



21 Instrument Rating Flight Test – Aeroplane and Helicopter

21.1 Overview

The aim of this flight test is to allow the applicant to demonstrate the knowledge, skills and attitudes as required in Appendix 5 of the CASR Part 61 MOS for the issue of an Instrument Rating and associated endorsements.

21.2 Examiner Requirements

The following examiner requirements are applicable to the conduct of the instrument rating flight test.

1. An examiner must ensure that the flight component is conducted under the Instrument Flight Rules (IFR).
2. An examiner must ensure that the ground component of the flight test is successfully completed prior to conducting the pre-flight briefing and flight component of a flight test.
3. A simulated engine failure after take-off must not be at a height below 400ft and shall be conducted by day in VMC.
4. A simulated engine failure in the cruise or instrument approach procedure must be conducted by day.
5. An assessment of upset situations and unusual attitudes must be flown by day in visual conditions.
6. An examiner must not introduce simultaneous, multiple unrelated simulated emergencies or abnormal situations during the flight.
7. After a simulated failure, the examiner must ensure the aircraft/simulator is configured back to a normal operating mode before another simulated failure may be introduced, except where the simulated failures are linked.
8. 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.
9. Where credits are available for flight test items they are valid for 28 days only. After 28 days, the flight test must be conducted in full.

21.3 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 flight test report form.

The examiner should ascertain, prior to the day of the flight test, whether the Part 141 or 142 operator has completed the Knowledge Deficiency Report (KDR) requirements. It is strongly recommended that KDR assessment be conducted by the Head of Operations (HOO) in advance of the flight test. If the KDR has not been completed by the Head of Operations (HOO), the examiner should complete this prior to the flight component. Where



the examiner conducts the KDR assessment, this should be on the (first) day of flight test notification (FTNS).

21.3.1 Use of Multi-Engine Aircraft

If the flight test is conducted in a multi-engine aeroplane, the examiner should simulate at least two engine failures in simulated IMC (an engine failure after take-off and an engine failure during the cruise). A simulated engine failure after take-off should not be at a height below 400ft and shall be conducted in day VFR conditions. A simulated engine failure in the cruise should be conducted in day VFR conditions.

21.3.2 Flight Test

To assess the applicant against, CIR.2, CIR.3, CIR.4, and CIR.5, CIR.6 competencies, the navigation task should be not be less than 2.0 hours of flight time (without taking into account any airspace restrictions i.e Bankstown/Essendon). This is in addition to the time required for conducting instrument approaches.

21.4 Ground Component

21.4.1 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:

- The flight test context, purpose and content,
- The assessment procedure,
- The function of the examiner,
- The 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.

21.4.2 Documents

Document Review

The examiner should confirm that an applicant for an instrument rating satisfies the requirements in the CASR for the grant of the licence. The 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 or CPL

Passes in required aeronautical knowledge examination- The examiner should sight the applicant's theory examination pass records if applicable.

Has completed required training – The examiner should review the applicant's pilot training file to be satisfied they have completed the required training.

Has required aeronautical experience – The examiner should review the applicant's pilot logbook to be satisfied they have the required aeronautical experience.

Medical certificate – If the test is to be conducted in an aeroplane, a valid medical certificate appropriate for the Class of licence should accompany the licence for the licence holder legally to exercise the privileges of the licence.



If the flight test is a retest following a fail assessment, examiners should review the applicants training record for evidence that appropriate remedial training has been carried out with the applicant.

21.4.3 General Knowledge Quiz

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

21.4.4 Review the Flight Planning

As part of the flight test an applicant should complete:

- A flight plan
- A fuel plan

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

Examiners should ensure through considered questioning, that the preparation is solely the work of the applicant and meets the knowledge standards as applicable.

21.5 Flight Component

The 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 IFR procedures throughout the flight test.

Assessment should be based on the technique used by the candidate and not just the ability to perform the task within specified numerical 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, CIR applicants should demonstrate efficient and effective decision making, continuous situational awareness and confident task management whilst maintaining positive and smooth aircraft control.

21.5.1 Pre-Flight Brief and Daily Inspection

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

- Simulating emergencies,
- Actual emergencies,
- Pilot in command,
- Transfer of control,
- References (for numerical tolerances in schedule 8 of the MOS),
- The scenario applied to the test environment (e.g. passenger carrying operation / simulation of passengers),
- The expectations of the applicant during the simulation of Instrument conditions, visual flight conditions and any simulated weather when advised “visual” by the examiner,
- The expectations when operating the aircraft at the minima (i.e. numerical tolerances),
- Multiple flights and the assessment of competencies (if applicable)

Examiners should observe and assess the applicant conducting a daily inspection. This does not have to be the daily inspection used for maintenance release certification.

21.5.2 Use of Automation

The applicant may use the automation systems fitted to the aircraft unless otherwise directed by the examiner.

The applicant should demonstrate proficiency to operate the aircraft for at least one instrument approach without the autopilot or flight director being used.

If the 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. Example, if the auto-pilot is not available, they may not “act” as the auto-pilot.

21.5.3 Assessing – Perform an Instrument Approach 1 engine inoperative (CIR.9)

When the flight test is conducted in a multi-engine aircraft, the examiner should ensure one approach is conducted 1 engine inoperative in simulated IMC. This simulated engine failure shall be initiated not later than the FAF and include a segment of this missed approach sufficient to assess competency.

21.5.4 Assessing – Limited Instrument Panel Manoeuvres (IFL.2)

The examiner may determine competency of limited panel manoeuvres:

- without reference to the primary attitude indicator/display and
- Without reference to the primary heading indicator/display simultaneously.



The assessment of manoeuvres 'without reference to reliable airspeed indication should be assessed where the applicant has access to serviceable primary attitude and heading displays.

21.5.5 Circling Approach

The circling approach should be demonstrated as the continuation of the published aerodrome instrument approach from the specified minima. The instrument approach and circling manoeuvres should be flown onto the actual aerodrome named on the instrument approach plate.

The circling approach should not be flown as a standalone low level circuit.

21.5.6 Simulated Emergencies

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

21.5.7 Failure Assessment

If fail assessment is made, the flight test should be terminated at that time. Credits for test items may be given at the discretion of the examiner.

Where the control of the aircraft is such that the successful outcome of a procedure 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.

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

- Failure to complete checks in accordance with the AFM (or equivalent),
- Failure to correctly prepare aircraft for flight,
- Failure to comply with ATC clearances & airspace requirements,
- Failure to operate the aircraft within the parameters of the AFM,
- Failure to maintain appropriate procedures and separation,
- Descent / ascent below / above any specified altitude limitations when operating in IMC or simulated IMC,
- Failure to maintain descent minima's,
- Loss of situational awareness.

Any demonstration of sustained poor flight management is an overall fail assessment and no credits given. For example - but are not limited to:

- Sustained failure to comply with hand over take over drill.



21.6 Post Flight

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

21.6.1 Complete Post-Examination Administration

- 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.