



# **FLIGHT TEST STANDARDS GUIDE**

## **INSTRUMENT RATING**

**Issue, continued competency, additional aid  
and removal of single engine limitation**

## **AEROPLANE/HELICOPTER**

**Assessment criteria for the guidance of  
flight examiners and instructors**

Revision 8 – September 2016

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## Foreword

Flight Test Standards Guides have been compiled for use by both flight examiners and flight instructors and are at present the acceptable means of compliance for use in conjunction with specific flight test syllabuses prescribed in the appropriate CAA Advisory Circulars.

Flight Test Standards Guides were originally developed by John Parker, the CAA General Aviation Examiner with assistance from Ritchie de Montalk of Massey University. Subsequent consultation with industry flight examiners has resulted in further refinement.

All instrument rating initial issue flight tests, continued competency demonstrations, single engine limitation removal and additional navigation aid demonstrations are to be conducted in accordance with the parameters laid down in this guide. This applies to:

- Delegated flight testing organisations, and
- Part 141 and 119 organisations holding the approval to conduct instrument rating continued competency demonstrations, single engine limitation removal and additional navigation aid demonstrations, and
- All flight examiners who hold the examiner privilege of continued competency instrument rating, removal of single engine limitation and/or additional navigation aid demonstrations.

Any feedback regarding this publication should be directed to [info@caa.govt.nz](mailto:info@caa.govt.nz)

## **Change Notice**

### **Revision 8 issued September 2016**

Introduces the requirement for Performance Based Navigation (PBN), and specifically RNP 1, into the GNSS element of instrument rating flight tests.

## **Introduction**

This guide contains standards for the Instrument Rating issue, continued competency, removal of single engine limitation and the additional navigation aids of NDB, ILS and GNSS flight tests. This guide is to be used by flight examiners who hold the examiner privilege of Instrument Rating issue, continued competency and/or removal of single engine limitation and/or additional navigation aids (NDB, ILS and/or GNSS).

Flight instructors may also use this booklet when preparing candidate's for flight tests. However, flight instructors are reminded of their obligation to teach to a syllabus rather than the specific flight test requirements.

This flight test guide is based upon the following references;

CAR Part 61 Pilot Licences and Ratings

CAR Part 91 General Operating Flight Rules

AC 61-17 Pilot Licences and Ratings – Instrument Rating

NZAIP Planning Manual, Volumes 1 to 4

Gronlund, N.E., & Linn, R.L. (1990). Measurement and evaluation in teaching. (6<sup>th</sup> ed.) New York: Macmillan.

FAA Practical Test Standards

## **Flight test standard concept**

Civil Aviation Rule (CAR) Part 61 and the associated Advisory Circular (AC) specify the areas in which knowledge and skill must be demonstrated by the candidate before a pilot licence or rating is issued.

Flight test standards guides, provide the flexibility to permit the CAA to publish flight test standards containing specific TASKS (procedures and manoeuvres) in which pilot competency must be demonstrated.

## **Flight test guide description**

Flight test guides are available to flight examiners on the CAA website [www.caa.govt.nz](http://www.caa.govt.nz) and amendments are notified to those who register for the free notification service.

This flight test guide has been designed to minimise the degree of subjectivity in the test although the examiner will still have to exercise judgement where weather factors such as turbulence and wind shear affect the aircraft's performance.

The assessment criteria define performances that are 'ideal' and 'not yet competent', more importantly a 'competent' performance is also defined.

Generally the terms sufficient and adequate are used to describe a minimum pass while the terms thorough, sound, accurate, correct, fully, and exactly are used to describe 'ideal' performances at the top end of the scale.

The rating scale 0 – 100 with competence achieved at 70+ and an above average performance achieved at 85+ may also be used if preferred.

## **Flight examiner responsibility**

The Flight Examiner who conducts the flight test is responsible for determining that the candidate meets the standards outlined in the objective of each TASK.

The examiner shall meet this responsibility by taking an ACTION that is appropriate for each task.

For each task that involves "knowledge only" elements, the flight examiner will orally question the candidate on those elements.

For each task that involves both "knowledge and skill" elements, the flight examiner will orally question the candidate on the knowledge elements and ask the candidate to perform the skill elements.

To minimise the risk of misunderstandings, the examiner will:

- (a) Ask the candidate to verbalise all checklists and nominated speeds.
- (b) Brief the candidate on the flight format.
- (c) Brief the candidate as to who is pilot-in-command.
- (d) Brief the candidate on how engine failure will be simulated (if applicable).
- (e) Assume the responsibilities of safety pilot.

## **Evaluation methods**

Evaluation methods, as used by flight instructors, must not be confused with the evaluation used by flight examiners. Flight instructors use three forms of evaluation. These are: placement, formative and diagnostic.

### ***Placement evaluation***

“Placement evaluation is concerned with the pupil’s entry performance and typically focuses on....does the pupil possess the knowledge and skills needed to begin the planned instruction?” (Gronlund & Linn, 1990, p.12). This type of evaluation is, for example, commonly carried out by the C.F.I on a student, new to the organisation who already has some flying experience, before briefing and assigning an instructor to continue the student’s training.

### ***Formative evaluation***

“Formative evaluation is used to monitor learning progress during instruction. Its purpose is to provide continuous feedback to both pupil and teacher concerning learning successes and failures” (Ibid., p.12). This type of evaluation is an ongoing process. It is used throughout the student’s training, during every instructional period. “Since formative evaluation is directed toward improving learning and instruction, the results are typically *not* used for assigning course grades” (Ibid., p.13).

### ***Diagnostic evaluation***

“The main aim of diagnostic evaluation is to determine the cause of persistent learning problems and to formulate a plan for remedial action” (Ibid., p.13). This type of evaluation is used by flight instructors to determine why a student is having problems executing a TASK, for example; gaining or losing height in the turn.

Flight Examiners use only one form of evaluation. That is; summative.

### ***Summative evaluation***

Summative evaluation “is used primarily ...for certifying pupil mastery of the intended learning outcomes.” (Ibid., p.13). It is used by flight examiners to assess the candidate’s performance against stated minimum standards. *Wherever possible* summative evaluation should be carried out by an independent examiner (not directly involved in the candidate’s training).



## **Formative evaluation and flight instruction have no place in summative evaluation.**

Flight instructors who hold flight examiner privileges must separate the types of evaluation they use as flight instructors, from the requirements of summative evaluation when as flight examiners, they conduct a flight test on behalf of the Civil Aviation Authority.

Flight examiners are credited with the flight time during a flight test and may log the flight time as pilot-in-command, but not as instruction.

## **Flight test standard description**

TASKS are procedures and manoeuvres appropriate to the demonstration required for Instrument Rating issue, continued competency, removal of single engine limitation or an additional navigation aid.

The OBJECTIVE that appears below the task relates that task to the regulatory requirement and lists the important elements that must be satisfactorily performed to demonstrate competency in that task.

The minimum acceptable standard of performance for a task is described in the column stating COMPETENT performance.

The ideal level of competence for a task is described in the right column. In many cases the perfect performance is not achievable but is simply stated as an ideal against which performance can be measured.

Unacceptable performance of a task is described in the NOT YET COMPETENT column.

The ACTION assists the flight examiner in ensuring that the task objective is met, and in some instances, alerts the flight examiner to areas upon which emphasis should be placed.

The conditions under which the task is to be performed are expanded on under the 'satisfactory/unsatisfactory performance' headings, which follow.

## **Satisfactory performance**

The ability of a candidate to perform the required TASK is based on;

- (a) Executing tasks within the aircraft's performance capabilities and limitations as laid down in the aircraft's flight manual, including use of the aircraft's systems.
- (b) Executing emergency procedures and manoeuvres, appropriate to the aircraft and in accordance with recommended procedures.
- (c) Piloting the aircraft with smoothness and accuracy, in accordance with the limitations detailed in this flight test guide.
- (d) Executing all exercises involving balanced flight with no more than 1/4 ball sustained deflection in slip or skid.
- (e) Exercising good judgement/decision making and maintaining situational awareness.
- (f) Applying aeronautical knowledge (principles of flight) to in-flight situations.
- (g) Completing all test items in accordance with the tolerances prescribed in this flight test guide, in smooth air and (unless otherwise stated) with reference to all available instruments and navigation aids.
- (h) Showing complete control of the aircraft, with the successful outcome of a task never seriously in doubt.

## **Unsatisfactory performance**

If, in the judgement of the flight examiner, the candidate does not meet the minimum standard of any task performed, the task demonstration is failed and therefore the flight test is failed.

The examiner may permit a second attempt at any (maximum 3) task(s) or element(s) provided that, in the opinion of the examiner, the safety of the aircraft was not compromised, the professional standing of the rating would not be diminished or a clear misunderstanding of the examiner's requirements occurred.

The flight examiner or candidate may discontinue the test at any time after the failure of a task makes the candidate ineligible to pass the flight test. The test will ONLY be continued with the consent of the candidate.

Consistently exceeding tolerances or failure to take prompt corrective action when tolerances are exceeded, is unsatisfactory performance.

Flight that is maintained within the stated tolerances but consistently deviates from the maximum positive limit to the maximum negative limit, is unsatisfactory performance.

Any action or lack of action by the candidate, which requires corrective intervention by the flight examiner to maintain safe flight, will be disqualifying.

Unsatisfactory performance in any test item will result in the candidate and the instructor being advised of the failure aspects and the additional training believed necessary before a further flight test may be undertaken.

## **Recording unsatisfactory performance**

The term task is used to denote areas in which competency must be demonstrated. When performance is unsatisfactory the flight examiner must record this on the flight test report against the specific task.

## **Use of the flight test guide**

The CAA requires that each flight test be conducted in compliance with the appropriate flight test standard. When using the flight test guide the flight examiner must evaluate the candidate's knowledge and skill in sufficient depth to determine that the standards of performance listed for all tasks are met.

When the flight examiner determines, during the performance of one task, that the knowledge and skill of another task is met, it may not be necessary to require performance of the other task.

The flight examiner is not required to follow the exact order in which the tasks appear. The flight examiner may change the sequence or combine tasks with similar objectives to save time. However, the objectives of all tasks must be demonstrated and evaluated at some time during the flight test. Flight examiners will develop a plan of action that includes the order and combination of tasks to be demonstrated by the candidate in a manner that will result in an efficient and valid test.

Flight examiners will place special emphasis on areas of aircraft operation that are most critical to flight safety. Among these areas are correct aircraft control, sound judgement in decision making, spatial orientation, collision avoidance and use of checklists. Although these areas may not be shown under each task, they are essential to flight safety and will receive careful evaluation throughout the flight test. If these areas are shown in the objective, additional emphasis will be placed on them.

## **Use of distractions during flight tests**

Other than simulated engine failure or distractions introduced to examine unusual attitude recovery techniques, the use of additional artificial distractions is not appropriate to the instrument rating issue, continued competency, removal of single engine limitation or additional navigation aid flight test.

## **Flight test prerequisites**

A candidate for Instrument Rating issue flight test is required by Civil Aviation Rule as a prerequisite to;

- (a) Have passed the appropriate written examinations, and
- (b) Present all relevant knowledge deficiency reports; and
- (c) Have obtained the requisite flight training and experience; and
- (d) Have proof of their identity; and
- (e) Hold a pilot licence that includes night flying privileges for that licence.

A candidate demonstrating continued competency for an instrument rating, the addition of a navigation aid or removal of a single engine limitation. Is required to;

- (a) Have obtained the requisite flight training; and
- (b) Have proof of their identity; and
- (c) Hold a current pilot licence,
- (d) that includes night flying privileges for that licence.

## **Aircraft and equipment requirements for flight test**

Whether an aircraft can be used for a flight test or not is a function of the aircraft's flight manual and its Certificate of Airworthiness. Aeroplane C of A's acceptable for instrument rating issue or renewal are:

1. Standard category
2. Special category – Amateur built (where the candidate is the owner AND the operating conditions on the C of A do not preclude IFR).

The candidate is required to provide an aircraft approved for IFR and any applicable PBN requirements. The aircraft must be equipped for, and its operating limitations must not prohibit, the pilot operations required during the test. Required equipment includes;

- (a) Fully functioning dual flight controls, and
- (b) Those instruments essential to the manoeuvres to be demonstrated, visible to both pilots without excessive parallax error, and
- (c) Those navigation aids essential to the demonstration and those optional aids relevant to an additional aid demonstration, and
- (d) At least three-point lap-and-sash harness, and
- (e) An acceptable means of simulating instrument flight which excludes external visual reference ("foggles"/hood or screens), and
- (f) Intercommunication equipment acceptable to the flight examiner.

The candidate is required to provide adequate and private facilities for briefing prior to and after the flight test.

## **Technically Enhanced Aircraft (TEA)**

A Technically Enhanced Aircraft (TEA) is an aircraft approved for IFR flight in which the primary flight instruments and navigation information are displayed electronically by an integrated system that has been certified at TSO level and is capable of displaying critical information about an aircraft's flight path, situation, position, and progress.

## **Examiner requirements for the flight test**

If the flight test is for the purpose of an Instrument Rating (IR) issue, the examiner must hold a delegation from the Director.

If the flight test (in an aircraft) is for IR continued competency, the examiner must hold; a current Flight Examiner Rating with the examiner privilege of Continued Competency Instrument Rating (Aeroplane or Helicopter as appropriate); **and** the examiner privilege of Extension of Instrument Rating (ADF, GNSS and/or ILS as applicable, VOR is inherent to the IR); **and** a type rating on the flight test aircraft; **and** a current (appropriate) instrument rating endorsed with the applicable (current) approach aids; **and** conduct the assessment within an organisation operating under an aviation training organisation certificate issued in accordance with Part 141 or an air operator certificate issued in accordance with Part 119 where the applicable certificate authorises the holder to conduct that flight test.

If the flight test is for the issue of a GNSS rating including RNP 1 and 2 privileges the examiner should meet the requirements of AC61-17.

If the flight test is for the purpose of the removal of a two pilot limitation, the examiner must meet the above requirements.

If the test (conducted in an aircraft) is for the purpose of an IR continued competency demonstration and the candidate **is not** IR current, in addition to the above, the examiner must hold an IR current to single pilot standard.

For the removal of a single engine limitation, the examiner must, in addition to the above, hold that specific examiner privilege.

If the flight test is to be conducted in a multi-engine aircraft, the examiner must meet the experience requirements of AC 61-19 and have demonstrated competency in accordance with CAR 61.807(a)(1) in a multi-engine aircraft.

If the flight test is to be conducted in a technically enhanced aircraft (TEA), it is recommended that the examiner have demonstrated competency in accordance with CAR 61.807(a)(1) in a TEA.

If the flight test is for the purpose of the addition or renewal of a navigation aid, the examiner must, in addition to the above, hold the examiner privilege of instrument rating continued competency demonstration and the additional navigation aid examiner privilege for the specific aid.

If the flight test is conducted in an approved synthetic flight simulator, the examiner need not hold a current medical nor single pilot currency.

## **Advice to examiners**

The annual competency demonstration is to contain the same exercises and meet the same standards as the IR issue flight test (see AC61 Appendix II) except that either a VOR, NDB or GNSS holding pattern may be demonstrated at the examiner's discretion.

The flight test is to be conducted between two aerodromes at least 35nm apart (or a specifically CAA approved shorter distance at examiner request), one of which must be a controlled aerodrome. This requirement applies to issue, continued competency or the removal of a single engine or single pilot limitation and TEA demonstrations, but not necessarily to the demonstration for an additional navigation aid.

Use of the auto-pilot by the candidate is at the examiner's discretion.

It is neither recommended nor required that unusual attitudes or simulated asymmetric (where applicable) be carried out in IMC. As a guide it is best to postpone the flight test if the forecast or expected cloud base will be below the minimum descent altitude of the approach procedure base turn. Not because operationally an instrument flight would be inadvisable, but because the simulated emergencies required to be demonstrated cannot be assured of being completed safely.

If, due to weather, unusual attitudes or asymmetric exercises cannot be demonstrated the examiner may defer the demonstration up to 30 days.

Where the candidate elects to carry out a two pilot instrument rating issue or renewal, you (the examiner) act as co-pilot. For the purpose of the flight test you should perform your duties by neither being obstructive or above average.

The issue of a GNSS rating should include a demonstration of competency in a GNSS/RNAV 2 route, RNAV 1 procedure (RNP 1 if this privilege is required) and an RNAV\_(GNSS) approach. Candidates who demonstrate competency in an RNP 1 procedure also meet the requirements of, and may be issued with, RNAV 1 and RNP 2 privileges. The oral examination should



include knowledge of GNSS principles, equipment and PBN operations as outlined in AC 61-17 Appendix III.

Complete the instrument rating flight test form and record the type of departure, approaches and asymmetric exercises in the comments section, include PBN specifications where relevant. In the event of a fail, use the comments section to **detail** the reason.

Pass or fail, give a copy of the flight test form to the candidate and send a copy of the flight test form to CAA.

In the event of a pass (initial issue, continued competency or single engine endorsement removal), endorse the logbook:

*I hereby certify that \_\_\_\_\_ has successfully demonstrated competency in accordance with the instrument rating flight test syllabus in a conventional/TEA/centre line thrust/multi-engine/single engine aeroplane/helicopter to single pilot/two pilot standard (delete as applicable).*

*Annual demonstration of competency due (day/month/year).*

*Examiner \_\_\_\_\_*

*Client ID \_\_\_\_\_ Date \_\_\_\_\_*

Instrument rating currency requirements permit a demonstration of competency to be completed up to sixty days prior to the date a demonstration is due.

Where this option is exercised the date of the next continued competency demonstration is dated from the due date and not the date on which the demonstration actually took place.

A successful demonstration of navigation aids and PBN procedures requires the following logbook endorsement:

*I hereby certify that \_\_\_\_\_ has satisfactorily demonstrated competency in the use of VOR, ADF, ILS, GNSS (delete as applicable) and PBN: RNAV 2/RNAV 1/ RNP 2/ RNP 1(delete as applicable) for aeroplanes/helicopters (delete one) .*

*GNSS type \_\_\_\_\_ Model \_\_\_\_\_*

*Examiner \_\_\_\_\_*

*Client ID \_\_\_\_\_ Date \_\_\_\_\_*

Where a flight test is conducted for the purpose of demonstrating proficiency in the use of an additional navigation aid, the flight must be conducted under IFR. All phases of flight required or demonstrated to achieve the requirements of the additional navigation aid must meet the requirements of this guide. For example, the candidate cannot fail the departure procedure or NDB hold in positioning for an ILS demonstration and still meet the requirement of a satisfactory ILS demonstration.

The removal of a single engine limitation to an instrument rating (by an examiner who holds this specific privilege) may only be demonstrated in a non-centre line thrust aeroplane or twin engine helicopter and must meet all the requirements of this guide.



## ASSESSMENT CRITERIA

### Task: Personal preparation

#### *Objective:*

To determine that the candidate demonstrates a suitable attitude to instrument flight by;

- (a) Presenting him or her self for the test; punctually, suitably attired and fit for flying.
- (b) Presenting; an up to date, summarised and certified pilot's logbook.
- (c) Presenting the appropriate written examination credits and knowledge deficiency reports (if applicable).
- (d) Presenting a pilot licence that meets the night experience requirements for that licence and current AIP volumes 2 & 3.
- (e) Presenting (if applicable) a copy of the previous instrument rating flight test report.
- (f) Demonstrating knowledge of the currency requirements of an instrument rating.

#### *Action:*

The examiner will;

- (a) Observe the candidate's punctuality, attire and, as far as practicable, determine that the candidate is fit to fly.
- (b) By examination of the candidate's logbook, determine that all statutory flight time requirements have been met and that the flight training syllabus (where applicable) has been completed.
- (c) Ensure that the candidate holds the appropriate exam credits, licence and instrument rating (where applicable) and that relevant knowledge deficiencies have been resolved.
- (d) Determine, by inspection, that the candidate's AIP is current and that the candidate has adequate knowledge of the privileges and currency requirements of the Instrument Rating.

**Personal Preparation**

**Rating** 70 85 100

**Not yet competent** **COMPETENT** **Ideal**

(1) The candidate arrives with insufficient time for adequate flight planning and/or in an unfit state and/or unsuitably attired (Jandals or high heels)	(1) The candidate is fit, suitably attired and arrives with sufficient time for adequate flight planning	(1) The candidate arrives punctually, suitably attired, fit for flying and with sufficient time for thorough flight planning
(2) The candidate does not meet the minimum experience requirements	(2) The candidate's log book is not up to date but can be completed without undue delay	(2) The candidate presents an up to date, summarised and certified pilot's log book which is neat, correct and complete in all respects
(3) Training syllabus not completed	(3) Minimum training syllabus complete	
(4) The candidate is unable to present evidence of written credits or present certified knowledge deficiency reports	(4) The candidate presents appropriate written credits and relevant knowledge deficiency reports	(4) Subjects noted in relevant knowledge deficiency reports are now fully understood
(5) The candidate's documents are not up to date	(5) The candidate presents current documents and pilot licence	(5) The candidate presents current documents, pilot licence and copy of previous IR test report (if applicable)
(6) The candidate can only recall IR currency requirements with prompting	(6) The candidate demonstrates adequate knowledge of IR currency and privileges	(6) The candidate demonstrates a thorough knowledge of IR currency requirements and privileges

## ASSESSMENT CRITERIA

### **Task: Operational flight plan preparation**

**Objective:** To determine that the candidate;

- (a) Exhibits a sound knowledge of aviation weather, NOTAMS and flight planning data by preparing an operational flight plan along charted or promulgated routes between two aerodromes, one of which is controlled, and at least 35nm route distance apart.
- (b) Nominates a suitable alternate as and when required for the flight test or for a hypothetical situation as described by the examiner.
- (c) Makes a sound go/no-go decision based on the available weather and flight planning data, including GNSS RAIM prediction (if applicable).
- (d) Exhibits a sound knowledge of the aircraft's performance capabilities in respect to departure, en-route, and instrument approach requirements.

**Action:** The examiner will;

- (a) Nominate the route and ensure that it meets the minimum requirements for the flight test.
- (b) Determine that the candidate obtains all relevant weather, NOTAMS and flight planning data.
- (c) Require the candidate to analyse the weather and relevant flight planning data in relation to IFR operations and determine that the candidate's performance meets the objectives.
- (d) Place emphasis on the candidate's ability to interpret the weather and NOTAMS and to make a sound go/no go decision.
- (e) Orally question aspects of the departure, en-route, and approach requirements to ensure the objectives are met.

## Operational Flight Plan Preparation

**Rating**

**70**

**85**

**100**

**Not yet competent**

**COMPETENT**

**Ideal**

<p>(1) The candidate does not appreciate the relevance of flight planning data to the proposed flight</p>	<p>(1) The candidate obtains sufficient Met, NOTAMS and flight planning data to meet the requirements of the proposed flight</p>	<p>(1) Obtains all relevant aviation weather, NOTAMS and flight planning data and demonstrates the ability to thoroughly analyse and apply it</p>
<p>(2) The candidate is unable to make a decision or makes an inappropriate no-go decision and/or does not carry out a GNSS RAIM prediction when applicable</p>	<p>(2) Makes an appropriate go/no go decision</p>	<p>(2) Makes a sound go/no go decision based on analysis of the relevant weather, NOTAMS and flight planning data</p>
<p>(3) The candidate takes excessive time to complete the flight plan</p>	<p>(3) Prepares operational and ATS flight plan with minor errors and/or in slightly excessive time</p>	<p>(3) Correctly prepares an operational and ATS flight plan for the nominated route in a timely manner</p>
<p>(4) The candidate makes gross errors or does not assess aircraft performance</p>	<p>(4) Correctly assesses aircraft performance for the route including take-off, SID, en-route, approach and landing, using appropriate performance charts, tables and data</p>	<p>(4) Demonstrates a thorough understanding of aircraft performance for the route including seasonal effects on take-off, SID, en-route emergencies, approach and landing</p>

## ASSESSMENT CRITERIA

### **Task: Knowledge of flight rules**

#### ***Objective:***

To determine that the candidate;

- (a) Demonstrates adequate knowledge of the fuel requirements under IFR.
- (b) Demonstrates adequate knowledge of the conditions that would require an alternate to be nominated and the criteria for a suitable alternate.
- (c) Demonstrates adequate knowledge of take-off, en-route, circling and approach minimums.
- (d) Applies IFR cruising levels with due regard to icing levels.
- (e) Where applicable, demonstrates knowledge of GNSS principles and procedures relevant to IFR and PBN operations in New Zealand

#### ***Action:***

The examiner will;

- (a) Inspect the candidate's operational flight plan for the application of IFR fuel requirements, MSA and the choice of cruising level, for appropriateness in relation to IFR cruising levels and expected icing levels to determine that the candidate's performance meets the objectives; and
- (b) Question the candidate on the application of MSA/MRA, freezing level, take-off, en-route, circling and approach minima as required to ensure that the candidate's performance meets the objectives
- (c) Where applicable, conduct an oral examination relating to GNSS principles PBN procedures and the requirements of a GNSS approach.



## Knowledge of Flight Rules

Rating 70 85 100

### Not yet competent

### COMPETENT

### Ideal

(1) The candidate cannot state the minimum fuel required	(1) Adequately calculates fuel requirements, including reserves for instrument flight	(1) Demonstrates a thorough knowledge of minimum fuel requirements for IFR
(2) The candidate does not nominate an alternate when required to do so or nominates an alternate that is unsuitable	(2) The candidate nominates an alternate but not the most suitable	(2) Nominates the most suitable alternate for the flight under actual or hypothetical conditions
(3) The candidate cannot state the significance of DA, DH, MDA, MSA and/or MRA	(3) The candidate can state the significance of DA, DH, MDA, MSA and MRA	(3) The candidate demonstrates a thorough knowledge and application of DA, DH, MDA, MSA and MRA
(4) Does not apply approach, take-off, circling and/or alternate minima	(4) Demonstrates adequate knowledge of approach, take-off, circling and alternate minima	(4) Demonstrates a thorough knowledge and application of take-off, approach, circling and alternate minima
(5) The candidate does not apply IFR cruising levels and/or cannot state the significance of flight in possible icing conditions	(5) The candidate applies IFR cruising altitudes and demonstrates adequate knowledge of icing conditions	(5) Demonstrates a thorough knowledge of icing conditions in choosing the most appropriate IFR cruising altitude
(6) The candidate fails to demonstrate adequate knowledge of GNSS principles and PBN requirements to the examiner's satisfaction	(6) The candidate demonstrates adequate knowledge of GNSS principles and PBN requirements	(6) The candidate demonstrates a thorough knowledge of GNSS principles and PBN requirements

## ASSESSMENT CRITERIA

### **Task: Flight preparation**

#### ***Objective:***

To determine that the candidate exhibits adequate knowledge of the;

- (a) Form 2129.
- (b) Aircraft technical log.
- (c) Fuel requirements including reserves for an IFR flight in accordance with CAR Part 91, Part 135, 125 or Part 121 as appropriate.
- (d) Fuel quantity on board the aircraft prior to the flight, endurance, fuel consumption and tank selection in accordance with the aircraft's flight manual or checklist.
- (e) Pre-flight inspection items applicable to IFR operations.
- (f) Instrument serviceability checks in accordance with recommended procedures.

#### ***Action:***

The examiner will;

- (a) Question the candidate about the aircraft's documents, and determine that the candidate's performance meets the objective.
- (b) Determine that the candidate can accurately calculate the fuel quantity required for the flight including reserves.
- (c) Determine that the candidate establishes the quantity of fuel on board the aircraft and monitors fuel consumption during flight.
- (d) Observe the candidate carrying out a pre-flight inspection and determine that the candidate's performance meets the objectives.
- (e) Observe and place emphasis on the correct interpretation of instrument readings for serviceability whilst taxiing.

## Flight Preparation

**Rating** **70** **85** **100**

**Not yet competent**

**COMPETENT**

**Ideal**

(1) The candidate has inadequate knowledge of Form 2129 and/or the technical log	(1) The candidate has adequate general knowledge of Form 2129, the technical log and the aircraft documents	(1) The candidate demonstrates a thorough knowledge of Form 2129, the technical log and the aircraft documents
(2) The candidate's general knowledge of fuel and oil requirements is inadequate	(2) The candidate has adequate knowledge of fuel management procedures and fuel and oil requirements appropriate to the operation	(2) The candidate demonstrates sound fuel management procedures and a thorough knowledge of the fuel and oil requirements for IFR flight appropriate to the operation
(3) Carries out a pre-flight inspection but omits items applicable to IFR operations	(3) Carries out a pre-flight inspection including items applicable to IFR operations	(3) Carries out a thorough pre-flight, including items applicable to IFR, in accordance with the flight manual
(4) The candidate does not carry out an instrument check or omits a critical item	(4) The candidate conducts appropriate instrument serviceability checks	(4) The candidate conducts instrument checks in accordance with the checklist

## ASSESSMENT CRITERIA

### **Task: Passenger briefing**

#### ***Objective:***

To determine that the candidate;

- (a) Supervises the passenger(s)
- (b) Briefs the passenger(s);
  1. On the location and operation of the aircraft's emergency equipment including the ELT.
  2. On the operation of all doors and hatches.
  3. On the use and operation of seat belts and shoulder harness (if applicable).
  4. On the rules regarding smoking.
  5. On the rules regarding the use of portable electronic devices.
  6. On the action in the event of an emergency landing and where appropriate in the event of ditching.

#### ***Action:***

The examiner will act in the role of an inexperienced passenger and;

- (a) Observe the candidate's performance to determine that it meets the objectives.
- (b) Determine the candidate's knowledge of the use of the aircraft emergency equipment by further questioning, as necessary.

## Passenger Briefing

Rating

70

85

100

**Not yet competent**

**COMPETENT**

**Ideal**

(1) Does not supervise passengers	(1) Ensures passengers are supervised on the movement area	(1) Ensures passengers are closely supervised on the movement area
(2) Does not instruct the passengers on the location of emergency equipment	(2) Gives passengers a briefing on emergency equipment	(2) Briefs passengers fully on position and use of emergency equipment
(3) Does not instruct passengers on door operation	(3) Closes and locks passenger's door and briefs passengers on its operation	(3) Ensures passengers can operate doors and briefs on any alternative means of escape
(4) Does not instruct passengers on seat belt use and/or does not insist on their use	(4) Ensures passengers put on their seat belts and that they are secure	(4) Ensures passenger can operate seat belts and shoulder restraints and ensures they are secure
(5) Does not brief passengers on the location and operation of the ELT	(5) Gives passengers a briefing on the operation of the ELT	(5) Briefs passengers fully on the location and operation of the ELT
(6) Permits smoking in contradiction of flight manual limitations	(6) Fails to brief passengers on smoking, but does not permit it	(6) Briefs passengers on smoking rules, and does not permit it
(7) Does not brief passengers on the use of electronic devices when appropriate	(7) Fails to brief passengers on the use of portable electronic devices but does not permit their use when applicable	(7) Briefs passengers on the use of portable electronic devices and does not permit their use when applicable
(8) Does not brief passengers on emergency landing procedures	(8) Briefs passengers on emergency landing/ditching procedures	(8) Briefs passengers thoroughly on actions in the event of an emergency and to keep hands and feet clear of controls at all times

## ASSESSMENT CRITERIA

### **Task: RTF procedures and navigation aid tuning**

**Objective:** To determine that the candidate;

- (a) Obtains clearances and otherwise complies with ATS instructions when appropriate.
- (b) Makes appropriate transmissions (if required) at compulsory reporting points.
- (c) Records and reads back appropriate instructions, information and clearances.
- (d) Uses correct aeronautical phraseology at all times with appropriate assertiveness.
- (e) Tunes, identifies and tests the aircraft's navigation equipment in accordance with recommended procedures and the manufacturer's instructions.
- (f) Tunes, operates and tests the transponder as required.
- (g) Loads and checks PBN routes, procedures and approaches

**Action:** The examiner will;

- (a) Observe and monitor the candidate's compliance with ATS clearances, instructions and compulsory reporting.
- (b) Monitor and observe the candidate's copying and read back of instructions, information and clearances.
- (c) Monitor all transmissions made by the candidate for the appropriate level of assertiveness, and correctness in accordance with the NZAIP.
- (d) Observe the candidate's actions in paras (e), (f) and (g) and determine that the candidate's performance meets the objectives.

## RTF Procedures and Navigational Aid Tuning

**Rating**

**70**

**85**

**100**

**Not yet competent**

**COMPETENT**

**Ideal**

(1) The candidate accepts a clearance but does not comply, or accepts a clearance that cannot be complied with	(1) The candidate obtains clearances and complies with ATS instructions, making compulsory reports where appropriate	(1) Obtains and evaluates clearances, complying, rejecting or requesting an alternative where appropriate and makes all compulsory reports
(2) The candidate frequently reads back clearances incorrectly	(2) Reads back clearances in accordance with AIP procedures most of the time	(2) Records and reads back clearances in accordance with AIP procedures at all times
(3) Uses slang or an excessively assertive communication style	(3) Uses correct aeronautical phraseology most of the time	(3) Uses aeronautical phraseology in an appropriate, authoritative and assertive manner
(4) Tunes navigational equipment but does not identify	(4) Tunes, identifies and tests aircraft's navigational equipment	(4) Tunes, identifies, tests and cross checks navigation equipment in accordance with the checklist
(5) Does not carry out a RAIM prediction if applicable	(5) Completes all appropriate GNSS integrity checks	(5) Completes all GNSS integrity checks in accordance with the checklist
(6) Does not use the transponder	(6) Tests, tunes and operates the transponder correctly	
(7) Does not load or check PBN data. Loads incorrect data.	(7) Loads and checks PBN data correctly	

## ASSESSMENT CRITERIA

### **Task: Loss of communication or navigation aid failure procedures**

#### ***Objective:***

To determine that the candidate;

- (a) Demonstrates adequate knowledge of the procedure to be followed in the event of a communication , navigation aid or GNSS failure during various phases of flight, including for TEA aircraft an MFD failure (if applicable).

#### ***Action:***

The examiner will;

- (a) Question the candidate on loss of communication, navigation aid and GNSS failure procedures to determine that the candidate's performance meets the objective.
- (b) In the case of a TEA, observe the candidate's handling of an MFD failure (if applicable).



## Loss of Communication or Navigation Aid Failure Procedures

**Rating** 70 **85** **100**

**Not yet competent**

**COMPETENT**

**Ideal**

<p>(1) The candidate's knowledge of the general procedure to adopt is inadequate</p>	<p>(1) The candidate demonstrates an adequate general knowledge of loss of communication, navigation aid or GNSS failure procedures</p>	<p>(1) Demonstrates a sound general knowledge of loss of communication, navigation aid or GNSS failure procedures following a communication or navigation aid failure in flight (and carries a cell phone)</p>
<p>(2) The candidate takes an unduly long time to determine the appropriate procedure</p>	<p>(2) The candidate is able to use a checklist or AIP to demonstrate the correct loss of communication, navigation aid or GNSS failure procedure</p>	<p>(2) With the aid of a checklist or AIP promptly demonstrates the correct response to a communication, navigation aid or GNSS failure under the specified flight conditions</p>
<p>(3) The candidate does not adopt the recommended procedure for a MFD failure (if applicable)</p>	<p>(3) The candidate adopts the procedure specified in the aircraft flight manual and/or systems manual for an MFD failure (if applicable)</p>	

## ASSESSMENT CRITERIA

### **Task: Two pilot crew responsibilities briefing**

#### ***Objective:***

To determine that the candidate (if applicable);

- (a) Adequately briefs the co-pilot on the co-pilots responsibilities and duties applicable to the flight.
- (b) Adequately divides the responsibilities so as to utilise the co-pilot in a meaningful way.
- (c) Monitors the co-pilots actions during the flight.

#### ***Action:***

The examiner will;

- (a) Role play the position of co-pilot.
- (b) Place emphasis on the division of duties, so that the co-pilot is utilised in a meaningful way.
- (c) In flight carry out, or if the flight test is observed by the examiner in a multi crew aircraft the co-pilot will carry out, the duties of the co-pilot by being neither obstructive or above average, relying primarily on prompts from the candidate.
- (d) Act as safety-pilot during the flight (in addition to any other crew).

**Two Pilot Crew Responsibilities Briefing**

**Rating** \_\_\_\_\_ **70** \_\_\_\_\_ **85** \_\_\_\_\_ **100**

**Not yet competent**

**COMPETENT**

**Ideal**

(1) The candidate does not clearly brief the co-pilot on the division of duties	(1) The candidate adequately briefs the co-pilot on duties	(1) The candidate comprehensively briefs the co-pilot on the division of crew duties and responsibilities for normal flight and emergency situations
(2) The candidate frequently operates as a single pilot	(2) The candidate adequately utilises the co-pilot most of the time	(2) The candidate utilises the co-pilot at all times in accordance with the pre-flight briefing so as to appropriately share the workload
(3) The candidate under monitors the co-pilot to the detriment of the flight	(3) The candidate periodically monitors the co-pilot during flight	(3) The candidate monitors the co-pilot throughout the flight

## ASSESSMENT CRITERIA

### **Task: Instrument transition**

#### ***Objective:***

To determine that the candidate;

- (a) Transitions smoothly from visual flight to instrument flight with a cloud base simulated at the published IFR take-off minima.

#### ***Action:***

The examiner will;

- (a) Specify the simulated IFR departure weather conditions.
- (b) Observe the candidate's transition from visual flight to instrument flight and determine that the candidate's performance meets the objective.

## Instrument Transition

**Rating**

**70**

**85**

**100**

**Not yet competent**

**COMPETENT**

**Ideal**

(1) An acceptable means of simulating instrument flight at the minima for take-off is not available	(1) An acceptable means of simulating instrument flight is introduced at the minima for take-off	(1) The candidate smoothly transitions to simulated instrument flight at the minima for take-off
(2) Airspeed frequently exceeds $\pm 5$ knots of the nominated initial climb speed	(2) Airspeed remains within $\pm 5$ knots of the nominated initial climb speed	(2) The nominated initial climb speed is held accurately
(3) The departure heading or track is flown but with frequent deviations exceeding $\pm 5^\circ$	(3) The departure heading or track is flown with minor deviations promptly corrected	(3) The departure heading or track is maintained accurately

## ASSESSMENT CRITERIA

PPL or CPL(H)

### **Task: Straight and level flight**

#### *Objective:*

To determine that the candidate is capable of;

- (a) Achieving and maintaining straight and level flight at the cleared or nominated altitude  $\pm 100$  feet.
- (b) Maintaining the nominated heading  $\pm 5$  degrees; and for helicopters only,
- (c) Accelerating and decelerating between the minimum speed for IFR flight and normal cruise.

#### *Action:*

The examiner will;

- (a) Place emphasis on the candidate's demonstration of altitude, heading and balance control.

### Straight and Level Flight

**Rating** **70** **85** **100**

**Not yet competent**

**COMPETENT**

**Ideal**

(1) The candidate frequently deviates from or maintains the nominated altitude in excess of 100ç	(1) Maintains the nominated altitude within $\pm 100\text{ç}$	(1) Maintains the nominated altitude accurately at all times
(2) The candidate frequently deviates from or maintains the nominated heading in excess of $\pm 5^\circ$	(2) Maintains the nominated heading but with frequent maximum deviations of $\pm 5^\circ$	(2) Maintains the nominated heading accurately at all times
(3) The candidate maintains an out of balance condition in excess of $\frac{1}{4}$ ball deflection	(3) Maintains balance but with maximum deviations of $\frac{1}{4}$ ball deflection	(3) Maintains the aircraft accurately in balance at all times

## ASSESSMENT CRITERIA

PPL or CPL(H)

### Task: Level turns

#### *Objective:*

To determine that the candidate;

- (a) Enters, maintains, and exits from turning manoeuvres with smooth and coordinated control applications, maintaining altitude  $\pm 100$  feet.
- (b) Uses an angle of bank appropriate to the procedure, or 30 degrees when demonstrated as a specific test item.

#### *Action:*

The examiner will;

- (a) Require the candidate to demonstrate turns through  $180^\circ$  both left and right using an appropriate angle of bank.
- (b) Observe the candidate's performance and determine that it meets the objectives.



## Level Turns

**Rating**

**70**

**85**

**100**

**Not yet competent**

**COMPETENT**

**Ideal**

(1) The candidate frequently deviates from the nominated altitude in excess of 100ç	(1) Enters, maintains and exits from the turn at the nominated altitude with altitude deviations not exceeding $\pm 100\text{ç}$	(1) Enters, maintains, and exits from the turn accurately maintaining the nominated altitude at all times
(2) The candidate cannot maintain a constant angle of bank	(2) The candidate maintains a rate one turn or the nominated angle of bank $\pm 5^\circ$	(2) The candidate maintains a rate one turn or the nominated angle of bank accurately
(3) The candidate is unable to achieve the predetermined heading within $\pm 10^\circ$	(3) Turns through at least $180^\circ$ left and right onto a predetermined heading to within $\pm 5^\circ$ with one correction	(3) Turns through at least $180^\circ$ left and right rolling out accurately onto the predetermined heading at all times
(4) The candidate maintains an out of balance condition in excess of $\frac{1}{4}$ ball deflection	(4) Maintains balance but with frequent maximum deviations of $\frac{1}{4}$ ball deflection	(4) Maintains the aircraft accurately in balance at all times

## ASSESSMENT CRITERIA

PPL or CPL(H)

### **Task: Climbing & descending**

#### *Objective:*

To determine that the candidate is capable of;

- (a) Maintaining a nominated climbing or descending speed  $\pm 5$  knots.
- (b) Maintaining a nominated heading  $\pm 5$  degrees.

#### *Action:*

The examiner will;

- (a) Place emphasis on the candidate's demonstration of airspeed, heading and balance control.

## Climbing and Descending

**Rating** **70** **85** **100**

**Not yet competent**

**COMPETENT**

**Ideal**

(1) The candidate frequently exceeds $\pm 5$ knots of the nominated climb speed	(1) The candidate maintains the nominated climbing or descending speed within $\pm 5$ knots	(1) Maintains the nominated climbing and descending speed accurately
(2) The candidate frequently exceeds $\pm 5^\circ$ of the nominated heading	(2) The candidate maintains the nominated climbing or descending heading with frequent deviations of $\pm 5^\circ$	(2) The candidate maintains the nominated climbing and descending heading accurately
(3) The candidate maintains an out of balance condition in excess of $\frac{1}{4}$ ball deflection	(3) The candidate maintains balance but with frequent maximum deviations of $\frac{1}{4}$ ball deflection	(3) The candidate maintains the aircraft accurately in balance at all times

## ASSESSMENT CRITERIA

PPL or CPL(H)

### **Task: Climbing turns to altitude**

#### *Objective:*

To determine that the candidate is capable of;

- (a) Maintaining a nominated climb speed  $\pm 5$  knots whilst turning at rate one.
- (b) Levelling at a predetermined or cleared altitude  $\pm 100$  feet whilst turning at rate one.

#### *Action:*

The examiner will;

- (a) Place emphasis on the candidate's demonstration of airspeed, balance, rate of turn or angle of bank (as applicable) and achievement of the nominated or cleared altitude.

### Climbing Turns to Altitude

Rating 70 85 100

**Not yet competent**                      **COMPETENT**                      **Ideal**

(1) The candidate frequently exceeds $\pm 5$ knots of the nominated climb speed	(1) The candidate maintains the nominated climb speed within $\pm 5$ knots	(1) Maintains the nominated climb speed accurately
(2) The candidate frequently exceeds the nominated altitude in excess of 100ç	(2) The candidate achieves and maintains the nominated altitude within $\pm 100\text{ç}$	(2) The candidate achieves and maintains the nominated altitude accurately at all times
(3) The candidate frequently exceeds the rate one turn	(3) Achieves the rate one turn but with frequent small adjustments to angle of bank	(3) Accurately achieves and maintains the rate one turn with constant angle of bank
(4) The candidate maintains an out of balance condition in excess of $\frac{1}{4}$ ball deflection	(4) Maintains balance but with frequent maximum deviations of $\frac{1}{4}$ ball deflection	(4) Maintains the aircraft accurately in balance at all times

## ASSESSMENT CRITERIA

PPL or CPL(H)

### **Task: Descending turns to altitude**

#### *Objective:*

To determine that the candidate is capable of;

- (a) Maintaining a nominated descent speed  $\pm 5$  knots whilst turning at rate one.
- (b) Levelling at a nominated or cleared altitude  $\pm 100$  feet whilst turning at rate one.

#### *Action:*

The examiner will;

- (a) Place emphasis on the candidate's demonstration of airspeed, balance, rate of turn or angle of bank (as applicable) and achievement of the nominated or cleared altitude.

### Descending Turns to Altitude

Rating 70 85 100

**Not yet competent**                      **COMPETENT**                      **Ideal**

(1) The candidate frequently exceeds $\pm 5$ knots of the nominated descent speed	(1) The candidate maintains the nominated descent speed within $\pm 5$ knots	(1) Maintains the nominated descent speed accurately
(2) The candidate frequently exceeds the nominated altitude in excess of 100ç	(2) The candidate achieves and maintains the nominated altitude within $\pm 100\text{ç}$	(2) The candidate achieves and maintains the nominated altitude accurately at all times
(3) The candidate frequently exceeds the rate one turn	(3) Achieves the rate one turn but with frequent small adjustments to angle of bank	(3) Accurately achieves and maintains the rate one turn with constant angle of bank
(4) The candidate maintains an out of balance condition in excess of $\frac{1}{4}$ ball deflection	(4) Maintains balance but with frequent maximum deviations of $\frac{1}{4}$ ball deflection	(4) Maintains the aircraft accurately in balance at all times

## ASSESSMENT CRITERIA

**PPL or CPL(H)**

### **Task: Limited panel**

#### ***Objective:***

To determine that the candidate can manually control the aircraft by sole reference to limited (emergency) flight instruments by demonstrating;

- (a) Level flight, maintaining heading within  $\pm 10$  degrees and  $\pm 200$  feet of the nominated altitude.
- (b) Level turns onto nominated compass headings within 20 degrees (initially) and subsequently corrected to within 10 degrees, maintaining the nominated altitude  $\pm 200$  feet.
- (c) Recoveries from unusual attitudes as appropriate to the aircraft size and type.

#### ***Action:***

The examiner will;

- (a) Obscure the AH and DI or in the case of a TEA: simulate a PFD failure (in VMC other than in simulators).
- (b) In the case of helicopters: disable the stabilisation system (if applicable and appropriate).
- (c) Nominate the altitude and heading to be maintained in level flight.
- (d) Nominate the compass heading to be turned onto.
- (e) Take control and manoeuvre the aircraft to place it in an unusual attitude, appropriate to the aircraft type and size, without endangering the aircraft or crew and instruct the candidate to recover to straight and level flight initially, thence to return to the nominated altitude and heading (in VMC other than in simulators).
- (f) Observe the candidate's performance to determine that it meets the objectives.



### Limited Panel

**Rating**

**70**

**85**

**100**

**Not yet competent**

**COMPETENT**

**Ideal**

(1) Frequent altitude deviations in excess of $\pm 200\text{ft}$	(1) Maintains the predetermined altitude within $\pm 200\text{ft}$	(1) Maintains the predetermined altitude accurately
(2) Frequently deviates from the heading by more than $10^\circ$	(2) Maintains the nominated heading within $10^\circ$	(2) Maintains the nominated heading accurately at all times
(3) Cannot turn onto the heading within $\pm 20^\circ$ or correct to within $\pm 10$ after several attempts	(3) Turns onto the heading within $\pm 20^\circ$ initially, correcting to within $\pm 10^\circ$ on next attempt most times	(3) Turns onto the nominated compass heading accurately
(4) Incorrectly identifies the aircraft's attitude using limited panel instruments or as a result of a PFD failure (if applicable)	(4) Correctly identifies the aircraft's attitude using limited panel instruments or those instruments available as a result of a PFD failure (if applicable)	(4) Immediately recognises the aircraft's attitude using limited panel instruments or those instruments available as a result of a PFD failure (if applicable)
(5) Does not reduce power in recovery from the nose low attitude or spiral dive; fails to apply power in nose high attitudes	(5) Reduces power during recovery from the nose low or spiral dive attitude and applies power in the nose high attitude recovery	(5) Immediately and appropriately reduces power for recovery from the nose low or spiral dive; smoothly applies power in the nose high attitude
(6) Makes no attempt to re-establish straight and level	(6) Returns to the straight and level references after a small delay	(6) Promptly regains S & L, then returns to the references

## ASSESSMENT CRITERIA

### **Task: Departure procedures**

#### ***Objective:***

To determine that the candidate;

- (a) Carries out the departure procedure in accordance with a promulgated SID or ATS directions (may be RNP 1 if required for test).

#### ***Action:***

The examiner will;

- (a) Observe the candidate's demonstration of a promulgated departure procedure and determine that the candidate's performance meets the objective (may be RNP 1 if required for test).

## Departure Procedures

**Rating** **70** **85** **100**

### Not yet competent

### COMPETENT

### Ideal

(1) The candidate deviates from the published departure procedure	(1) The candidate executes the published departure procedure	(1) Accurately executes the departure procedure in accordance with the promulgated SID or ATS instructions
(2) The candidate frequently deviates in excess of $\pm 5^\circ$ from any departure heading	(2) The candidate maintains required departure heading within $\pm 5^\circ$	(2) Maintains any required departure heading accurately at all times
(3) The candidate frequently exceeds $\pm 5$ knots of the nominated climb speed	(3) The candidate maintains the nominated climb speed within $\pm 5$ knots	(3) Maintains the nominated climb speed accurately
(4) Incorrect track selected and flown and/or deviations frequently exceed $\pm 5^\circ$	(4) Intercepts and maintains departure track with minor deviations promptly corrected	(4) Intercepts and maintains the departure track accurately
(5) The candidate frequently deviates from or maintains the cleared altitude in excess of 100 $\text{ft}$	(5) Maintains the cleared altitude within $\pm 100\text{ft}$	(5) Maintains the cleared altitude accurately at all times

## ASSESSMENT CRITERIA

### **Task: En-route procedures**

#### ***Objective:***

To determine that the candidate;

- (a) Complies with IFR, and where applicable PBN, procedures en-route.

#### ***Action:***

The examiner will;

- (a) Observe the candidate's demonstration of en-route procedures and determine that the candidate's performance meets the objective.

## En-route Procedures

Rating 70 85 100

**Not yet competent**

**COMPETENT**

**Ideal**

(1) Intercepts and maintains an incorrect track or deviations frequently exceed $\pm 5^\circ$	(1) The candidate maintains cleared tracks with minor deviations promptly corrected	(1) Maintains the cleared track accurately at all times
(2) Incorrectly sets the altimeter sub-scale or fails to update the GNSS altimeter setting where applicable	(2) Sets and cross checks, area and approach altimeter setting as applicable	
(3) The candidate frequently deviates from or maintains the cleared altitude in excess of 100ft	(3) The candidate maintains the assigned altitude or flight level within $\pm 100\text{ft}$	(3) Maintains the assigned altitude accurately at all times
(4) The candidate neglects to do cruise checks	(4) The candidate completes cruise checks	(4) Completes timely cruise checks using a checklist
(5) Does not report position when required	(5) Reports position in accordance with AIP procedures	(5) Promptly reports position in accordance the AIP
(6) Does not maintain an in-flight navigational log	(6) The candidate maintains an in-flight navigation log	(6) Maintains an accurate and legible in-flight nav log
(7) The candidate does not maintain in flight fuel log	(7) The candidate maintains an in-flight fuel log	(7) The candidate maintains an accurate fuel log

## ASSESSMENT CRITERIA

### **Task: Use of checklists**

#### *Objective:*

To determine that the candidate;

- (a) Uses normal and emergency checklists as applicable to the operation.

#### *Action:*

The examiner will;

- (a) Observe the candidate's use of checklists and determine that the performance meets the objective.

### Use of Checklists

**Rating** 70 85 100

**Not yet competent**                      **COMPETENT**                      **Ideal**

(1) The candidate does not use checklists in accordance with standard operating procedures	(1) The candidate uses normal checklists in accordance with standard operating procedures	(1) The candidate routinely uses normal checklists in accordance with standard operating procedures
(2) The candidate's knowledge of recall items is seriously deficient	(2) The candidate demonstrates adequate proficiency with recall items in emergency checklists	(2) The candidate demonstrates a thorough knowledge of recall items in emergency checklists
(3) The candidate is unfamiliar with the emergency checklists or QRH	(3) The candidate demonstrates adequate proficiency in the use of the emergency checklists or QRH for non-recall items	(3) Demonstrates proficiency with problem solving using emergency checklists for non-recall items

## ASSESSMENT CRITERIA

### **Task: General use of autopilot**

#### ***Objective:***

To determine that the candidate;

- (a) Carries out serviceability checks prior to utilising the autopilot in flight.
- (b) Can utilise the autopilot in flight.
- (c) Knows the limitations and capabilities of the autopilot.
- (d) Can recognise failure of the autopilot in flight.

#### ***Action:***

The examiner will;

- (a) Observe the candidate's functional test of autopilot serviceability prior to flight.
- (b) Require the candidate to demonstrate in-flight use of the autopilot as appropriate to the operation.
- (c) Observe the candidate's performance and determine that it meets the objectives.
- (d) Question the candidate on the limitations of the autopilot.



## General Use of Autopilot

**Rating** **70** **85** **100**  
**Not yet competent** **COMPETENT** **Ideal**

(1) The candidate does not check autopilot prior to flight	(1) The candidate carries out a satisfactory pre-flight autopilot check	(1) The candidate checks the autopilot strictly in accordance with the checklist prior to flight
(2) The candidate is unable to use the autopilot	(2) The candidate can use the basic autopilot functions	(2) The candidate can fully utilise all autopilot functions in flight
(3) The candidate is unable to recognise autopilot failure until the aircraft departs significantly from the flight path	(3) The candidate can recognise autopilot failure in flight and take corrective action	(3) The candidate can recognise autopilot failure in flight and promptly take corrective action
(4) The candidate is unaware of autopilot limitations	(4) The candidate has a basic knowledge of autopilot limitations	(4) The candidate has a thorough knowledge of autopilot capabilities and limitations

## ASSESSMENT CRITERIA

### **Task: Interception and tracking GNSS**

#### ***Objective:***

To determine (if applicable) that the candidate is capable of;

- (a) Intercepting a track by sole reference to GNSS data and verifying track and distance by reference to current navigation charts.
- (b) Maintaining a promulgated track with a maximum deviation of  $\pm \frac{1}{2}$  scale CDI deflection by sole reference to GNSS data.

#### ***Action:***

The examiner will;

- (a) Require the candidate to intercept and track a promulgated route with sole reference to GNSS data.
- (b) Observe the candidate's method of verifying track and distance information.
- (c) Observe the candidate's performance and determine that it meets the objectives.



## ASSESSMENT CRITERIA

### **Task: Interception and tracking NDB**

#### *Objective:*

To determine that the candidate is capable of;

- (a) Intercepting a track by sole reference to a NDB.
- (b) Maintaining a promulgated track by sole reference to a NDB with a maximum deviation of  $\pm 5^\circ$ .

#### *Action:*

The examiner will;

- (a) Require the candidate to intercept and track a promulgated route with sole reference to a NDB.
- (b) Observe the candidate's performance and determine that it meets the objectives.



## ASSESSMENT CRITERIA

### **Task: Interception and tracking VOR**

#### *Objective:*

To determine that the candidate is capable of;

- (a) Intercepting a track by sole reference to VOR data.
- (b) Maintaining a promulgated track by sole reference to VOR data.

#### *Action:*

The examiner will;

- (a) Require the candidate to intercept and track a promulgated route with sole reference to VOR data.
- (b) Observe the candidate's performance and determine that it meets the objectives.



## ASSESSMENT CRITERIA

### **Task: Radiotelephony tuning and procedures**

#### ***Objective:***

To determine that the candidate;

- (a) Listens to communications from ground stations and other aircraft.
- (b) Uses the aircraft's radio to communicate clearly and concisely.
- (c) Uses correct aeronautical phraseology.
- (d) Records and complies with clearances and instructions.

#### ***Action:***

The examiner will;

- (a) Monitor the candidate's communications and determine that the candidate's performance meets the objectives.
- (b) Place emphasis on the use of standard phraseology.
- (c) Place emphasis on compliance and recording of clearances.



## Radiotelephony Tuning and Procedures

**Rating** **70** **85** **100**

<b>Not yet competent</b>	<b>COMPETENT</b>	<b>Ideal</b>
(1) The candidate frequently misses radio traffic	(1) The candidate maintains a listening watch	(1) The candidate maintains a listening watch at all times and encourages a “quiet cockpit”
(2) The candidate has poor communication ability	(2) The candidate communicates adequately	(2) The candidate communicates clearly and concisely at all times
(3) The candidate frequently uses slang and incorrect terminology	(3) The candidate uses correct aviation terminology most of the time	(3) The candidate uses correct aeronautical phraseology at all times
(4) The candidate does not record clearances	(4) Records and reads back all vital instructions and clearances	(4) Records and reads back all clearances
(5) The candidate does not comply with clearances and instructions or complies without regard to aircraft performance	(5) Complies with clearances and instructions	(5) Evaluates clearances and instructions, complying or rejecting as appropriate

## ASSESSMENT CRITERIA

### **Task: Engine failure after take-off (multi-engine aircraft only)**

#### ***Objective:***

To determine that the candidate, having entered IMC;

- (a) Maintains control of the aircraft at all times.
- (b) Executes an appropriate emergency procedure when the engine is failed after take-off in simulated instrument meteorological conditions.
- (c) Uses the aircraft emergency checklist or QRH to follow up the recall emergency actions including simulated appropriate radio calls.
- (d) Nominates an appropriate plan of action.

#### ***Action:***

The examiner will;

- (a) Nominate the simulated minimums for take-off.
- (b) Simulate emergencies without risk to aircraft or crew (VMC only in other than simulators).
- (c) Ensure that ATS is aware of the simulated emergency.
- (d) Simulate an engine failure after take-off in simulated instrument conditions.
- (e) Place emphasis on the candidate's control of the aircraft (critical element).
- (f) Observe the candidate's subsequent actions and determine that they meet the objectives.

### Engine Failure after Take-Off (multi-engine aircraft)

**Rating** **70** **85** **100**

**Not yet competent**

**COMPETENT**

**Ideal**

(1) Candidate handles aircraft erratically and/or would lose control without examiner intervention	(1) Maintains control of the aircraft with minor deviations promptly corrected	(1) Maintains complete control at all times
(2) The candidate is unable to control initial yaw and/or is unable to maintain the subsequent climb heading within 5°	(2) Maintains take-off heading $\pm 15^\circ$ until recall items completed then $\pm 5^\circ$ after engine secured	(2) Maintains take-off heading without deviation
(3) The candidate fails to feather or feathers the wrong engine	(3) Completes the initial feathering procedure correctly from memory	(3) Promptly completes recall items as detailed in the flight manual
(4) Airspeed deviates frequently from Vyse	(4) Achieves and maintains Vyse + 5 knots – 0 knots	(4) Achieves and maintains Vyse accurately and without deviation
(5) The candidate does not use a checklist and/or simulate radio calls	(5) Follows up recall items with the checklist and simulated radio calls	(5) Appropriately follows up recall items with a checklist and simulates radio calls
(6) The candidate does not have a plan of action and/or subsequent actions worsen the situation	(6) The candidate nominates a new plan of action with a minor delay	(6) Promptly nominates the most suitable plan of action for the situation

## ASSESSMENT CRITERIA

### **Task: One engine inoperative performance (multi-engine aircraft only)**

#### ***Objective:***

To determine that the candidate, after the failure of an engine prior to or during an approach;

- (a) Maintains control of the aircraft at all times and carries out the approach within the required parameters for the aid.
- (b) Uses the aircraft's emergency checklist to follow up recall items (if appropriate) and makes the appropriate emergency radio calls.
- (c) Initiates an engine inoperative missed approach from minimum altitude in accordance with the missed approach procedure for that aid.
- (d) Subsequently demonstrates a clear appreciation of the effect of an engine failure on the aircraft's performance by nominating an appropriate plan of action.

#### ***Action:***

The examiner will;

- (a) Simulate emergencies without risk to aircraft or crew (VMC recommended in other than simulators).
- (b) Simulate an engine failure prior to or during an instrument approach and (when appropriate) set the power on the failed engine to zero thrust to simulate a feathered engine.
- (c) Place emphasis on the candidate's control of the aircraft (critical element).
- (d) Deny the candidate visual reference at MDA, MAP and/or DA.
- (e) Observe the candidate's subsequent actions and determine that they meet the objectives.

### One Engine Inoperative Performance (multi-engine aircraft)

Rating 70 85 100

**Not yet competent**

**COMPETENT**

**Ideal**

(1) The candidate handles the aircraft erratically and/or would lose control without examiner intervention	(1) Maintains control of the aircraft with minor deviations promptly corrected	(1) Maintains complete control at all times
(2) The candidate identifies the wrong engine and/or is unable to maintain the heading within 15°	(2) Maintains heading $\pm 15^\circ$ until recall items completed then $\pm 5^\circ$ after engine secured	(2) Maintains heading without deviation
(3) The candidate immediately feathers (inappropriately) with no attempt to establish the cause of engine failure and/or does not use a checklist or QRH for follow up items when appropriate	(3) Follows up recall items with the checklist in an attempt to establish the cause of engine failure and makes simulated emergency calls as appropriate	(3) Promptly follows up recall items with the checklist to establish the cause of engine failure and takes the most appropriate action
(4) The candidate is unable to maintain the approach profile and/or track and or allows airspeed to decrease below Vyse in an attempt to maintain altitude	(4) Maintains tracks within the approach aid parameters	(4) Maintains published tracks without deviation
(5) The candidate does not have a plan or the plan of action worsens the situation	(5) The candidate nominates a suitable plan of action	(5) Nominates the most suitable plan of action for the scenario promptly

## ASSESSMENT CRITERIA

**Task: Full panel: Upset recovery (unusual attitudes)**

***Objective:***

To determine that the candidate can;

- (a) Recover from unusual attitudes as appropriate to the aircraft size and type.

***Action:***

The examiner will;

- (a) Take control and manoeuvre the aircraft to place it in an unusual attitude appropriate to the aircraft type and size without endangering the aircraft or crew and instruct the candidate to recover to straight and level flight initially, thence to return to the nominated altitude and heading (VMC recommended in other than simulators).
- (b) Observe the candidate's subsequent actions and determine that they meet the objective.

**Full Panel: Upset Recovery (Unusual Attitudes)**

**Rating** 70 85 100

**Not yet competent**

**COMPETENT**

**Ideal**

(1) Incorrectly identifies the aircraft's attitude using all available instruments	(1) Correctly identifies the aircraft's attitude using all available instruments	(1) Immediately recognises the aircraft's attitude using all available instruments
(2) Does not reduce power at all during recovery from the nose low attitude or spiral dive and/or fails to apply power in nose high attitudes	(2) Reduces power during recovery from the nose low or spiral dive attitude and applies power in the nose high attitude recovery	(2) Immediately and appropriately reduces power during recovery from the nose low or spiral dive attitude and smoothly applies full power in the nose high attitude recovery
(3) Enters a second unusual attitude while attempting to regain the references	(3) Returns to the straight and level references after a small delay	(3) Promptly regains straight and level, returning to the references in a timely manner

## ASSESSMENT CRITERIA

### **Task: Joining procedure: Overhead**

#### ***Objective:***

To determine that the candidate;

- (a) Navigates to the aid in accordance with the published track, STAR or ATS directions.
- (b) Identifies station passage, using as appropriate, the ADF, VOR or GNSS.
- (c) Completes the procedure turn (if applicable).
- (d) Anticipates station passage and configures the aircraft for the appropriate approach category or class (if applicable).

#### ***Action:***

The examiner will;

- (a) Observe that the candidate correctly recognises station passage.
- (b) Observe the candidate's situational awareness and orientation in completing the procedure turn (if applicable) and configuring the aircraft appropriately in anticipation of commencing the approach and determine that the candidate's performance meets the objectives.



### Joining Procedure: Overhead

**Rating**

**70**

**85**

**100**

**Not yet competent**

**COMPETENT**

**Ideal**

<p>(1) Is unable to track within the tolerances of <math>\pm 5^\circ</math> for NDB or VOR or within <math>\pm \frac{1}{2}</math> scale CDI deflection for GNSS</p>	<p>(1) Navigates to the aid or IAF maintaining the published STAR or promulgated track with deviations of up to <math>\pm 5^\circ</math> for NDB or VOR or <math>\pm \frac{1}{2}</math> scale CDI deflection for GNSS</p>	<p>(1) Navigates to the aid or IAF in accordance with the published STAR or promulgated track without deviation</p>
<p>(2) Makes large heading changes in the overhead and/or does not recognise station passage within 6 seconds</p>	<p>(2) Passes slightly to one side of the aid or IAF with some minor heading changes in the overhead but correctly recognises station passage</p>	<p>(2) Passes directly overhead the aid or IAF and correctly identifies station passage</p>
<p>(3) Fails to complete the published procedure turn</p>	<p>(3) Correctly completes the procedure turn if applicable</p>	<p>(3) Accurately completes the procedure turn</p>
<p>(4) Commences the approach late, requiring the use of an excessive rate of descent</p>	<p>(4) Commences the approach in a configuration appropriate to the aircraft's approach category or class</p>	<p>(4) Anticipates the approach and configures the aircraft in a timely manner appropriate to category</p>

## ASSESSMENT CRITERIA

### **Task: Joining procedure: DME or GNSS arc**

#### ***Objective:***

To determine that the candidate;

- (a) Establishes the aircraft correctly on the DME or GNSS arc.
- (b) Maintains position on the arc  $\pm 1$  nm.
- (c) Maintains profile in accordance with the clearance or designated crossing radials.
- (d) Intercepts final track within  $\pm 5^\circ$ .

#### ***Action:***

The examiner will;

- (a) Observe the Candidate's performance and determine that it meets the objectives.

### Joining Procedure: DME or GNSS ARC

**Rating** **70** **85** **100**

**Not yet competent**

**COMPETENT**

**Ideal**

(1) The candidate cannot establish the aircraft on the arc or deviates beyond $\pm 1$ nm while attempting to establish the aircraft on the arc	(1) Anticipates lead distance and establishes on the arc within $\pm 1$ nm	(1) Correctly anticipates lead distance for commencement of the turn onto the arc and establishes on the arc accurately
(2) The candidate deviates more than $\pm 1$ nm from the arc	(2) Maintains position on the arc within $\pm 1$ nm	(2) Maintains the arc accurately without deviation
(3) Descends below the limiting altitude at the crossing radial or track	(3) Maintains profile on the arc in accordance with a clearance or crossing radial/tracks	(3) Maintains profile on the arc in accordance with a clearance or designated crossing radial/tracks without deviation
(4) The candidate establishes on an incorrect inbound radial/track	(4) Intercepts final approach track within $\pm 5^\circ$	(4) Intercepts final approach track accurately

## ASSESSMENT CRITERIA

### **Task: Joining procedure: Radar (if applicable)**

#### ***Objective:***

To determine that the candidate;

- (a) Can, under radar direction, position the aircraft to a predetermined position or fix or intercept a nominated track.
- (b) Maintains orientation by monitoring other navigation aids.

#### ***Action:***

The examiner will;

- (a) Observe the candidate's performance to determine that it meets the objectives.



## ASSESSMENT CRITERIA

**Task: Joining procedure: RNAV 1, RNP 1 and/or STAR (if applicable)**

***Objective:***

To determine that the candidate;

- (a) Loads and activates the correct STAR.
- (b) Maintains tracking in accordance with the applicable PBN procedure
- (c) Maintains vertical profile in accordance with the STAR or as directed by ATS.
- (d) On completion of the STAR, intercepts a hold or final approach track.

***Action:***

The examiner will;

- (a) Observe the candidate's performance and determine that it meets the objectives

**Joining Procedure: RNAV 1, RNP 1, and/or STAR**

**Rating**

**70**

**85**

**100**

**Not yet competent**

**COMPETENT**

**Ideal**

(1) Is unable to load the required STAR or loads the incorrect procedure	(1) Loads, verifies and activates the correct STAR just in time to join the procedure	(1) Actions the loading, verification and activation of the STAR in a timely manner.
(2) Is unable to track within $\pm \frac{1}{2}$ scale CDI deflection for GNSS	(2) Navigates to the IAF, hold or final approach track maintaining the STAR with a deviation of up to $\pm \frac{1}{2}$ scale CDI deflection for GNSS	(2) Navigates to the IAF, hold or final approach track maintaining the STAR with only minimal deviation from track ( $\pm \frac{1}{4}$ scale deflection)
(3) Descends below procedure limiting altitudes or altitude limits as directed by ATS.	(3) Maintains vertical profile in accordance with the STAR or ATS direction.	(3) Maintains vertical profile in accordance with the procedure or ATS direction without deviation.
(4) The candidate fails to establish at the IAF, hold or the final inbound approach track.	(4) Establishes at the IAF, hold or final approach track within $\pm \frac{1}{2}$ scale deflection	(4) Establishes at the IAF, hold or final approach track accurately ( $\pm \frac{1}{4}$ scale deflection)

## ASSESSMENT CRITERIA

### **Task: Instrument holding procedure: NDB, VOR or GNSS**

#### ***Objective:***

To determine that the candidate:

- (a) Enters the holding pattern in accordance with the standard sector entry published in the AIP.
- (b) Maintains altitude at or above the published minimum holding altitude with a maximum deviation of not more than  $\pm 100\text{ft}$
- (c) Intercepts the inbound track by adjusting the outbound leg and using the lesser of a rate one turn or  $25^\circ$  angle of bank when turning inbound.
- (d) Tracks inbound in the holding pattern within the tolerance of  $\pm 5^\circ$  for NDB or VOR or  $\pm$  half scale CDI using GNSS.
- (e) Adjusts the outbound leg (but not beyond any DME limiting distance) to compensate for drift so as to achieve the inbound leg as published.

#### ***Action:***

The examiner will;

- (a) Nominate the holding pattern to be demonstrated (if applicable).
- (b) Observe the candidate's performance and determine that it meets the objectives.



**Instrument Holding Procedure: NDB, VOR or GNSS**

**Rating**

**70**

**85**

**100**

**Not yet competent**

**COMPETENT**

**Ideal**

(1) Uses an inappropriate entry procedure	(1) Enters the holding pattern in accordance with the published sector entry procedure	(1) Enters the holding pattern accurately in accordance with the published sector entry procedure
(2) The candidate enters the hold at a lower altitude than the minimum holding altitude or frequently deviates in excess of 100ft	(2) Maintains the assigned holding altitude with deviations not exceeding $\pm 100\text{ft}$	(2) Maintains the assigned holding altitude without deviation
(3) The candidate turns outbound in the wrong direction	(3) Tracks inbound within $\pm 5^\circ$ for NDB or VOR, or $\pm \frac{1}{2}$ scale CDI using GNSS	(3) Tracks the holding pattern accurately and without deviation inbound
(4) The candidate exceeds the maximum holding speed, DME outbound distance and/or makes no allowance for drift	(4) The outbound leg is adjusted by an allowance for drift to achieve the inbound leg	(4) The outbound leg is adjusted by an allowance for drift to consistently and accurately achieve the inbound leg

## ASSESSMENT CRITERIA

### Task: Instrument approach: NDB or VOR

#### *Objective:*

To determine that the candidate;

- (a) Executes an NDB or VOR approach in accordance with the published limit points on the approach profile.
- (b) Maintains published tracks  $\pm 5^\circ$ , reducing to  $\pm 3^\circ$  for NDB or  $\pm 2.5^\circ$  for VOR in the final 300ft to MDA.
- (c) Configures the aircraft to conform with the appropriate approach category/class and positions the aircraft so that a landing can be made.
- (d) Achieves MDA within a tolerance of  $\pm 50\text{ft}$  or  $- 0\text{ft}$

#### *Action:*

The examiner will;

- (a) Observe the candidate's performance to determine that it meets the objectives.

**Instrument Approach: NDB or VOR**

**Rating** 70 85 100

**Not yet competent**

**COMPETENT**

**Ideal**

(1) The candidate deviates significantly from published profile	(1) Executes the approach in accordance with the published limit points on the approach profile	(1) Executes approach exactly in accordance with published profile
(2) The candidate intercepts an incorrect track	(2) Maintains tracks $\pm 5^\circ$ for NDB or VOR reducing to $\pm 3^\circ$ for NDB or $\pm 2.5^\circ$ for VOR in the final 300 feet to MDA	(2) Maintains published tracks without deviation
(3) The candidate uses an excessive rate of descent (> 800 fpm) to achieve the MDA and/or descends below MDA	(3) Achieves the published MDA with a maximum deviation of + 50 <del>¢</del> and - 0 <del>¢</del>	(3) Achieves MDA accurately
(4) Exceeds the maximum speed for the nominated approach category and/or does not configure the aircraft to achieve a landing	(4) The candidate achieves a final approach speed and configuration that would permit a landing	(4) The candidate achieves a final approach speed and configuration that would ensure a normal landing

## ASSESSMENT CRITERIA

### Task: Instrument approach: GNSS

#### *Objective:*

To determine that the candidate;

- (a) Executes a GNSS approach in accordance with the published profile (including holding and missed approach) verifying track and distance information.
- (b) Maintains published tracks  $\pm$  half scale deflection reducing to  $\pm$  one dot in the final 300ft to MDA.
- (c) Configures the aircraft for the appropriate approach category and positions the aircraft so that a landing can be made.
- (d) Achieves MDA within a tolerance of  $+50\text{ft}$  or  $- 0\text{ft}$
- (e) Demonstrates adequate knowledge of the various functions of the specific GNSS make and model used in the demonstration; the 'simulation' mode or an approved simulator may be used (at candidate discretion).

#### *Action:*

The examiner will;

- (a) Nominate a GNSS approach and observe the candidate's performance in tracking, holding, approach and transition to the missed approach, to determine that it meets the objectives.
- (b) Require the candidate to demonstrate the various functions of the specific GNSS make and model.
- (c) Permit a demonstration in 'simulation' mode or an approved simulator (at candidate discretion) only when competence for an additional GNSS make/model is being demonstrated.

**Instrument Approach: GNSS**

**Rating** 70 85 100

**Not yet competent**

**COMPETENT**

**Ideal**

(1) The candidate fails to verify track and distance information by cross reference to current approach charts	(1) The candidate verifies track and distance information by cross reference to current approach charts	
(2) The candidate deviates significantly from published profile and/or does not confirm 'approach active'	(2) Executes the approach in accordance with the published profile	(2) Executes approach exactly in accordance with published profile
(3) The candidate intercepts an incorrect track or frequently exceeds $\pm \frac{1}{2}$ scale CDI deflection during approach	(3) Maintains track $\pm \frac{1}{2}$ scale CDI deflection reducing to $\pm$ one dot in the final 300 feet	(3) Maintains published tracks without deviation
(4) Uses an excessive rate of descent ( $> 800$ fpm) to achieve MDA and/or descends below MDA	(4) Achieves MDA with maximum deviation of $+ 50\phi$ and $- 0\phi$	(4) Achieves MDA accurately
(5) Exceeds the maximum speed for the nominated approach category and/or does not configure the aircraft to achieve a landing	(5) Achieves a final approach speed and configuration that would permit a landing	(5) Achieves a final approach speed and configuration that would ensure a normal landing
(6) Inadequate knowledge of specific make and model functions	(6) Demonstrates adequate knowledge of specific make and model functions	(6) Demonstrates a thorough knowledge of specific make and model functions

## ASSESSMENT CRITERIA

### **Task: Instrument approach: ILS**

#### ***Objective:***

To determine that the candidate;

- (a) Executes the ILS approach in accordance with the published profile.
- (b) Intercepts the LLZ and tracks the LLZ with a maximum deviation of  $\frac{1}{4}$  scale left or right of track from FAP onwards.
- (c) Intercepts the glide slope and from FAP onwards, maintains it with a maximum deviation of  $\frac{1}{2}$  scale above or  $\frac{1}{4}$  scale below reducing to a maximum deviation of  $\frac{1}{4}$  scale above or  $\frac{1}{4}$  scale below during the last 300ft to DA/H with zero negative tolerance at DA/H.
- (d) Configures the aircraft to achieve an appropriate final approach speed so that a landing can be made.
- (e) Is familiar with LLZ procedures.

#### ***Action:***

The examiner will;

- (a) Observe the candidate's performance to determine that it meets the objectives.
- (b) Place emphasis on the candidate's actions at DA/H.
- (c) Orally question the candidate on LLZ procedures.

## Instrument Approach: ILS

**Rating** **70** **85** **100**

<b>Not yet competent</b>	<b>COMPETENT</b>	<b>Ideal</b>
(1) Frequently exceeds a ¼ scale deflection left or right from FAP onwards	(1) Intercepts and tracks the LLZ with a maximum deviation of ¼ scale left or right from FAP onwards	(1) Intercepts and tracks the LLZ without deviation
(2) The candidate is unable to maintain the glide slope parameters or fails to monitor the glide slope by cross reference to the approach chart	(2) Intercepts and maintains glide slope within ½ scale above ¼ scale below to DA/H + 300ft hence ± ¼ scale to DA/H and zero negative tolerance at DA/H	(2) Intercepts and maintains the glide slope without deviation
(3) The aircraft is inappropriately configured for landing at the DA/H	(3) Achieves final approach speed with the aircraft configured for landing at DA/H	(3) Achieves an appropriate approach speed, configured in a timely manner for landing
(4) The candidate descends below or levels off at DA/H	(4) If not visual, initiates the missed approach not below DA/H	(4) If not visual, initiates the missed approach immediately on reaching DA/H
(5) Demonstrates inadequate knowledge of LLZ procedures	(5) The candidate demonstrates adequate knowledge of LLZ procedures	(5) The candidate demonstrates in depth knowledge of LLZ procedures

## ASSESSMENT CRITERIA

### **Task: Instrument approach: Circling (aeroplane only)**

#### ***Objective:***

To determine that the candidate:

- (a) Transitions from an instrument approach procedure to a visual circuit from which a visual approach and landing can be made on a runway at least 80° from the final approach track.
- (b) Maintains the lowest circling altitude published for that class or category of aircraft at the aerodrome concerned or a higher circling altitude as nominated by the examiner.
- (c) Configures the aircraft so that an appropriate speed for visual manoeuvring is maintained.
- (d) Manoeuvres the aircraft within the published visibility minima.

#### ***Action:***

The examiner will;

- (a) Advise the candidate when visual and nominate the cloud base and visibility to be assumed for the circling approach.
- (b) Place emphasis on manoeuvring within the speed, altitude and visibility limitations.
- (c) Observe the candidate's performance to determine that it meets the objectives.



**Instrument Approach: Circling (aeroplane)**

**Rating** 70 **85** **100**

**Not yet competent**

**COMPETENT**

**Ideal**

<p>(1) Infringes the obstacle clearance height whilst circling or inadvertently re-enters IMC during the visual circuit</p>	<p>(1) At the specified circling altitude, transitions from the instrument approach to a visual circuit</p>	<p>(1) At the specified circling altitude, transitions smoothly from the instrument approach to a visual circuit and accurately maintains the circling altitude until established on final approach</p>
<p>(2) Exceeds the circling approach speed appropriate to the aircraft's class or category</p>	<p>(2) Configures the aircraft to achieve an appropriate visual manoeuvring speed</p>	<p>(2) Configures the aircraft to achieve the most appropriate visual manoeuvring speed</p>
<p>(3) Circles against the circuit direction without a clearance and/or loses sight of the airfield</p>	<p>(3) Manoeuvres the aircraft within the published visibility minima</p>	<p>(3) Manoeuvres appropriately within the published visibility minima</p>

## ASSESSMENT CRITERIA

### **Task: Missed approach procedure**

#### ***Objective:***

To determine that the candidate:

- (a) Carries out the missed approach in a timely manner from the MAP or DA in accordance with the published missed approach procedure when visual reference, in terms of the meteorological minima prescribed for the approach, is not achieved.

#### ***Action:***

The examiner will;

- (a) Deny the candidate visual reference at the MDA/MAP or DA and observe the candidate's performance to determine that it meets the objective.

### Missed Approach Procedure

Rating 70 85 100

**Not yet competent**                      **COMPETENT**                      **Ideal**

<p>(1) Continues past the MAP or DA by more than 7 seconds</p>	<p>(1) From MAP or DA, recognises the requirement for a missed approach and initiates procedure within 6 seconds</p>	<p>(1) From MAP or DA, recognises the requirement for a missed approach and immediately initiates the missed approach in accordance with the profile</p>
<p>(2) Exceeds any altitude restriction or fails to reach any minimum altitude specified for the procedure</p>	<p>(2) Executes the missed approach maintaining track within <math>\pm 5^\circ</math> for NDB and VOR or <math>\pm \frac{1}{2}</math> scale deflection for GNSS</p>	<p>(2) Executes the missed approach maintaining track without deviation</p>

## ASSESSMENT CRITERIA

### **Task: Instrument approach: Fully automated (at Examiner discretion)**

#### ***Objective:***

To determine that the candidate:

- (a) Can execute an ILS, GNSS, VOR or NDB approach using an appropriate autopilot in the approach mode.
- (b) Transitions from an autopilot (coupled if applicable) approach to a manual approach at the autopilot limiting altitude or at the MAP or DA; and/or
- (c) Initiates a missed approach from MAP or DA using the missed approach mode if it is within autopilot capability.

#### ***Action:***

The examiner will;

- (a) Observe the candidate's performance and determine that it meets the objectives.

**Instrument Approach: Fully Automated (at Examiner discretion)**

**Rating** 70 85 100

**Not yet competent**

**COMPETENT**

**Ideal**

(1) The candidate does not monitor autopilot performance	(1) The candidate tests, confirms and monitors autopilot functions	(1) The candidate demonstrates a thorough knowledge of autopilot functions and limitations
(2) The candidate exceeds an autopilot limitation or attempts to override autopilot inputs without disengaging it	(2) The candidate demonstrates adequate knowledge of autopilot approach mode functions	(2) The candidate demonstrates thorough knowledge of autopilot approach mode functions
(3) The candidate does not recognise and/or react to an autopilot malfunction	(3) Transitions from an autopilot or coupled approach to a manual approach at the autopilot limiting height or altitude, or at DA or MAP with minimal delay	(3) Transitions from an autopilot or coupled approach to a manual approach at the autopilot limiting height or altitude, or at DA or MAP as appropriate
(4) Delays excessively in initiating missed approach using MA mode (if applicable)	(4) Initiates missed approach from DA or MAP using MA mode (if applicable)	(4) Promptly initiates missed approach from DA or MAP using MA mode (if applicable)

## ASSESSMENT CRITERIA

### **Task: Instrument approach: Non-automated**

#### ***Objective:***

To determine that the candidate:

- (a) Manipulates the controls and maintains situational awareness whilst executing the approach procedure within the appropriate tolerances for an ILS, GNSS, VOR or NDB approach.

#### ***Action:***

The examiner will;

- (a) Observe the candidate's performance and determine that it meets the objective.

**Instrument Approach: Non-Automated**

**Rating** \_\_\_\_\_ **70** \_\_\_\_\_ **85** \_\_\_\_\_ **100**

**Not yet competent**

**COMPETENT**

**Ideal**

<p>(1) The candidate fails to meet the minimum performance requirements applicable to the approach aid demonstration</p>	<p>(1) The candidate demonstrates the minimum performance requirements applicable to the approach aid demonstration and adequate situational awareness</p>	<p>(1) The candidate demonstrates proficiency applicable to the approach and sound situational awareness</p>
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## ASSESSMENT CRITERIA

### **Task: Threat and error management**

#### *Objective:*

To ensure that the candidate:

- (a) Exhibits competent threat and error management techniques during the demonstration.

#### *Action:*

The examiner will:

- (a) Assess the candidate's threat and error management techniques through observation of situational awareness, decision making and human factors considerations.
- (b) Simulate operational and/or systems failures (as appropriate) to assess the candidate's threat and error management.
- (c) Orally question (as required) the candidate's decision making process to assess threat and error management.



## Threat and Error Management

Rating 70 85 100

<b>Not yet competent</b>	<b>COMPETENT</b>	<b>Ideal</b>
(1) The candidate's situational awareness is compromised and/or not applied to the operational situation (as simulated if applicable)	(1) The candidate exhibits a competent level of situational awareness in relation to the operation (as simulated if applicable)	(1) The candidate exhibits a high level of situational awareness with emphasis on operational factors
(2) The candidate's knowledge of human factors is inadequate and/or not applied to the operation	(2) The candidate exhibits a competent level of human factors in those factors relevant to the operation	(2) The candidate exhibits superior knowledge of human factors, particularly those relevant to the operation
(3) The candidate's decision making process cannot be evaluated or clearly ignores available information, especially any information related to the operation	(3) The candidate verbalises the decision making process and highlights any decision influenced by the operational environment	(3) The candidate verbalises the decision making process with emphasis on any decision influenced by the operational environment

