relatively small number of helicopters operated in Australia.

The removal of the need for an instructor to complete training for and qualify for an instructor training endorsement for a specific type rating presents an increased risk of consequences of reduced quality flight training or inconsistency in training outcomes. The robustness of an operator's training syllabus should mitigate this. Again, the policy encourages oversight by operators to ensure safety is maintained within the system.

Comparably, reducing the number of flight tests an examiner needs to complete before being authorised to conduct flight tests in multi-engine helicopters may result in less standardised entry control standards, but may also allow for leading or innovative training practices to be included in the system.

The impact on aviation safety by the proposal should continue to be monitored, and controls will include:

- Each of the aircraft captured in the class will be covered by regulation 61.062 of CASR (with equivalent provision in the interim instrument) which means type-specific training and a flight review on the type would be required before a pilot is authorised to operate the aircraft.
- Flight instructors will be required to have minimum experience as PIC on each type before conducting training on a type. This proposed experience requirement is intended to be a proportionately comparable requirement as was in paragraph 11.5(a) of CAO 40.3.7. That paragraph previously required an instructor to have 50 hours PIC in multi-engine helicopters and 25 hours PIC on the type before conducting training in multi-engine helicopters. The proposed 25 hour PIC experience is intended to ensure an instructor cannot obtain a type rating and immediately conduct training for another type under the instrument without first accruing experience operating the helicopter. Management of the personnel is the responsibility of the FTO and they will continue to have responsibility to ensure the instructor is competent to deliver the training.
- Flight examiners will be required to be authorised to conduct flight training for a multi-engine helicopter covered by the system, to reflect the principle that a person can only test what they are competent to train. A flight examiner will be authorised to conduct the flight training by either holding the type-specific training endorsement, or becoming authorised via the legislative instrument (completing training and a flight review on the type, and gaining 25 hours PIC experience on the type).
- Emphasis of regulation 61.385 which requires a pilot to be competent in each aircraft they fly. This rule has additional importance for aircraft included in a system that may not require specific aircraft training.
- The FTO must have an approved training course for the relevant aircraft type as part of their flight training suite.

Further opportunities for standardisation and mitigation will be considered as part of a future comprehensive risk assessment to be conducted prior to regulatory amendment.

## Regulation impact statement

Formal regulation impact analysis has not yet been conducted. 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 multi-engine class rating 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 4 July 2022.