



14 Multi-Engine Aeroplane Class Rating Flight Test

14.1 Overview

The aim of the Multi Engine Aeroplane class rating test is to allow the applicant to demonstrate their ability to exercise the privileges of the rating. The privileges may only be exercised if the holder also holds the relevant design features.

14.2 Examiner Requirements

The following examiner requirements are applicable to the conduct of the Multi Engine Aeroplane Class Rating Flight Test. Requirements 2, 3 and 4 only apply if the flight test is conducted in an aircraft.

1. The examiner must ensure that the ground component is successfully completed prior to conducting the pre-flight briefing and flight component of the flight test.
2. A simulated engine failure after take-off must not be initiated at a height less than 400ft and must only be conducted by day in VMC.
3. Simulated engine failures must be conducted by day.
4. An assessment of upset situations and unusual attitudes must only be flown by day in visual conditions.
5. The examiner must not introduce simultaneous, multiple unrelated simulated emergencies or abnormal situations during the flight.
6. After a simulated failure, the examiner must ensure the aircraft is configured back to a normal operating mode before another simulated failure may be introduced, except where the simulated failures are linked.
7. Applicants should not be given a second opportunity to demonstrate a manoeuvre unless, in the opinion of the examiner, the circumstances causing failure of the first attempt were outside the control of the applicant in the test environment.
8. Where credits are available for flight test items they are valid for 28 days only. After 28 days, the multi-engine aeroplane class rating flight test must be conducted in full.

14.3 Testing Methodology

Examiners should apply the flight test methodology described in section 03 Flight Test Principles and Standardisation.

Examiners should assess the applicant's performance against the competencies contained in schedule 5 of the Part 61 MOS and the requirements of the applicable multi-engine aeroplane class rating flight test report form.

14.4 Ground Component

14.4.1 Initial Brief to Applicant

In accordance with the flight test principles in chapter 03, the examiner should begin the flight test with a brief to the applicant on all items listed below:

- Flight test context, purpose and content,
- Assessment procedure,
- Function of the examiner,
- Standards against which competency will be assessed,



- Explain and confirm actions in the event of failure.

The applicant should be encouraged to ask for clarification should they become uncertain on any of the flight test elements.

14.4.2 Documents

Document Review

The examiner should confirm that an applicant for a MEACR satisfies the requirements in the CASR for the grant of the licence. To achieve this, the CASR 61.235(5) certification, training records, logbook, licence and medical certificate should be checked.

Current licence held - sight the applicant's current licence to verify that the applicant holds a PPL, CPL, MPL or ATPL.

Medical Certificate - The examiner should check that the applicant holds a valid medical certificate appropriate to the calls of pilot licence, or a medical exemption allowing them to exercise the privileges of their pilot licence.

Passes in required theory examinations - The examiner should review the applicant's theory examination pass records.

Required aeronautical experience - The examiner should review the applicant's pilot logbook.

Completed required training - The examiner should review the applicant's pilot training file.

If the flight test is a retest following a fail assessment, the examiner should review the applicant's training records for evidence that appropriate remedial training has been carried out with the applicant.

14.4.3 General Knowledge Quiz

Knowledge requirements listed in Schedule 5 CASR Part 61 MOS should be satisfactorily covered during the ground component.

If required, the examiner should refer to the underpinning knowledge requirements for each of the relevant unit codes and relevant aeronautical knowledge requirements listed in Schedule 3 for further guidance on questioning topics.

14.4.4 Review the Flight Planning

The applicant should complete a fuel plan and flight plan.

When reviewing an applicant's flight preparation documents, the applicant should be able to demonstrate that the data on which the planning decisions and calculations have been made is valid (forecast weather, NOTAMS, considered CTA avoidance, aircraft data etc).

14.5 Flight Component

The multi-engine aeroplane class rating flight test should be designed such that all required components can be assessed in a logical sequence.

A competent performance in operating the aircraft is one in which the pilot is in control of the aircraft and is able to manage unplanned situations to achieve the desired task outcome. The applicant's performance will be assessed on technique, judgement, knowledge, smoothness and accuracy. The following explanations are provided to assist examiners in assessing the flight component:

- **Technique** - the method in which a task is performed. There may be more than one acceptable technique and examiners should be flexible in their assessment.



- Judgement - is applicable to all tasks but is of particular importance in respect of environmental conditions and effects such as cloud, wind and turbulence.
- Knowledge - during the course of the flight test the applicant's knowledge may be further tested.
- Smoothness - the applicant should demonstrate smooth flying in all sequences. Anything less is unacceptable and will result in a fail assessment.
- Accuracy - accuracy in the control of height, airspeed, direction and trim are all important. Persistent errors in any of these aspects should result in a fail assessment.
- Procedures – the applicant should demonstrate awareness and practical application of procedures throughout the flight test.

Assessment should be based on the technique used by the applicant and not just the ability to perform the task within specified flight tolerances. Technique involves smooth and accurate control application in adjusting power, attitude, trim and balance in a timely and coordinated fashion whilst following correct procedures.

Additionally, multi-engine aeroplane class rating flight test applicants should demonstrate efficient and effective decision making, continuous situational awareness and confident task management whilst maintaining positive and smooth aircraft control.

14.5.1 Pre-Flight Brief & Daily Inspection

In accordance with the flight test principles in section 03, the examiner should brief the applicant on all items listed below:

- Simulating emergencies,
- Actual emergencies,
- Pilot in command,
- Transfer of control,
- References (for flight tolerances in schedule 8 of the MOS),
- The scenario applied to the test environment (e.g. passenger carrying operation / simulation of passengers)

The examiner should observe and assess the applicant conducting a daily inspection as applicable for the aircraft class. This does not have to be the daily inspection used for maintenance release certification.

14.5.2 Use of Auto Pilot

The applicant may use the auto-pilot unless otherwise directed by the examiner.

If the multi-engine aeroplane class rating flight test is conducted in an aircraft certified for single pilot operation, the examiner should not perform any duty essential to the operation of the aircraft. That is, if the auto-pilot is not available, they may not “act” as the auto-pilot.

Assessing ‘Full Instrument Panel Manoeuvres’ (IFF.2)

The examiner may determine competency of full panel manoeuvres:

- With reference to the primary attitude indicator/display and primary heading indicator/display simultaneously.

14.5.3 Simulated Emergencies



The safety of the aircraft should never be in doubt when simulating emergencies / failures.

14.5.4 Failure Assessment

The examiner should consider fail items and the overall flight test outcome based on three categories.

1. Failure to demonstrate competency on an individual sequence or manoeuvre.

Where the control of the aircraft is such that the successful outcome of a sequence or manoeuvre is in doubt and the examiner has to take control of the aircraft, (physically or by direction) an overall fail assessment should be made and no credits given.

If the sequence or manoeuvre is not performed to standard but the examiner does not need to take control of the aircraft, then a fail assessment should be made for that item. In this situation, at the discretion of the examiner, credits for other test items may be given and the flight test continued. To avoid the possibility of 'deferred assessment' the examiner should immediately advise the applicant that the item will need to be reassessed on a retest.

2. Failure of a safety critical item or procedure.

Where an applicant fails to demonstrate competency with a single safety critical item, a fail assessment should be made for that item. Examples of safety critical items include, but are not limited to:

- Failure to correctly prepare aircraft for flight
- Failure to complete checks in accordance with the AFM (or equivalent)
- Failure to operate the aircraft within the parameters of the AFM

If a fail assessment is made for a safety critical item, the multi-engine aeroplane class rating flight test should be terminated at that time and no credits given.

3. Failure to demonstrate sound flight management.

Any demonstration of sustained poor flight management is considered safety critical and an overall fail assessment should be made with no credits given. Examples include, but are not limited to:

- Failure to maintain appropriate procedures and separation,
- Failure to comply with ATC clearances & airspace requirements,
- Failure to comply with any nominated or specified altitudes,
- Failure to lookout,
- Loss of situational awareness.

Categories 2 and 3 failures will require a complete retest.



14.6 Post Flight

The examiner should debrief the applicant and the flying training organisation in as soon as practicable after the conclusion of the flight component.

In the event of a fail assessment, in addition to the verbal de-briefing, the examiner should ensure sufficient detail is entered in to the applicants training record to allow the operator to construct a remedial training program.

14.6.1 Complete Post-Examination Administration

At the conclusion of the debrief process above, examiners should:

- Make the appropriate entry in the pilot's licence document. Examiners should refer to the CASA Flight Crew Licencing Procedures Manual for licence entry instructions
- Within 14 days after the day of the test, complete the flight test notification form and flight test report. Provide a copy of these reports to the applicant, Part 141 or 142 operator and CASA
- Within 14 days complete the FTNS notification requirements.