

## FLIGHT TEST STANDARDS GUIDE

## COMMERCIAL PILOT LICENCE ISSUE

and

**BIENNIAL FLIGHT REVIEW (BFR)** 

AEROPLANE

Assessment criteria for the guidance of flight examiners and instructors

Revision 9 Issued December 2022

## Content

	ord						
Change Notice							
	ction						
Flight te	est standard concept	.6					
	est guide description						
	est standard description						
	the flight test guide						
	tion methods						
Flight e	examiner responsibility	11					
	and equipment requirements for flight test						
	to examiners						
	ctory performance						
Unsatis	sfactory performance	14					
	ling unsatisfactory performance						
Distrac	tions in flight	15					
	checklists						
Flight to	est prerequisites						
Task:	Personal preparation						
	Aircraft documents						
	Weather and NZAIP supplements						
Task:	Aircraft performance						
Task:	Fuel management						
Task:	Aircraft loading: Including fuel, oil and baggage						
Task:	Pre-flight						
Task:	Passenger briefing						
Task:	Engine start, warm up and shutdown						
Task:	Air Traffic Service procedure						
Task:	Taxiing and brake check						
Task:	Engine checks, run-up and operation						
Task:	Pre take-off checks						
Task:	Normal take-off	44					
Task:	Crosswind take-off (at Examiner discretion)						
Task:	Short field take-off	48					
Task:	Engine failure techniques (critical task)						
Task:	Climbing						
Task:	Straight and level flight						
Task:	Instrument flight - straight and level	56					
Task:	Instrument flight - medium turns						
Task:	Instrument flight - climbing & descending						
Task:	Instrument flight - stall onset in level flight						
Task:	Instrument flight - stall onset in climbing turn						
Task:	Instrument flight - spiral dive						
Task:	Limited panel - straight and level	68					

Task:	Limited panel - compass turns	70
Task:	Limited panel - climbing & descending	72
Task:	Limited panel - climbing & descending turn	74
Task:	Limited panel - unusual attitude recovery	
Task:	Medium turns	
Task:	Climbing turns	80
Task:	Steep turns	
Task:	Maximum rate turns	
Task:	Slow flight	
Task:	Stalling in basic configuration	
Task:	Stalling in power-on configurations	
Task:	Wing drop stalling	
Task:	Stalling in a steep turn	94
Task:	Forced landing without power (critical task)	
Task:	Forced landing with power (critical task)	
Task:	Descent	
Task:	Descending turns	
Task:	Steep gliding turns	
Task:	Flap usage or sideslipping	
Task:	Low flying in simulated poor visibility	
Task:	Joining the Circuit	
Task:	Normal approach and landing	
Task:	Flapless approach and landing	
Task:	Crosswind approach and landing (at Examiner discretion)	
Task:	Glide approach and landing (at Examiner discretion)	
Task:	Short field approach and landing	
Task:	Approach and go-round	
Task:	Threat and error management	126
Task:		
Task:		
Task:	Flight orientation	
Task:		
Task: Task: Task:	Radiotelephony tuning and procedures Lookout (critical task)	128 130 132

## 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 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 initial issue flight tests are to be conducted in accordance with the parameters laid down in this guide. This applies to:

- Part 141 flight testing organisations
- Delegated flight testing organisations
- All flight examiners

Category A or B flight instructors undertaking Biennial Flight Reviews, are to use the prescribed parameters and continue instruction until competence is achieved in each task.

Any feedback regarding this publication should be directed to info@caa.govt.nz

## **Change Notice**

Update of airworthiness certificates eligible for use for CPL issue flight tests.

## Introduction

This guide contains standards for the Commercial Pilot Licence (Aeroplane) issue flight test and is to be used by flight examiners who hold the examiner privilege of Commercial Pilot Licence issue flight test (Aeroplane).

Standards relating to those skills for which instructors certify competence by logbook endorsement - namely cross-country navigation training and flight test, instrument flight training and night flight, are specified in the Advisory Circular to Part 61.

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.
- Advisory Circular to Part 61, Pilot Licences and Ratings.
- NZAIP.
- Manufacturer's Pilot Operating Handbooks.
- Aircraft Flight Manuals.
- Gronlund, N.E., & Linn, R.L. (1990). <u>Measurement and</u> <u>evaluation in teaching</u>. (6<sup>th</sup> ed.) New York: Macmillan.
- FAA Practical Test Standards.
- The Flight Instructor's Guide (a NZCAA GAP publication).

Publications recommended for further reference include;

• AOPA Manual - Private and Commercial Pilot.

## Flight test standard concept

Civil Aviation Rule (CAR) Part 61 and the associated Advisory Circulars (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.

Adherence to the provisions of the appropriate flight test standard is mandatory for the evaluation of pilot candidates.

Where reference is made to recommended procedures, these are based on the New Zealand Flight Instructor's Guide.

## Flight test guide description

Flight test guides are available to flight examiners and appropriately qualified flight instructors on the CAA website <u>www.caa.govt.nz</u> 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, defines 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 the desired '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 test standard description

TASKS are procedures and manoeuvres appropriate to the demonstration required for Commercial Pilot Licence (Aeroplane) issue and Biennial Flight Review.

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/instructor in ensuring that the task objective is met, and in some instances, alerts the flight examiner/instructor 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.

## 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/instructor must evaluate the candidate's knowledge and skill in sufficient depth to determine that the standards of performance listed for the tasks are met.

When the flight examiner/instructor 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/instructor is not required to follow the exact order in which the tasks appear. The flight examiner/instructor may change the sequence or combine tasks with similar objectives to save time. Flight examiners/instructors 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 and instructors will place special emphasis on areas of aeroplane operation that are most critical to flight safety. Among these areas are correct aeroplane control within the manufacturer's limitations, fuel management, sound judgement in decision making, emergency procedures, stall/spin awareness, spatial disorientation and situational awareness, collision avoidance, wake turbulence avoidance, and use of checklists where appropriate. Although these areas may not be shown under each task, they are essential to flight safety and will receive careful evaluation throughout the flight. If these areas are shown in the objective, additional emphasis will be placed on them.

## **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.

Whereas flight examiners use only summative evaluation.

## 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 totally 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.

Because the flight examiner is **only** assessing the candidate's performance against stated minimum standards, the examiner is not designated as the pilot-in-command (except in those cases where it is required by CAR), nor is the examiner giving instruction. However, 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 instructors who conduct BFRs may need to use all forms of evaluation to achieve the required demonstration of competence and therefore act as pilot in command and shall log the time as instruction.

## Flight examiner responsibility

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

The examiner/instructor 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 or instructor will orally question the candidate on those elements.

For each task that involves both "knowledge and skill" elements, the flight examiner/instructor will orally question the candidate on the knowledge elements and ask the candidate to perform the skill elements. Oral questioning may be used at any time during the flight test.

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 as to who will command 'go around' during the forced landing, EFATO and precautionary landing exercises.

During the instrument flight phases, the examiner will:

(a) Assume the responsibilities of safety pilot.

## Aircraft and equipment requirements for flight test

The candidate is required to provide an aircraft for the flight test. The aircraft must be equipped for, and its operating limitations must not prohibit, the pilot operations required during the test. Required equipment will include;

- (a) fully functioning dual flight controls, and
- (b) those instruments essential to the manoeuvres planned to be demonstrated during the flight visible to both pilots without excessive parallax error, and
- (c) at least three-point lap-and-sash harness, and
- (d) intercommunication equipment of an approved type, and
- (e) an acceptable means of simulating instrument flight.

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

## Advice to examiners

The following information is provided for instructors, examiners, training and testing organisations. 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. For the issue of Commercial Pilot Licence the aeroplane is required to hold a Standard Category C of A.

## 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 guide,
- (d) executing all exercises involving balanced flight with no more than 1/4 ball sustained deflection in slip or skid,
- (e) exercising above average judgement/decision making and maintaining situational awareness,
- (f) applying aeronautical knowledge (principles of flight) to in-flight situations,
- (g) completing all items in accordance with the tolerances prescribed in this guide, in smooth air,
- (h) showing complete control of the aircraft, with the successful outcome of a task never seriously in doubt, and
- (i) for the purpose of initial licence issue, executing elements of a task described as "critical" to at least the minimum acceptable performance level on the first attempt.

## 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. In the case of a BFR the instructor shall detail the further training required.

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

The flight examiner or candidate may discontinue the issue 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.

An excessive allowance for poor candidate performance due to weather conditions should not be made. Rather, the candidate's decision making process, in electing to commence or continue, should be questioned.

Failure to take prompt corrective action when tolerances are exceeded is unsatisfactory performance.

Flight that is maintained within the stated tolerances but 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.

It is vitally important that the candidate uses proper scanning techniques to clear the area before performing manoeuvres. Ineffective performance will be disqualifying.

Unsatisfactory performance in any 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 it on the flight test report against the specific task.

## **Distractions in flight**

Numerous studies indicate that accidents have occurred when a pilot's attention has been distracted. It is important, therefore, that the principles of *Threat and Error Management* are understood and mitigation strategies such as good control techniques, the ability to establish priorities and sound *airborne decision-making* are instilled in training.

Flight Examiners, Instructors and Trainees should be aware at all times that distractions are an inherent part of flight and an ever-present threat to safety.

Some examples that occur in training and testing are:

- (a) simulating engine failure,
- (b) identifying a field suitable for emergency landings,
- (c) identifying features or objects on the ground,
- (d) questioning by the flight examiner or instructor,
- (e) general conversation,
- (f) simulating adverse weather conditions,
- (g) experiencing visual illusions.

## Use of checklists

Throughout the flight the candidate is evaluated on the use of checklists. The candidate should complete an appropriate set of checks for the task in hand (take-off and landing, stalling, low flying).

The situation may be such that the use of a written checklist, while accomplishing the task, would be either unsafe or impractical. In such situations the checklists should be memorised.

## Flight test prerequisites

A candidate for CPL (A) issue flight test is required by Civil Aviation Rule to;

- (a) hold appropriate current written examination credit(s), and
- (b) present all relevant knowledge deficiency reports; and
- (c) have a certified logbook record of the requisite flight training and experience, and
- (d) have proof of their identity, and
- (e) hold a current PPL (A) or equivalent.

#### Task: Personal preparation

#### **Objective:**

To determine that the candidate demonstrates a professional attitude by;

- (a) Arriving for the test or review;
  - 1. Punctually
  - 2. Suitably attired (in keeping with this professional qualification)
  - 3. Fit for flying.

#### (b) Presenting;

- 1. An up to date, summarised and certified pilot's logbook
- 2. A current PPL (A) or equivalent
- 3. The appropriate written (current) examination credit(s)
- 4. A current AIP Volume 4 and VNC.
- (c) Demonstrating knowledge of the licensing and currency requirements for a commercial pilot.

#### Action:

- (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 has been completed.
- (c) Ensure that the candidate holds the appropriate (current) exam credit(s) and private pilot's licence or equivalent.
- (d) Determine that the candidate's AIP Volume 4 and VNC are current.
- (e) Determine that the candidate has adequate knowledge of the privileges and currency requirements of a Commercial Pilot.

	Personal Preparation						
Ra	iting'	70	85_	100			
	Not yet competent		COMPETENT		Ideal		
(1)	Unacceptably late	(1)	Late with acceptable excuse	(1)	Arrives punctually		
(2)	Dressed inappropriately for flying (wears Jandals/high heels)	(2)	Dressed in keeping with a professional qualification				
(3)	Is physically or mentally unfit for test and/or does not comply with any medical restriction endorsed on their medical certificate	(3)	Fit but clearly nervous	(3)	Fit and enthusiastic		
(4)	Logbook records incomplete, minimum flight times not met	(4)	Logbook records complete	(4)	Logbook records are neat and complete in all respects		
(5)	Training syllabus not completed	(5)	Minimum training syllabus completed				
(6)	Inappropriate or expired written exam credit(s)	(6)	Appropriate and current written exam credit(s)				
(7)	NZAIP Volume 4 and/or VNC are not available or not current	(7)	NZAIP Volume 4 and VNC are available and current	(7)	NZAIP Volume 4 and VNC are current and readily available throughout the flight		
(8)	Unaware of licence privileges and/or currency requirements	(8)	Demonstrates a basic knowledge of privileges and currency requirements	(8)	Demonstrates a sound knowledge of privileges and currency requirements		

## Task: Aircraft documents

#### **Objective:**

To determine that the candidate exhibits adequate knowledge of the;

- (a) Certificate of Airworthiness.
- (b) Aircraft technical log.
- (c) Aircraft flight manual (including CAA forms 2173 and 2129) and associated pilot's operating handbook.

#### Action:

- (a) Question the candidate about the aircraft's documents, and determine that the candidate's performance meets the objective.
- (b) Place emphasis on the candidate's awareness of documents and aircraft limitations.

	Aircraft Documents					
Ra	ting	70				
	Not yet competent	COMPETENT	Ideal			
(1)	Has insufficient knowledge of the aircraft's documents	(1) Demonstrates adequate knowledge of the aircraft's documents	(1) Demonstrates a thorough knowledge of the aircraft's documents			
(2)	Has insufficient knowledge of the aircraft's limitations	<ul><li>(2) Demonstrates a good general knowledge of the aircraft's limitations (critical element)</li></ul>	<ul><li>(2) Demonstrates a sound knowledge of the aircraft's limitations</li></ul>			

#### Task: Weather and NZAIP supplements

#### **Objective:**

To determine that the candidate;

- (a) Exhibits adequate knowledge of aviation weather and flight planning data by obtaining, reading and analysing;
  - 1. Aviation weather including ARFOR's, TAFs and METARs with associated SPECIs and SIGMETs
  - 2. NOTAM's
- (b) Exhibits adequate knowledge of the NZAIP Volume 4 and VNC contents and use.
- (c) Makes a sound go/no-go decision based on the available weather and flight planning data (**critical element**).

#### Action:

- (a) Determine that the candidate has obtained all relevant weather and flight planning data relating to the flight test or hypothetical cross-country flight.
- (b) Require the candidate to analyse and explain the weather and relevant flight planning data, and determine that the candidate's performance meets the objective.
- (c) Place emphasis on the candidate's ability to use and interpret the NZAIP Volume 4 and VNC.
- (d) Place emphasis on the candidate's ability to interpret the weather and NOTAM's and to make a sound go/no go decision.

Ra	iting'	70	
	Not yet competent	COMPETENT	Ideal
(1)	Cannot obtain Met data	<ol> <li>Obtains sufficient Met data to meet the requirements of the proposed or hypothetical flight</li> </ol>	(1) Obtains all Met data appropriate to the proposed or hypothetical flight
(2)	Cannot obtain NOTAM's	<ul><li>(2) Obtains and reviews NOTAM's relevant to the proposed or hypothetical flight</li></ul>	<ul><li>(2) Obtains, reviews and demonstrates a thorough understanding of the relevance of NOTAM's to the proposed or hypothetical flight</li></ul>
(3)	Cannot read TAF or METAR	(3) Demonstrates ability to interpret TAF, METAR and ARFOR's	(3) Demonstrates ability to analyse ARFOR's, TAF, METAR and SPECI, SIGMET if applicable
(4)	Knowledge of the NZAIP Volume 4 and/or VNC contents seriously flawed	<ul><li>(4) Demonstrates an appropriate level of knowledge on the contents and use of the NZAIP Volume 4 and VNC</li></ul>	<ul><li>(4) Demonstrates a thorough understanding of the contents and use of the NZAIP Volume 4 and VNC</li></ul>
(5)	Does not demonstrate an appreciation of the relevance of flight planning data to the proposed or hypothetical flight	(5) Demonstrates sufficient understanding of flight planning data to make a go/no go decision ( <b>critical element</b> )	<ul><li>(5) Demonstrates a thorough understanding of flight planning data and is able to make a sound go/no-go decision</li></ul>

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#### Task: Aircraft performance

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

- (a) Uses the appropriate performance charts or aircraft's flight manual (with appropriate reference to AC91-3), to calculate take-off and landing distances with due consideration to density altitude, runway slope, wind and any other relevant conditions in relation to commercial operations under CAR Part 135 (within a time appropriate to a professional approach).
- (b) Makes a sound decision on whether the required performance is within the aircraft's capability (**critical element**).
- (c) Demonstrates sound knowledge of the Group Rating System.
- (d) Demonstrates sound knowledge of the effects of seasonal and atmospheric conditions on the aircraft's performance.

#### Action:

- (a) Require the candidate to calculate the aircraft's take-off and landing distance for the flight test or a hypothetical flight.
- (b) Place emphasis on complete and accurate performance calculations and the soundness of the candidate's judgement in regard to the aircraft's performance capability and operating limitations (**critical element**).
- (c) Require the candidate to complete the calculations in (a) and (b) within thirty minutes.
- (d) Require the candidate to explain the application of the Group Rating System.
- (e) Require the candidate to describe the effects of seasonal conditions on the aircraft's performance.

Ra	ting	70		85	100
	Not yet competent		COMPETENT		Ideal
(1)	Uses inappropriate performance charts, tables or data	(1)	Uses appropriate performance charts, tables and data	(1)	Uses all appropriate performance charts, tables and data
(2)	Uses inappropriate conditions for the calculation of take-off or landing distance, such that safety would be compromised	(2)	Uses the appropriate conditions to calculate the take-off and landing distance for an air transport operation under Part 135 ( <b>critical element</b> )	(2)	Uses the appropriate conditions to accurately and quickly calculate the take-off and landing distance for an air transport operation under Part 135
(3)	Cannot complete the calculations required in (1) and (2) within thirty minutes	(3)	Completes the calculations required in (1) and (2) within thirty minutes	(3)	Completes the calculations required in (1) and (2) within 15 minutes
(4)	Fails to ensure sufficient runway length is available for take-off or landing ( <b>critical element</b> )	(4)	Ensures sufficient runway length is available for take-off and landing through local knowledge	(4)	Ensures sufficient runway length is available for take-off and landing by correctly comparing distance required to distance available
(5)	Is unable to explain or apply the group rating system	(5)	Explains the use of the group rating system	(5)	Explains the use of the group rating system and applies its principles (as applicable) in flight
(6)	Demonstrates inadequate knowledge of factors affecting aircraft performance in winter (ice) or summer (density altitude)	(6)	Demonstrates a satisfactory knowledge of seasonal factors affecting aircraft performance	(6)	Demonstrates a thorough knowledge of all seasonal factors affecting aircraft performance

#### Aircraft Performance

#### Task: Fuel management

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

- (a) Demonstrates competency in calculating fuel requirements including reserves and contingency (as nominated by the examiner), for a commercial operation, in accordance with CAR Part 135 (critical element).
- (b) Establishes the fuel quantity on board the aircraft prior to the flight and calculates endurance (**critical element**).
- (c) Correctly operates the engine primer pump for starting in accordance with the aircraft's flight manual or checklist.
- (d) Correctly operates the auxiliary fuel pump (if applicable) in accordance with the aircraft's flight manual or checklist.
- (e) Selects the correct fuel tank for start, taxiing and take-off, and in flight correctly monitors fuel consumption and tank selection in accordance with the aircraft's flight manual or checklist (**critical element**).

#### Action:

- (a) Nominate the contingency reserve to be used and determine that the candidate can accurately calculate the fuel quantity required for the flight including reserves.
- (b) Determine that the candidate can establish the quantity of fuel on board the aircraft and monitor fuel consumption during flight.
- (c) Monitor the candidate's operation of the primer, fuel pump and tank selection both before and during flight and determine that the candidate's actions are in accordance with the aircraft's flight manual or checklist.

_			r uer Management		
Ra	ting Not yet competent	70	COMPETENT	85	100 100
(1)	Miscalculates fuel requirements	(1)	Adequately calculates fuel requirements, including the nominated contingency and appropriate reserves ( <b>critical element</b> )	(1)	Accurately calculates fuel requirements, including reserves
(2)	Does not establish the quantity of fuel on board the aircraft	(2)	Establishes that the minimum quantity of fuel required is on board the aircraft ( <b>critical element</b> )	(2)	Accurately establishes the quantity of fuel on board and converts this to flight time, including reserve
(3)	Miss-primes engine grossly and/or does not lock the primer after use	(3)	Under or over primes slightly for the engine's temperature but properly locks the primer	(3)	Primes correctly for the engine's temperature in accordance with the aircraft's flight manual and properly locks the primer after use
(4)	Frequently misuses the auxiliary fuel pump	(4)	Adequately operates the auxiliary fuel pump without compromising safety	(4)	Correctly operates the auxiliary fuel pump in accordance with the aircraft's flight manual
(5)	Does not select the appropriate fuel tank for start, taxiing and take-off	(5)	Correctly selects an appropriate fuel tank for start, taxiing and take-off as required by the aircraft's flight manual	(5)	Selects the appropriate fuel tank for start, taxiing and take-off in strict accordance with the aircraft's flight manual
(6)	Does not monitor fuel consumption in flight	(6)	Monitors fuel consumption and tank selection in flight ( <b>critical element</b> )	(6)	Monitors tank selection and fuel consumption in flight converting to flight time remaining, including reserves

#### Fuel Management

# Task: Aircraft loading: Including fuel, oil and baggage *Objective:*

To determine that the candidate;

- (a) Fully understands aircraft weight limitations and is able to calculate the take-off and landing weight, within the time limit available for "aircraft performance" calculations (**critical** element).
- (b) Is able to calculate the aircraft's Centre of Gravity for take-off and landing, within the time limit available for "aircraft performance" calculations (**critical element**).
- (c) Fully understands the distribution and securing of baggage.

#### Action:

- (a) Require the candidate to calculate the take-off and landing weight for the flight test, or a hypothetical flight, using data supplied by the examiner.
- (b) Require the candidate to calculate the aircraft's Centre of Gravity position, as loaded for the flight test or hypothetical flight, and determine that the Centre of Gravity is within acceptable limits.
- (c) Require the candidate to complete the calculations in (a) and (b) within the time limit provided for "aircraft performance" calculations.
- (d) Require the candidate to demonstrate sound knowledge of load distribution and security.

	Aircraft Loading						
Ra	iting'	_70			100		
	Not yet competent		COMPETENT		Ideal		
(1)	Is unable to calculate the take-off and/or landing weight	(1)	Demonstrates ability to calculate the take-off and landing weight with acceptable accuracy ( <b>critical</b> element)	(1)	Demonstrates ability to calculate take- off and landing weight accurately and quickly		
(2)	Centre of Gravity calculations contain gross errors	(2)	Centre of Gravity calculations contain minor errors that do not compromise safety ( <b>critical element</b> )	(2)	Accurately determines Centre of Gravity position for take-off and landing		
(3)	Understanding of principles of loading and load security seriously flawed	(3)	Demonstrates adequate knowledge of the principles of loading and load security	(3)	Demonstrates a sound knowledge of the principles of loading and load security		
(4)	Fails to complete calculations of take- off weight, C of G position, take-off and/or landing distance within 30 minutes	(4)	Completes the calculations of take-off weight, C of G position, take-off and/or landing distance within 30 minutes	(4)	Completes all performance calculations accurately and in a timely manner		

## Task: Pre-flight

#### **Objective:**

To determine that the candidate exhibits a sound knowledge of the aircraft type by explaining or demonstrating the appropriate;

- (a) Pre-flight interior inspection.
- (b) Pre-flight external inspection including checking of fuel and oil in accordance with the aircraft's pilot operating handbook.
- (c) Securing of baggage and loose articles.
- (d) Location and use of emergency equipment.

## Action:

- (a) Observe the candidate carrying out a pre-flight inspection and determine that the candidate's performance meets the objectives.
- (b) Question the candidate on any/all significant aircraft features, protuberances and or aerials.
- (c) Question the candidate on the location and use of emergency equipment.

	Pre-flight					
Ra	ating	70				
	Not yet competent	COMPETENT	Ideal			
(1)	Conducts the pre-flight inspection in a non methodical way or neglects significant items	(1) Conducts the pre-flight inspection in an orderly and systematic way	<ul><li>(1) Conducts the pre-flight inspection thoroughly and in accordance with the Pilot's Operating Handbook</li></ul>			
(2)	Is ignorant of the purpose of, or cannot identify, significant aircraft features	(2) Identifies all significant aircraft features	(2) Identifies and explains the purpose of any aircraft feature when asked			
(3)	Disregards security of baggage and loose articles	(3) Secures baggage and loose articles	(3) Correctly stores and secures baggage, freight and loose articles			
(4)	Is ignorant of the location and/or use of emergency equipment	<ul><li>(4) Locates emergency equipment and explains its use</li></ul>	<ul><li>(4) Demonstrates a thorough understanding of the location, purpose and use of emergency equipment</li></ul>			

## 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						
Ra	ting Not yet competent	70	COMPETENT	85	100 100		
(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		

#### Task: Engine start, warm up and shutdown

#### **Objective:**

To determine that the candidate;

- (a) Starts and warms up the engine in accordance with the aircraft's flight manual or checklist with emphasis on;
  - 1. Determining that the area is clear and that the aircraft is positioned so as to avoid creating a hazard.
  - 2. Setting the brakes correctly.
  - 3. Correctly starting the engine and checking engine instruments after start.
  - 4. Commencing to taxi, only when temperatures and pressures are stabilised in accordance with the aircraft's flight manual.
- (b) Demonstrates knowledge of the actions required in the event of an engine fire during or after start.

And post flight;

- (a) Carries out the shut down checks in accordance with the aircraft's flight manual or checklist.
- (b) Completes the post flight documentation and secures the aircraft.
- (c) Supervises the passengers.

#### Action:

- (a) Observe the candidate's engine start and shutdown procedure and determine that the candidate's performance meets the objectives.
- (b) Ask the candidate to explain the actions in the event of an engine fire during or after start (at examiner discretion).

Ra	Engine Start, Warm Up & ShutdownRating7085100						
1\a	Not yet competent	/0	COMPETENT	_05	Ideal		
(1)	Creates a hazard to other aircraft, objects or people during start or cannot taxi from the aircraft's present position	(1)	Is not particular about the position of the aircraft for starting, but is not a hazard to people, nor causes damage to other aircraft or objects	(1)	Correctly positions the aircraft for starting with emphasis on avoiding the creation of a hazard to aircraft, objects or people		
(2)	Fails to set brakes	(2)	Correctly sets brakes				
(3)	Does not operate engine controls appropriately or fails to check oil pressure after start	(3)	Correctly starts, checks and operates the engine	(3)	Starts, checks and operates the engine, observing all limitations, in accordance with the flight manual		
(4)	Disregards or is ignorant of engine operating limitations	(4)	Observes critical engine limitations prior to taxiing	(4)	Observes all engine limitations prior to taxiing in accordance with the flight manual or checklist		
(5)	Panics or does not react to a simulated engine fire on start	(5)	Verbalises the required actions in response to a simulated engine fire	(5)	Reacts rapidly in accordance with the aircraft's flight manual		
(6)	Vacates the aircraft (at any time) whilst the engine is running	(6)	Correctly shuts down	(6)	Shuts down in accordance with the aircraft's flight manual or checklist		
(7)	Fails to terminate any flight plan (if applicable) or does not secure the aircraft (if required)	(7)	Secures the aircraft and completes post flight documentation	(7)	Secures the aircraft in accordance with the aircraft's flight manual and completes all post flight actions		

## Engine Start, Warm Up & Shutdown

## Task: Air Traffic Service procedure

#### **Objective:**

To determine that the candidate;

- (a) Obtains information from ATIS when appropriate (if available).
- (b) Obtains taxiing, take-off and landing clearances and otherwise complies with ATS instructions when appropriate.
- (c) Reads back appropriate instructions, information and clearances.
- (d) Uses correct aeronautical phraseology at all times with appropriate assertiveness.
- (e) Correctly sets QNH and cross checks the altimeter(s).

#### Action:

- (a) Observe and monitor the candidate's receipt and copying of ATIS information.
- (b) Observe and monitor compliance with ATS taxi, take-off and landing clearances and other instructions.
- (c) Monitor the candidate's read back of instructions, information and clearances.
- (d) Monitor all transmissions made by the candidate for the appropriate level of assertiveness and correctness.
- (e) Observe the candidate's altimeter setting and checking procedure and if applicable question the procedure to be adopted at unattended aerodromes.

_			Air Traffic Service Procedure	~ ~	
Ra	ting Not yet competent	70	COMPETENT	_85	100 100
(1)	Does not obtain ATIS when it is appropriate and available	(1)	Obtains ATIS but does not record it	(1)	Obtains and records ATIS
(2)	Attempts to taxi, take-off or land without a clearance, when one is required	(2)	Obtains a clearance when required	(2)	Obtains a clearance or broadcasts intentions as and when appropriate
(3)	Does not comply with any ATS clearance	(3)	Complies with ATS clearances and instructions	(3)	Evaluates ATS clearances and instructions, complying or rejecting as appropriate
(4)	Fails to read back vital information	(4)	Reads back vital instructions, information and clearances	(4)	Reads back all appropriate instructions, information and clearances
(5)	Unable to communicate using aviation phraseology	(5)	Uses correct aviation phraseology most of the time	(5)	Uses correct aviation phraseology at all times
(6)	Uses slang or adopts an excessively assertive communication style	(6)	Communicates in an adequately assertive manner	(6)	Communicates in an appropriate, authoritative and assertive manner
(7)	Does not set QNH or cannot describe unattended altimeter setting procedures	(7)	Sets QNH and cross checks altimeter(s) and can describe unattended altimeter setting procedures	(7)	Records and sets QNH, cross checks altimeter(s) for accuracy by an acceptable method

### ASSESSMENT CRITERIA Task: Taxiing and brake check *Objective:*

To determine that the candidate;

- (a) Performs a brake check immediately after the aircraft begins to move.
- (b) Completes instrument serviceability checks whilst taxiing, in accordance with recommended procedures.
- (c) Controls taxiing speed without excessive use of brake.
- (d) Recognises and avoids hazards.
- (e) Positions the controls for the existing wind conditions.
- (f) Parks the aircraft at the holding point, in accordance with the aircraft's flight manual or recommended practices.

And after landing;

- (a) Carries out the appropriate after landing checks once clear of the active runway.
- (b) Performs a brake check immediately prior to entering the parking area.
- (c) Parks the aircraft correctly with due attention to wind direction and other aircraft or objects.

### Action:

- (a) Observe the candidate's taxiing procedures and determine that the performance meets the objectives.
- (b) Place emphasis on situational awareness, correct aircraft control, taxi speed, and avoidance of hazards.

Do	Taxiing and Brake Check       Rating707085100					
Ка	Not yet competent	/0	COMPETENT	_05	100 Ideal	
(1)	Neglects to carry out a brake test on leaving and returning to the parking area	(1)	Carries out brake check but applies brake heavily	(1)	Performs brake check smoothly as soon as the aircraft begins to move and prior to re-entering parking area	
(2)	Does not complete critical instrument checks whilst taxiing	(2)	Completes appropriate instrument serviceability checks whilst taxiing	(2)	Completes all instrument serviceability checks whilst taxiing	
(3)	Taxis at dangerously high speed or uses harsh braking to control speed	(3)	Taxis, checking speed with brakes, but not excessively so	(3)	Taxis at the correct pace, without excessive brake use, controlling speed with throttle	
(4)	Does not recognise, or creates, a hazard whilst taxiing	(4)	Recognises and avoids hazards whilst taxiing	(4)	Recognises, avoids and does not create a hazard whilst taxiing	
(5)	Incorrectly positions controls when wind speed is significant	(5)	Holds controls in neutral position	(5)	Positions controls correctly for existing wind conditions	
(6)	Does not park into wind for run-up when wind is significant	(6)	Parks the aircraft into wind for run- up, regardless of wind strength	(6)	Parks into wind for run-up as appropriate	
(7)	Does not complete after landing checks	(7)	Completes after landing checks	(7)	Taxis clear of runway and completes the after landing checklist	
(8)	Parks aircraft without due consideration for strong winds and in a position that will create a hazard to other aircraft or objects	(8)	Parks aircraft with adequate clearance from objects and other aircraft	(8)	Parks aircraft in accordance with recommended procedures, into wind with adequate clearance from objects and other aircraft	

## Task: Engine checks, run-up and operation

## **Objective:**

To determine that the candidate;

- (a) Runs up and checks the engine in accordance with the checklist.
- (b) In the air, operates the throttle smoothly, avoids abrupt temperature changes, and operates the mixture control and carburettor heat in accordance with the aircraft's flight manual or checklist.

## Action:

The examiner/instructor will;

(a) Observe the candidate's engine handling procedures and determine that the candidate's performance meets the objectives.

Rating		Engine Checks, Run-up and Operation 70	n _85	100
	Not yet competent	COMPETENT	Ideal	
(1)	Fails to carry out an engine run-up or ignores performance tolerances specified in the aircraft's flight manual	(1) Demonstrates awareness of engine performance tolerances and completes the run-up in an orderly manner	<ol> <li>Demonstrates knowledge o operating limitations as spe the aircraft's flight manual completes the run-up in acc with the checklist</li> </ol>	cified in and
(2)	Operates throttle roughly or misuses mixture and carburettor heat to the extent that safety could be compromised or engine damage occur	<ul><li>(2) Operates throttle, mixture and carburettor heat correctly but tends to use coarse throttle movements (although not excessively so)</li></ul>	<ul> <li>(2) Operates the engine within limitations at all times smoo precisely and prudently, av- sudden temperature change</li> </ul>	othly, oiding

# Engine Checks, Run-up and Operation

## Task: Pre take-off checks

### **Objective:**

To determine that the candidate;

- (a) Carries out pre take-off checks in accordance with the aircraft's checklist.
- (b) Checks flight controls for full control deflection, freedom of movement and correct sense, prior to take-off.
- (c) Carries out a pre take-off briefing in accordance with recommended procedures, including;
  - 1. Engine failure or abnormal operation on the runway
  - 2. Engine failure after take-off
  - 3. Departure procedures (if applicable).

## Action:

- (a) Nominate the type of take-off to be demonstrated.
- (b) Observe the candidate's pre take-off procedures and determine that the candidate's performance meets the objectives.

	Pre Take-Off Checks					
Ra	iting'	70		_85	100	
	Not yet competent	-	COMPETENT		Ideal	
(1)	Does not carry out pre take-off checks or omits essential items	(1)	Completes pre take-off checks	(1)	Completes pre take-off checks in accordance with the aircraft's checklist	
(2)	Does not check flight controls before take-off	(2)	Checks flight controls for full, free and correct movement			
(3)	Does not carry out a pre take-off briefing	(3)	Carries out a pre take-off briefing	(3)	Carries out a thorough pre take-off briefing, including the departure procedure (if applicable), in accordance with recommended procedures	

## Task: Normal take-off

### **Objective:**

To determine that the candidate;

- (a) Ensures the correct runway is being used and the approach path is clear (**critical element**).
- (b) Completes line up checks in accordance with the aircraft's checklist.
- (c) Ensures the take-off path is clear and advances the throttle smoothly to maximum allowable power, checking engine instruments and airspeed rising.
- (d) Tracks the runway centre line during and after take-off.
- (e) Rotates at the recommended Vr.
- (f) Establishes pitch attitude for recommended climb.
- (g) Trims the aircraft for the recommended climb attitude.
- (h) Completes after take-off checks in accordance with the aircraft's flight manual or checklist.

## Action:

- (a) Observe the candidate's demonstration of a normal take-off and determine that the candidate's performance meets the objective.
- (b) Place emphasis on the candidate's demonstration of accurate airspeed, pitch and heading control.
- (c) Make allowance for airspeed fluctuations due to gusts and turbulence (but not excessively so).

	Normal Take-off					
Ra	ting	70			100	
	Not yet competent		COMPETENT		Ideal	
(1)	Attempts to line up in front of aircraft on final, or on the wrong runway	(1)	Uses the correct runway and clears the approach path prior to lining up ( <b>critical element</b> )	(1)	Ensures the runway in use is correct and clears the complete approach area	
(2)	Does not align DI and cross check compass	(2)	Completes line up checks	(2)	Completes line up checks, as per checklist	
(3)	Does not check engine pressures and temperatures during the take-off roll	(3)	Confirms engine temperatures and pressures are within their normal ranges during the take-off roll	(3)	Confirms, early in the take-off roll, that temperatures, pressures, RPM and airspeed are normal	
(4)	Grossly deviates from runway centre line during take-off or climb out	(4)	Maintains runway centre line during take-off and climb out	(4)	Accurately tracks the runway centre line throughout the take-off and climb out	
(5)	Over rotates, or rotates excessively early or late	(5)	Rotates at an appropriate Vr	(5)	Rotates at the correct Vr	
(6)	Maintains an airspeed more than $\pm 5$ knots of target	(6)	Maintains the recommended climb airspeed within $\pm$ 5 knots	(6)	Accurately establishes and maintains the recommended climb airspeed	
(7)	Makes no attempt to trim	(7)	Trims for the climb attitude	(7)	Trims accurately for the climb attitude	
(8)	Fails to complete critical after take- off checks	(8)	Completes after take-off checks	(8)	Completes all after take-off checks in accordance with the checklist	

## Task: Crosswind take-off (at Examiner discretion)

### **Objective:**

To determine that the candidate;

- (a) Knows the aircraft's maximum crosswind component and its significance (**critical element**).
- (b) Positions controls appropriately to compensate for crosswind.
- (c) Tracks the runway centre line during take-off and climb out, compensating for the crosswind component.
- (d) Positively rotates at the Vr appropriate to the crosswind conditions.

Note: Crosswind take-off is not an optional task for BFR

## Action:

- (a) Question the candidate on the aircraft's maximum demonstrated crosswind component and its significance.
- (b) If conditions permit, observe the candidate's demonstration of a crosswind take-off and determine that the candidate's performance meets the objective.
- (c) Place emphasis on the candidate's control positioning and allowance for drift.
- (d) Place emphasis on the candidate's demonstration of accurate airspeed, pitch and heading control.
- (e) Make allowance for airspeed fluctuations due to gusts and turbulence (but not excessively so).

# **Cross-wind Take off (at Examiner discretion)**

Ra		7085	100
	Not yet competent	COMPETENT     Ideal	
(1)	Does not know the aircraft's maximum demonstrated crosswind component	<ul> <li>(1) Knows the aircraft's maximum demonstrated crosswind component (critical element)</li> <li>(1) Knows the aircraft's m demonstrated crosswin and its significance</li> </ul>	
(2)	Does not position controls correctly to compensate for obvious cross-wind	<ul> <li>(2) Positions controls correctly to compensate for obvious cross-wind</li> <li>(2) Positions controls correctly compensate for cross-wind</li> </ul>	vind in ght manual and
(3)	Grossly deviates from runway centre line during the take-off roll or climb out	<ul> <li>(3) Maintains runway centre line during the take-off and climb out</li> <li>(3) Accurately tracks the r line throughout the take out</li> </ul>	•
(4)	Over rotates, or rotates excessively early or late	<ul> <li>(4) Rotates at correct Vr for cross-wind conditions</li> <li>(4) Positively rotates at concrosswind conditions in with the aircraft's flight recommended procedure</li> </ul>	n accordance t manual and
(5)	Maintains an airspeed more than $\pm 5$ knots of target	(5) Establishes and maintains the nominated airspeed within $\pm 5$ knots (5) Accurately establishes the nominated climb sp	

# Task: Short field take-off

## **Objective:**

To determine that the candidate is capable of;

- (a) Taking off from a field of minimal length, as determined by the use of 'P' charts or the Aircraft's Flight Manual, factored in accordance with AC91-3 (critical element).
- (b) Configuring the aircraft in accordance with the flight manual.
- (c) Modifying the rotate and climb speeds for the conditions and reevaluating the advisability of continuing.
- (d) Utilising all available runway, ensuring that static RPM is achieved and instrument readings are acceptable, prior to brakes release.
- (e) Rotating at the recommended Vr, establishing Vx if obstacles are to be cleared (adjusted for wind conditions) and Vy clear of obstacles.
- (f) Raising flap (if applicable) in accordance with the aircraft's flight manual and recommended procedures (**critical element**).

## Action:

- (a) Observe the demonstration of a take-off from a simulated field of minimal length and determine that the candidate's performance meets the objective.
- (b) Place emphasis on the candidate's assessment of appropriate rotate and climb speeds for the conditions and the advisability of continuing with the take-off.
- (c) Place emphasis on the candidate's demonstration of accurate pitch, heading and airspeed control and make allowance for fluctuations due to turbulence (but not excessively so).
- (d) Place emphasis on the correct procedure for raising flap.

	Short Field Take-off					
Ra	8	70	COMPETENT	85	100 100	
(1)	Not yet competent Does not confirm sufficient runway length is available prior to take-off	(1)	COMPETENT Confirms sufficient runway length is available prior to take-off (critical element)	(1)	Confirms sufficient take-off distance is available by the use of 'P' charts or the flight manual, prior to take-off	
(2)	Incorrectly configures the aircraft	(2)	Appropriately configures the aircraft	(2)	Configures the aircraft in accordance with the flight manual	
(3)	Does not modify the rotate or climb speed when conditions obviously warrant it	(3)	Modifies the rotate or climb speed when conditions warrant	(3)	Modifies the rotate and climb speed appropriately for the conditions and makes a valid go/no go decision	
(4)	Does not line up so as to utilise full runway length	(4)	Lines up so as to utilise full runway length	(4)	Lines up utilising full length in accord with recommended procedure	
(5)	Does not check static RPM when surface conditions permit	(5)	Checks static RPM against brakes when surface conditions permit	(5)	Checks static RPM and all engine indications, prior to brakes release	
(6)	Over rotates, or rotates excessively early or late	(6)	Rotates at approximately the correct Vr for the conditions	(6)	Rotates at the correct Vr or nominated speed for the conditions	
(7)	Maintains an airspeed more than $\pm 5$ knots of target	(7)	Accelerates to Vx initially, then when clear of obstacles Vy, as appropriate within $\pm$ 5 knots	(7)	Accelerates to Vtoss or Vx and when clear of obstacles Vy (adjusted for conditions), accurately maintains Vy to a safe height	
(8)	Raises flap before increasing airspeed	(8)	Increases airspeed before raising flap (critical element)	(8)	Increases airspeed and raises flap progressively in accordance with the recommended procedure	

## Task: Engine failure techniques (critical task)

### **Objective:**

To determine that the candidate;

- (a) Maintains control of the aircraft at all times (**critical element**).
- (b) Executes an appropriate emergency procedure when the take-off is abandoned or an engine is failed after take-off (**critical element**).
- (c) Nominates an achievable landing site, executes a procedure that would achieve the nominated landing site and carries out appropriate checklist items, if time permits (**critical element**).
- (d) Initiates the go around procedure correctly when prompted by the examiner (**critical element**).

### Action:

- (a) Simulate emergencies without risk to aircraft or crew.
- (b) Ensure that ATS is aware of the simulated emergency.
- (c) Early in the take-off roll, either simulate an event that would require the take-off to be abandoned (low oil pressure), or simulate engine failure by moving the mixture control to ICO; and/or
- (d) Simulate an engine failure after take-off by partially retarding the throttle and;
- (e) Place emphasis on the candidate's control of the aircraft.
- (f) Observe the candidate's subsequent actions and determine that they meet the objectives.
- (g) Place emphasis on the candidate's go around procedure.

	Engine Failure Techniques						
Ra	8	70		.85	100		
	Not yet competent		COMPETENT	1	Ideal		
(1)	Leaves the runway during simulated aborted take-off or does not lower the aircraft's nose after simulated EFATO	(1)	Maintains control of the aircraft, lowering the aircraft's nose after simulated EFATO ( <b>critical element</b> )	(1)	Maintains complete control of the aircraft at all times immediately lowering the aircraft's nose after simulated EFATO		
(2)	Does not recognise emergency situation or is unable to remember immediate actions	(2)	Identifies emergency situation and attends promptly to immediate actions ( <b>critical element</b> )	(2)	Correctly identifies emergency situation and initiates appropriate immediate actions from recall without error		
(3)	Elects to continue the take-off when an aborted take-off is called for or attempts to turn back	(3)	Selects an acceptable emergency landing area ( <b>critical element</b> )	(3)	Without delay selects the best possible landing area within range of the aircraft		
(4)	Grossly over or undershoots the landing area	(4)	Successfully carries out the recommended procedure ( <b>critical</b> element)	(4)	Carries out the recommended procedure with a high degree of success assured		
(5)	Does not close the throttle	(5)	Carries out subsequent checklist items (critical element)	(5)	Carries out subsequent checklist items as time permits		
(6)	Does not respond to 'go around' command, does not lead with power or slams throttle	(6)	Responds to 'go around' command, leading with power ( <b>critical element</b> )	(6)	Immediately responds to 'go around' command, applying power smoothly and raising flap in accordance with the recommended procedure		

# Task: Climbing

### **Objective:**

To determine that the candidate is capable of;

- (a) Maintaining the nominated climb speed  $\pm$  5 knots.
- (b) Trimming the aircraft to maintain the climb attitude.
- (c) Maintaining the aircraft's engine temperatures and pressures within acceptable limits in accordance with the aircraft's flight manual and recommended procedures (**critical element**).
- (d) Clearing the flight path ahead of the aircraft by use of a recommended procedure (**critical element**).

## Action:

- (a) Nominate the type of climb to be demonstrated.
- (b) Place emphasis on the candidate's demonstration of accurate airspeed and balance control.
- (c) Ensure the aircraft is trimmed accurately for the climb attitude (including rudder, if applicable).
- (d) Place emphasis on the candidate's monitoring and control of engine temperature.
- (e) Place emphasis on the candidate's procedure for clearing the flight path ahead of the aircraft.
- (f) Make allowance for airspeed fluctuations due to gusts and turbulence (but not excessively so).

	Climbing						
Ra	ating	70		85	100		
	Not yet competent	-	COMPETENT		Ideal		
(1)	Maintains an airspeed in excess of $\pm 5$ knots of the nominated climb speed	(1)	Maintains nominated climb speed within $\pm$ 5 knots	(1)	Maintains the nominated climb speed accurately		
(2)	Makes no attempt to trim the aircraft	(2)	Trims for the climb attitude	(2)	Trims accurately for the climb attitude(including rudder, if applicable)		
(3)	Would exceed engine limitations without examiner's intervention	(3)	Operates the engine within all limitations ( <b>critical element</b> )	(3)	Operates the engine smoothly, precisely and prudently, within all limitations at all times		
(4)	Fails to clear the flight path ahead of the aircraft using a recommended procedure, and would, if permitted, enter cloud or controlled airspace unintentionally	(4)	Clears the airspace ahead of the aircraft regularly in accordance with recommended procedures ( <b>critical</b> <b>element</b> )	(4)	Clears the airspace ahead and above the aircraft, in accordance with the recommended procedure and with an obvious awareness of VMC and controlled airspace restrictions		

# Task: Straight and level flight

### **Objective:**

To determine that the candidate is capable of;

- (a) Achieving and maintaining straight and level flight at a nominated altitude  $\pm$  50 feet.
- (b) Maintaining the (DI) heading  $\pm 5$  degrees.
- (c) Trimming the aircraft accurately to maintain straight and level flight.

## Action:

- (a) Nominate the altitude at which level flight will be entered and maintained.
- (b) Nominate the heading to be maintained and observe that the DI is correctly aligned.
- (c) Place emphasis on the candidate's demonstration of accurate altitude, heading and balance control.
- (d) Ensure the aircraft is trimmed accurately for level flight.
- (e) Make allowance for fluctuations due to turbulence (but not excessively so).

	Straight and Level					
Ra	ting	7085	100			
	Not yet competent	COMPETENT Ideal				
(1)	Is unable to anticipate the level off	(1) Anticipates the level off (1) Accurately anticipates the	evel off			
(2)	Maintains an altitude in excess of 50 feet of the nominated altitude	(2) Maintains the nominated altitude within 50 feet(2) Maintains the nominated a accurately	titude			
(3)	Consistently deviates from the nominated heading by more than 5 degrees or fails to ensure the DI is aligned with the compass	<ul> <li>(3) Maintains the nominated heading within ± 5 degrees</li> <li>(3) Maintains the nominated h accurately, realigning the I required</li> </ul>	U			
(4)	Makes no attempt to trim the aircraft	(4) Trims for the straight and level attitude(4) Trims accurately for the str level attitude	aight and			

## Task: Instrument flight - straight and level

### **Objective:**

To determine that the candidate is capable of;

- (a) Achieving and maintaining straight and level flight at a nominated altitude  $\pm$  100 feet using full panel instruments.
- (b) Maintaining the (DI) heading  $\pm 5$  degrees and checking, at appropriate intervals, the DI against the magnetic compass.
- (c) Trimming the aircraft accurately to maintain straight and level flight.

## Action:

- (a) Nominate the altitude at which level flight will be entered and maintained.
- (b) Nominate the heading to be maintained and observe that the DI is correctly aligned.
- (c) Place emphasis on the candidate's demonstration of accurate altitude, heading and balance control using full panel instruments.
- (d) Ensure the aircraft is trimmed accurately for level flight.
- (e) Make allowance for fluctuations due to turbulence (but not excessively so).

Ra	ting	Instrument Flight - Straight and Level 70	
	Not yet competent	COMPETENT	Ideal
(1)	Is unable to anticipate the level off using full panel instruments	(1) Anticipates the level off using full panel instruments	(1) Accurately anticipates the level off using full panel instruments
(2)	Maintains an altitude in excess of 100 feet of the nominated altitude using full panel instruments	<ul><li>(2) Maintains the nominated altitude within 100 feet using full panel instruments</li></ul>	(2) Maintains the nominated altitude accurately using full panel instruments
(3)	Consistently deviates from the nominated heading by more than 5 degrees or fails to ensure the DI is aligned with the compass	<ul> <li>(3) Maintains the nominated heading within ± 5 degrees using full panel instruments and occasionally compares the DI with compass heading</li> </ul>	<ul> <li>(3) Maintains the nominated heading accurately using full panel instruments, realigning the DI as required</li> </ul>
(4)	Makes no attempt to trim the aircraft	(4) Trims for the straight and level attitude	(4) Trims accurately for the straight and level attitude

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## Task: Instrument flight - medium turns

### **Objective:**

To determine that the candidate;

- (a) Enters, maintains, and exits from 30 degree angle of bank turns with smooth and coordinated control applications, maintaining altitude  $\pm$  100 feet using full panel instruments.
- (b) Can roll out on a predetermined DI heading  $\pm$  10 degrees.

## Action:

- Require the candidate to demonstrate a 30 degree angle of bank turn through at least 180°, both left and right, onto a predetermined DI heading using full panel instruments.
- (b) Observe the candidate's performance and determine that it meets the objectives.

Ra	iting	70			100
	Not yet competent		COMPETENT		Ideal
(1)	Rough, uncoordinated control applications	(1)	Uses coordinated control movements	(1)	Uses smooth coordinated control movements at all times
(2)	Frequently exceeds $\pm$ 100 feet of the nominated altitude using full panel instruments	(2)	Maintains the nominated altitude $\pm$ 100 feet using full panel instruments	(2)	Accurately maintains the nominated reference altitude at all times using full panel instruments
(3)	Excessively varies the bank angle during the turn using full panel instruments	(3)	Maintains 30 degrees angle of bank ± 5 degrees using full panel instruments	(3)	Accurately maintains the nominated angle of bank throughout the turn using full panel instruments
(4)	Consistently rolls out of the turn more than 10 degrees off the reference DI heading	(4)	Rolls out of the turn within 10 degrees of the reference DI heading	(4)	Consistently and accurately rolls out of the turn on the reference DI heading

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## Task: Instrument flight - climbing & descending

### **Objective:**

To determine that the candidate is capable of;

- (a) Entering and maintaining a climb and descent using full panel instruments as the sole reference.
- (b) Maintaining the nominated speed  $\pm 5$  knots using full panel instruments.
- (c) Accurately trimming the aircraft.
- (d) Maintaining the aircraft's engine temperatures and pressures within acceptable limits in accordance with the aircraft's flight manual and recommended procedures (**critical element**).

### Action:

- (a) Nominate the type of climb or descent to be demonstrated.
- (b) Place emphasis on the candidate's demonstration of accurate airspeed and balance control using full panel instruments.
- (c) Ensure the aircraft is trimmed accurately.
- (d) Place emphasis on the candidate's monitoring and control of engine temperature.
- (e) Make allowance for airspeed fluctuations due to turbulence (but not excessively so).

Instrument Flight – Climbing and Descending					
Ra	iting	70		85	100
	Not yet competent		COMPETENT		Ideal
(1)	Maintains an airspeed in excess of $\pm 5$ knots of the nominated speed using full panel instruments	(1)	Maintains nominated speed within $\pm 5$ knots using full panel instruments	(1)	Maintains the nominated speed accurately using full panel instruments
(2)	Makes no attempt to trim the aircraft	(2)	Trims for the required attitude using full panel instruments	(2)	Trims accurately for the required attitude(including rudder, if applicable) using full panel instruments
(3)	Would exceed engine limitations without examiner's intervention	(3)	Operates the engine within all limitations ( <b>critical element</b> )	(3)	Operates the engine smoothly, precisely and prudently, within all limitations at all times

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## Task: Instrument flight - stall onset in level flight

### **Objective:**

To determine that the candidate;

- (a) Recognises the indications of stall onset using full panel instruments and promptly recovers by reducing the angle of attack and applying full power to minimise height loss (**critical elements**).
- (b) Prevents yaw during entry and recovery.
- (c) Re-establishes the aircraft in straight and level flight.

## Action:

- (a) Require the candidate to bring the aircraft to the stall with power on using full panel instruments.
- (b) Nominate the power setting to be used.
- (c) At examiner discretion, nominate the symptom at which recovery should be commenced.
- (d) Place emphasis on the prevention of yaw and a standard recovery.
- (e) Observe the candidate's performance and determine that it meets the objectives.

### Rating 70 85 100 COMPETENT Ideal Not yet competent Neglects to do HASELL checks Completes HASELL/HELL checks Completes HASELL/HELL checks in (1)(1)(1)(critical element) accordance with the checklist (2)Does not select an appropriate Selects an appropriate reference (2) Selects an appropriate reference (2)commencement altitude altitude (critical element) heading and altitude (3) Slams throttle and/or neglects to (3) Operates throttle smoothly, correcting (3)Operates throttle smoothly, preventing correct yaw at all using full panel yaw using full panel instruments vaw (entry and recovery) using full instruments panel instruments Selects carburettor heat to cold and (4) Does not recognise stall onset and (4)Selects carb. heat cold prior to stall, (4)permits the aircraft to stall (critical recovers at onset recognises stall onset (nominated element) symptom or buffet), prompt recovery (5) Does not reduce angle of attack or (5) Uses correct recovery technique (5) Promptly uses correct recovery induces a secondary stall (critical (simultaneously checking forward and technique (simultaneously checking element) applying power) forward and applying full power) (6) Does not use full power to minimise (6) Applies full power to prevent height (6)Applies full power and prevents any height loss (critical element) loss (but sags 50' maximum) height loss Makes no attempt to re-establish Returns to straight and level flight Promptly regains straight and level, (7)(7)(7)straight and level flight returning to the reference heading and

### **Instrument Flight - Stall Onset in Level Flight**

height using full panel instruments

# Task: Instrument flight - stall onset in climbing turn

### **Objective:**

To determine that the candidate;

- (a) Recognises the indications of stall onset using full panel instruments and promptly recovers by reducing the angle of attack and applying full power to minimise height loss (**critical elements**).
- (b) Prevents yaw during entry and recovery.
- (c) Re-establishes the aircraft in a climbing turn, using full panel instruments, at a reduced angle of bank (**critical element**) or returns to straight and level flight (at examiner discretion).

## Action:

- (a) Require the candidate to bring the aircraft to the stall with power on in a climbing turn using full panel instruments.
- (b) Nominate the power setting to be used.
- (c) Nominate the recovery to be demonstrated, either continue in the climbing turn or return to straight and level flight
- (d) At examiner discretion, nominate the symptom at which recovery should be commenced.
- (e) Place emphasis on the prevention of yaw and the reduction of angle of bank using full panel instruments.
- (f) Observe the candidate's performance and determine that it meets the objectives.

### Rating 70 85 100 COMPETENT Not vet competent Ideal Neglects to do HASELL checks Completes HASELL/HELL checks Completes HASELL/HELL checks in (1)(1)(1)accordance with the checklist (critical element) Does not select an appropriate (2)Selects an appropriate reference (2)commencement altitude altitude (critical element) Neglects to correct yaw at all using Corrects yaw using full panel Prevents yaw throughout, using full (3) (3)(3) full panel instruments panel instruments instruments (4) Does not recognise stall onset using Selects carburettor heat to cold and Selects carb. heat cold prior to stall, (4)(4) full panel instruments and permits the recovers at onset using full panel recognises stall onset using full panel aircraft to stall (critical element) instruments (nominated symptom or instruments buffet), prompt recovery Uses correct recovery technique (5) Does not reduce angle of attack or (5) Promptly uses correct recovery (5)induces a secondary stall (critical (simultaneously checking forward and technique (simultaneously checking applying power) forward and applying full power) element) (6) Does not ensure full power is applied Ensures full power is applied (6)(7)Makes no attempt to reduce angle of (7)Reduces angle of bank (critical (7)Promptly reduces angle of bank to element) to continue in the turn or continue in the climbing turn or bank return to straight and level (at returns to straight and level (at examiner discretion) examiner discretion) using full panel instruments

### **Instrument Flight - Stall Onset in Climbing Turn**

# Task: Instrument flight - spiral dive

## **Objective:**

To determine that the candidate;

- (a) Recognises the indications of a spiral dive using full panel instruments and promptly recovers by closing the throttle, rolling wings level and easing out of the ensuing dive (**critical elements**).
- (b) Re-establishes the aircraft in straight and level flight using full panel instruments.

## Action:

- (a) Place the aircraft in a spiral dive, with power on, and require the candidate to recover.
- (b) Place emphasis on the candidate's prompt recognition of the spiral dive and recovery action using full panel instruments.
- (c) Place emphasis on the candidate's application of smooth control movements to regain straight and level flight.
- (d) Observe the candidate's performance and determine that it meets the objectives.

Rating		70		85	100
	Not yet competent	CC	OMPETENT		Ideal
(1)	Does not recognise the spiral dive using full panel instruments		nise the spiral dive using full nstruments ( <b>critical element</b> )	(1)	Immediately recognises the spiral dive using full panel instruments
(2)	Does not reduce power at all	(2) Closes	the throttle (critical element)	(2)	Promptly closes the throttle
(3)	Does not level the wings using full panel instruments		vings level using full panel nents ( <b>critical element</b> )	(3)	Promptly and smoothly rolls wings level using full panel instruments
(4)	Rough, uncoordinated control applications	(4) Eases of element	but of the ensuing dive ( <b>critical at</b> )	(4)	Promptly and smoothly eases out of the ensuing dive
(5)	Makes no attempt to re-establish straight and level flight using full panel instruments		s to straight and level flight full panel instruments	(5)	Promptly regains straight and level, returning to the reference heading and height using full panel instruments

## Task: Limited panel - straight and level

### **Objective:**

To determine that the candidate is capable of;

- (a) Entering and maintaining straight and level flight using basic instrumentation as the sole reference.
- (b) Maintaining a constant compass heading  $\pm$  10 degrees using basic instrumentation.
- (c) Maintaining a constant height  $\pm$  200 feet using basic instrumentation.

## Action:

- (a) Obscure the AH and DI.
- (b) Nominate the compass heading and altitude to be maintained using basic instrumentation.
- (c) Observe the candidate's performance and determine that it meets the objectives.

Rating' Not yet competent		70	Limited Panel - Straight and Level		100
			COMPETENT		Ideal
(1)	Is unable to anticipate the level off using limited panel instruments	(1)	Anticipates the level off using limited panel instruments	(1)	Accurately anticipates the level off using limited panel instruments
(2)	Maintains an altitude in excess of 200 feet of the nominated altitude using limited panel instruments	(2)	Maintains the nominated altitude ± 200 feet using limited panel instruments	(2)	Maintains the nominated altitude accurately using limited panel instruments
(3)	Consistently deviates from the nominated compass heading by more than 10 degrees using limited panel instruments	(3)	Maintains the nominated compass heading within $\pm$ 10 degrees using limited panel instruments	(3)	Maintains the nominated compass heading accurately using limited panel instruments
(4)	Makes no attempt to trim the aircraft	(4)	Trims for straight and level flight	(4)	Trims accurately for straight and level flight

# Limited Panel - Straight and Level

## Task: Limited panel - compass turns

## **Objective:**

To determine that the candidate is capable of;

(a) Turning onto a compass heading  $\pm 10$  degrees in level flight using basic instrumentation as the sole reference.

## Action:

- (a) Obscure the AH and DI.
- (b) Nominate the compass heading to be turned onto and the altitude to be maintained.
- (c) Observe the candidate's performance and determine that it meets the objective.

Rating		Limited Panel - Compass Turns 70	85100
	Not yet competent	COMPETENT	Ideal
(1)	Consistently fails to roll out of the turn within 10 degrees of the nominated compass heading using limited panel instruments	<ul> <li>Rolls out of the turn within 10 degrees of the nominated compass heading most of the time using limited panel instruments</li> </ul>	<ul> <li>(1) Consistently rolls out of the turn within 10 degrees of the nominated compass heading using limited panel instruments</li> </ul>
(2)	Exceeds 200 feet of the nominated altitude	<ul><li>(2) Maintains the nominated altitude within 200 feet</li></ul>	(2) Maintains the nominated altitude accurately

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## Task: Limited panel - climbing & descending

### **Objective:**

To determine that the candidate is capable of;

- (a) Entering and maintaining a climb and descent using basic instrumentation as the sole reference.
- (b) Maintaining a constant compass heading  $\pm$  10 degrees using basic instrumentation.
- (c) Maintaining a constant speed  $\pm$  10 knots using basic instrumentation.

### Action:

- (a) Obscure the AH and DI.
- (b) Nominate the compass heading and airspeed to be maintained using basic instrumentation.
- (c) Observe the candidate's performance and determine that it meets the objectives.

п		Anniteu Panei – Chinding and Descendin	8
Rating Not yet competent		70 COMPETENT	85100 Ideal
(1)	Maintains an airspeed in excess of ± 10 knots of the nominated speed using limited panel instruments	<ol> <li>Maintains nominated speed within ± 10 knots using limited panel instruments</li> </ol>	<ol> <li>Maintains the nominated speed accurately using limited panel instruments</li> </ol>
(2)	Maintains a compass heading more than 10 degrees from the nominated heading	(2) Maintains the nominated compass heading within ± 10 degrees	(2) Accurately maintains the nominated compass heading
(3)	Makes no attempt to trim the aircraft	<ul><li>(3) Trims to maintain the climb or descent (as required) using limited panel instruments</li></ul>	<ul> <li>(3) Trims accurately to maintain the climb or descent (as required) using limited panel instruments (including rudder, if applicable)</li> </ul>

#### Limited Panel – Climbing and Descending

# Task: Limited panel - climbing & descending turn

#### **Objective:**

To determine that the candidate is capable of;

- (a) Entering and maintaining the climbing and descending turn using basic instrumentation as the sole reference.
- (b) Maintaining a constant speed  $\pm$  10 knots using basic instrumentation.
- (c) Rolling out on a predetermined compass heading  $\pm$  10 degrees using basic instrumentation.

#### Action:

- (a) Obscure the AH and DI.
- (b) Nominate the compass heading to be turned onto and airspeed to be maintained using basic instrumentation.
- (c) Observe the candidate's performance and determine that it meets the objectives.

	Limited Panel - Climbing and Descending Turns						
Ra	iting	708	85100				
	Not yet competent	COMPETENT	Ideal				
(1)	Maintains an airspeed in excess of ± 10 knots of the nominated speed using limited panel instruments	<ol> <li>Maintains the nominated speed within ± 10 knots using limited panel instruments</li> </ol>	<ol> <li>Maintains the nominated speed accurately using limited panel instruments</li> </ol>				
(2)	Overbanks	(2) Maintains rate 1	(2) Maintains an angle of bank appropriate to the flight performance requirements using limited panel instruments				
(3)	Consistently rolls out of the turn more than 10 degrees off the nominated compass heading	<ul><li>(3) Rolls out of the turn within ± 10 degrees of the nominated compass heading</li></ul>	(3) Accurately rolls out of the turn on the nominated compass heading				

#### Limited Danel Climbing and Descending Turns

#### Task: Limited panel - unusual attitude recovery

**Objective:** To determine that the candidate is capable of;

- (a) Recognising an unusual flight attitude using basic instrumentation (**critical element**).
- (b) Recovering to straight and level flight from unusually nose high, nose low and spiral dive attitudes using basic instrumentation.
- (c) Overcoming disorienting effects by regaining straight and level flight smoothly, using basic instrumentation.

#### Action:

- (a) Obscure the AH and DI.
- (b) Nominate the heading and altitude to which the candidate shall return after recovery.
- (c) Place the aircraft in an unusually nose high and nose low attitude (with or without bank angle at examiner discretion) and require the candidate to recover to straight and level flight using basic instrumentation.
- (d) Place the aircraft in a spiral dive and require the candidate to recover to straight and level flight using basic instrumentation.
- (e) Place emphasis on the candidate's recognition of, and correct recovery from unusual attitudes using basic instrumentation.
- (f) Place emphasis on a limited angle of bank and smooth return to the nominated heading and altitude using basic instrumentation.
- (g) Observe the candidate's performance and determine that it meets the objectives.

	Limited Panel – Unusual Attitude Recovery						
Ra	ting	708	85100				
	Not yet competent	COMPETENT	Ideal				
(1)	Does not recognise an unusually nose high, nose low or spiral dive attitude using limited panel instruments	(1) Correctly identifies the aircraft's attitude using limited panel instruments ( <b>critical element</b> )	<ol> <li>Immediately recognises the aircraft's attitude using limited panel instruments</li> </ol>				
(2)	Does not reduce power at all during recovery from the nose low or spiral dive attitude ( <b>critical element</b> ) or fails to apply power in the nose high attitude recovery	(2) Reduces power during recovery from the nose low or spiral dive attitude and applies power in the nose high attitude recovery	(2) Promptly 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)	Makes no attempt to re-establish straight and level flight using limited panel instruments	(3) Returns to straight and level flight using limited panel instruments	(3) Promptly regains straight and level, returning to the reference compass heading and altitude using limited panel instruments				

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## Task: Medium turns

#### **Objective:**

To determine that the candidate;

- (a) Enters, maintains, and exits from turning manoeuvres with smooth and coordinated control applications, maintaining altitude  $\pm$  50 feet and less than a <sup>1</sup>/<sub>4</sub> ball deflection in balance.
- (b) Maintains situational awareness and orientation (**critical element**) through lookout and the selection of a suitable reference point.

## Action:

- (a) Place emphasis on the candidate's lookout.
- (b) Require the candidate to demonstrate a 30 degree angle of bank turn through at least 180° both left and right.
- (c) Place emphasis on the candidate's procedure for clearing the flight path ahead of the aircraft.
- (d) Observe the candidate's performance and determine that it meets the objectives.

	Medium Turns						
Ra	8	70		85	100		
	Not yet competent		COMPETENT		Ideal		
(1)	Fails to complete a lookout prior to entering the turn, or to maintain an adequate lookout during the turn	(1)	Completes a lookout prior to entering the turn and maintains an adequate lookout throughout the turn ( <b>critical</b> <b>element</b> )	(1)	Completes an excellent lookout prior to entering the turn and maintains it during, and on exit from, the turn		
(2)	Rough, uncoordinated control applications	(2)	Uses coordinated control movements	(2)	Uses smooth coordinated control movements at all times		
(3)	Frequently exceeds $\pm$ 50 feet of the nominated altitude	(3)	Maintains the nominated altitude $\pm$ 50 feet	(3)	Accurately maintains the nominated reference altitude at all times		
(4)	Excessively varies the bank angle during the turn	(4)	Maintains the nominated angle of bank $\pm 5$ degrees	(4)	Accurately maintains the nominated angle of bank throughout the turn		
(5)	Maintains in excess of ¼ ball deflection	(5)	Averages no more than <sup>1</sup> / <sub>4</sub> ball deflection	(5)	Maintains accurate balance throughout		
(6)	Consistently rolls out of the turn more than 20 degrees off the reference point	(6)	Selects a good reference point and rolls out of the turn within 10 degrees of the reference point	(6)	Selects a solid reference point and consistently rolls out of the turn on the reference point		
(7)	Would enter cloud, controlled airspace inadvertently or leave the designated training area during the turn without examiner intervention ( <b>critical element</b> )	(7)	Remains clear of cloud and does not inadvertently enter controlled airspace and/or remains within the designated training area	(7)	Throughout the turn, maintains VMC at all times and remains well clear of inadvertent controlled airspace infringement		

# Task: Climbing turns

**Objective:** To determine that the candidate is capable of;

- (a) Maintaining the nominated climb speed  $\pm 5$  knots.
- (b) Maintaining an angle of bank appropriate to the aircraft's performance requirement and balance less than <sup>1</sup>/<sub>4</sub> ball deflection.
- (c) Maintaining the aircraft's engine temperatures and pressures within acceptable limits in accordance with the aircraft's flight manual and recommended procedures (**critical element**).
- (d) Clearing the flight path ahead of the aircraft by use of a recommended procedure (**critical element**).

#### Action:

- (a) Nominate the type of climb to be demonstrated.
- (b) Require the candidate to demonstrate a climbing turn through at least 180° both left and right.
- (c) Place emphasis on the candidate's demonstration of accurate airspeed and balance control.
- (d) Place emphasis on the candidate's selection of angle of bank to maximise aircraft performance.
- (e) Place emphasis on the candidate's monitoring and control of engine temperature.
- (f) Place emphasis on the candidate's procedure for clearing the flight path ahead of the aircraft.
- (g) Make allowance for airspeed fluctuations due to gusts and turbulence (but not excessively so).

	Climbing Turns						
Ra	iting'	70		85	100		
	Not yet competent		COMPETENT		Ideal		
(1)	Maintains an airspeed in excess of $\pm 5$ knots of the nominated climb speed	(1)	Maintains nominated climb speed within $\pm$ 5 knots	(1)	Maintains the nominated climb speed accurately		
(2)	Overbanks degrading aircraft performance	(2)	Maintains 20 degrees angle of bank ± 5 degrees	(2)	Maintains an angle of bank appropriate to the flight performance requirements		
(3)	Maintains in excess of ¼ ball deflection	(3)	Averages no more than <sup>1</sup> / <sub>4</sub> ball deflection	(3)	Maintains accurate balance throughout		
(4)	Would exceed engine limitations without examiner's intervention	(4)	Operates the engine within all limitations ( <b>critical element</b> )	(4)	Operates the engine smoothly, precisely and prudently, within all limitations at all times		
(5)	Fails to clear the flight path ahead of the aircraft using a recommended procedure, and would, if permitted, enter cloud or controlled airspace unintentionally	(5)	Clears the airspace ahead of the aircraft regularly in accordance with recommended procedures ( <b>critical</b> <b>element</b> )	(5)	Clears the airspace ahead and above the aircraft, in accordance with the recommended procedure and with an obvious awareness of VMC and controlled airspace restrictions		

#### Task: Steep turns

#### **Objective:**

To determine that the candidate;

- (a) Enters, maintains, and exits from turning manoeuvres with smooth and coordinated control applications, maintaining altitude  $\pm$  50 feet and balance within <sup>1</sup>/<sub>4</sub> ball deflection.
- (b) Increases power at bank angles in excess of 30 degrees (**critical** element).
- (c) Maintains situational awareness and orientation (**critical element**) through lookout and the selection of a suitable reference point.

## Action:

- (a) Place emphasis on the candidate's lookout.
- (b) Place emphasis on the candidate's coordination during entry and roll out.
- (c) Require the candidate to demonstrate a balanced 45 degree angle of bank turn through 360° both left and right.
- (d) Place emphasis on the candidate's procedure for clearing the flight path ahead of the aircraft.
- (e) Observe the candidate's performance and determine that it meets the objectives.

Do	ting	70	Steep Turns	95	100	
Ka	ting Not yet competent	/0	COMPETENT	_85100 100		
(1)	Fails to complete a lookout prior to entering the turn, or to maintain an adequate lookout during the turn	(1)	Completes a lookout prior to entering the turn and maintains an adequate lookout throughout ( <b>critical element</b> )	(1)	Completes an excellent lookout prior to entering the turn and maintains it during, and on exit from, the turn	
(2)	Rough, uncoordinated control applications	(2)	Uses coordinated control movements most of the time	(2)	Uses smooth coordinated control movements at all times	
(3)	Frequently exceeds $\pm$ 50 feet of the nominated altitude	(3)	Maintains the nominated altitude $\pm$ 50 feet	(3)	Accurately maintains the nominated reference altitude at all times	
(4)	Excessively varies the bank angle during the turn	(4)	Maintains the nominated angle of bank $\pm 5$ degrees most of the time	(4)	Accurately maintains the nominated angle of bank throughout the turn	
(5)	Maintains in excess of <sup>1</sup> / <sub>4</sub> ball	(5)	Averages no more than <sup>1</sup> / <sub>4</sub> ball	(5)	Maintains accurate balance throughout	
(6)	Does not increase power at all at angles of bank greater than 30 degrees ( <b>critical element</b> )	(6)	Uses an appropriate power setting	(6)	Smoothly increases power, commensurate with increasing angle of bank in excess of 30 degrees	
(7)	Consistently rolls out of the turn more than 10 degrees off the reference	(7)	Selects a good reference point and rolls out of the turn within 10 degrees of the reference point	(7)	Selects a solid reference point, with regard to drift, so as to remain in the same area, and consistently rolls out of the turn on the reference point	
(8)	enters cloud, controlled airspace or leaves the designated training area during the turn ( <b>critical element</b> )	(8)	Remains clear of cloud within the designated training area and does not inadvertently enter controlled airspace	(8)	Maintains VMC throughout the turn and remains well clear of inadvertent controlled airspace infringement	

#### Task: Maximum rate turns

#### **Objective:**

To determine that the candidate;

- (a) Enters, maintains, and exits from turning manoeuvres with smooth and coordinated control applications, maintaining altitude  $\pm$  50 feet and balance within <sup>1</sup>/<sub>4</sub> ball.
- (b) Increases power at bank angles in excess of 30 degrees (**critical** element).
- (c) Adopts the correct entry technique (**critical element**) in relation to the aircraft's maximum manoeuvring speed (Va) for the aircraft's weight and speed.
- (d) Maintains situational awareness and orientation (**critical element**) through lookout and the selection of a readily identifiable reference point.

#### Action:

- (a) Place emphasis on the candidate's lookout.
- (b) Place emphasis on the candidate's coordination during entry and roll out.
- (c) Require the candidate to demonstrate a balanced maximum rate turn through 360° both left and right (the entry speed may be nominated by the examiner).
- (d) Place emphasis on the candidate's entry procedure in relation to the aircraft's Va, weight and airspeed.
- (e) Place emphasis on the candidate's procedure for clearing the flight path ahead of the aircraft.
- (f) Observe the candidate's performance and determine that it meets the objectives.

Maximum Rate Turns						
Ra	8	70	/0		100	
	Not yet competent		COMPETENT		Ideal	
(1)	Fails to complete or maintain an adequate lookout	(1)	Completes a lookout prior to entering the turn and maintains an adequate lookout throughout ( <b>critical element</b> )	(1)	Completes an excellent lookout prior to entering the turn and maintains it during, and on exit from, the turn	
(2)	Rough, uncoordinated control applications	(2)	Uses coordinated control movements most of the time	(2)	Uses smooth coordinated control movements at all times	
(3)	Exceeds (or would exceed) Va limitations for the aircraft's weight	(3)	Checks aircraft's airspeed in relation to Va prior to turn entry (entry speed may be nominated by the examiner)	(3)	Notes aircraft speed in relation to Va for the aircraft's weight before entry	
(4)	Leads with power when airspeed is above Va or delays power application when the airspeed is well below Va or reduces power prematurely on roll out	(4)	Leads with roll when airspeed is above Va; coordinates power and roll when airspeed is at Va; or leads with power when airspeed is well below Va ( <b>critical element</b> ); on exit from the turn reduces power with angle of bank	(4)	Smoothly leads with roll if airspeed is above Va, increasing power as Va is achieved; or coordinates power and roll at Va; or leads with full power if speed is below Va for the weight; and reduces power at cruise airspeed	
(5)	Exceeds $\pm$ 50 feet of the nominated altitude or exceeds <sup>1</sup> / <sub>4</sub> ball	(5)	Maintains the nominated altitude $\pm$ 50 feet and less than <sup>1</sup> / <sub>4</sub> ball	(5)	Accurately maintains balance and the nominated reference altitude	
(6)	Excessively varies the bank angle or back pressure during the turn	(6)	Maintains a constant back pressure and angle of bank $\pm$ 5 degrees most of the time	(6)	Maintains a constant bank angle and back pressure to activate the first note of stall warning (or stall onset)	
(7)	Is disorientated (critical element)	(7)	Selects a solid reference and rolls out of the turn within 20 degrees	(7)	Selects a readily identifiable reference point and consistently rolls out on it	

# Task: Slow flight

#### **Objective:**

To determine that the candidate is capable of;

(a) Controlling the aircraft at a minimum of 1.2 Vs in various configurations whilst;

1. Maintaining straight and level flight at a nominated altitude  $\pm\,50$  feet.

2. Turning at (up to) 20 degrees angle of bank maintaining a nominated altitude  $\pm$  50 feet.

3. Re-establishing normal cruise.

#### Action:

- (a) Nominate the altitude at which level flight will be maintained.
- (b) Nominate the airspeed to be maintained (not less than 1.2 Vs for the configuration to be used).
- (c) Require a change of direction from an established level turn to the opposite direction using a maximum of 20 degrees angle of bank.
- (d) Place emphasis on the candidate's maintenance of altitude, heading and balance control (as applicable).
- (e) Ensure the aircraft is trimmed for straight and level flight.
- (f) Require the candidate to re-establish normal cruise.
- (f) Make allowance for fluctuations due to turbulence (but not excessively so).

# **Slow Flight**

Ra	ting	70	85	100
	Not yet competent	COMPETENT	Ideal	
(1)	Maintains an airspeed in excess of $\pm 5$ knots of the nominated speed	(1) Maintains the nominated spee knots most of the time	d within $\pm 5$ (1) Maintains the nomi	nated speed accurately
(2)	Maintains an altitude in excess of 50 feet of the nominated altitude	(2) Maintains the nominated altitute feet most of the time	de $\pm 50$ (2) Maintains the nominaccurately	nated altitude
(3)	Fails to compensate with power and/or rudder during turning	(3) Compensates appropriately wi and/or rudder in all configurat slow flight		oower and rudder in a ate manner during slow rations
(4)	Makes no attempt to trim the aircraft	(4) Trims for straight and level fli	ght (4) Trims accurately fo flight	r straight and level

# Task: Stalling in basic configuration

#### **Objective:**

To determine that the candidate;

- (a) Carries out HASELL checks prior to stalling and HELL checks between each stall (**critical element**).
- (b) Prevents yaw during entry and recovery.
- (c) Recognises the indications of a stall and promptly recovers at the onset or stall by reducing the angle of attack and applying full power to minimise height loss.
- (d) Re-establishes the aircraft in straight and level flight on the nominated reference point and altitude.

#### Action:

- (a) Require the candidate to demonstrate a basic stall, in the candidate's own time and place.
- (b) Nominate recovery at onset and/or at the stall (examiner's discretion).
- (c) Place emphasis on checks, lookout and safe height.
- (d) Place emphasis on the prevention of yaw and a standard recovery.
- (e) Observe the candidate's performance and determine that it meets the objectives.

	Stalling in Basic Configuration						
Ra	ting	70		85	100		
	Not yet competent		COMPETENT		Ideal		
(1)	Neglects to do HASELL checks	(1)	Completes HASELL/HELL checks (critical element)	(1)	Completes HASELL/HELL checks in accordance with the checklist		
(2)	Does not select an appropriate commencement altitude	(2)	Selects an appropriate reference altitude (critical element)	(2)	Selects an appropriate reference point and altitude		
(3)	Slams throttle and/or neglects to correct yaw at all	(3)	Operates throttle smoothly, correcting yaw	(3)	Operates throttle smoothly, preventing yaw (entry and recovery)		
(4)	Does not recognise stall onset	(4)	Selects carburettor heat to cold and recovers at onset or at the stall (examiner discretion)	(4)	Selects carb. heat cold prior to stall, recognises stall onset		
(5)	Does not reduce angle of attack, induces secondary stall or over corrects and loses more than 200'	(5)	Reduces angle of attack and applies power ( <b>critical element</b> )	(5)	Promptly uses correct recovery technique (simultaneously reducing angle of attack and applying power)		
(6)	Does not use full power to minimise height loss	(6)	Applies full power and minimises the height loss to less than 100'	(6)	Applies full power and minimises the height loss to less than 50'		
(7)	Makes no attempt to re-establish straight and level flight	(7)	Returns to straight and level flight at the reference altitude	(7)	Promptly regains straight and level, returning to the reference heading and altitude		

# 

#### Task: Stalling in power-on configurations

#### **Objective:**

To determine that the candidate;

- (a) Carries out HASELL checks prior to stalling and HELL checks between each stall (**critical element**).
- (b) Selects the power and flap nominated for the stall.
- (c) Prevents yaw during entry and recovery.
- (d) Recognises the indications of a stall and promptly recovers at onset or stall by reducing the angle of attack and applying full power to minimise height loss.
- (e) Re-establishes the aircraft in straight and level flight on the nominated reference point and altitude.

#### Action:

- (a) Nominate the configuration for the demonstration.
- (b) Nominate recovery at onset or stall (examiner's discretion).
- (c) Require the candidate to demonstrate power-on/flap configuration stalls, in the candidate's own time and place.
- (d) Place emphasis on checks, lookout and safe height.
- (e) Place emphasis on a standard recovery.
- (f) Observe the candidate's performance and determine that it meets the objectives.

Ra	Stalling in Power-on ConfigurationsRating7085100						
IXa	Not yet competent	/0	COMPETENT	_05	Ideal		
(1)	Neglects to do HASELL checks	(1)	Completes HASELL or HELL checks as required ( <b>critical element</b> )	(1)	Completes HASELL/HELL checks in accordance with the checklist		
(2)	Does not select an appropriate commencement altitude	(2)	Selects an appropriate reference altitude (critical element)	(2)	Selects an appropriate reference point and altitude		
(3)	Cannot select the aircraft configuration nominated for the stall	(3)	Selects the aircraft configuration nominated for the stall	(3)	Correctly selects the configuration nominated for the stall		
(4)	Slams throttle and/or neglects to correct yaw at all	(4)	Operates throttle smoothly, correcting yaw	(4)	Operates throttle smoothly, preventing yaw (entry and recovery)		
(5)	Does not recognise stall onset and permits the aircraft to stall ( <b>critical</b> <b>element</b> )	(5)	Selects carburettor heat to cold and recovers at onset or at the stall (examiner discretion)	(5)	Selects carb. heat cold prior to stall, recognises stall onset (nominated symptom or buffet), prompt recovery		
(6)	Does not reduce angle of attack, induces secondary stall or loses more than 200'	(6)	Reduces angle of attack and applies power ( <b>critical element</b> )	(6)	Promptly uses correct recovery technique (simultaneously reducing angle of attack and applying power)		
(7)	Does not use full power to minimise height loss	(7)	Applies full power and minimises the height loss to less than 100'	(7)	Applies full power and minimises the height loss to less than 50'		
(8)	Makes no attempt to re-establish straight and level flight	(8)	Returns to straight and level flight at the reference altitude	(8)	Promptly regains straight and level, returning to the reference heading and altitude		

#### **Stalling in Power-on Configurations**

# Task: Wing drop stalling

#### **Objective:**

To determine that the candidate;

- (a) Carries out HASELL checks prior to stalling and HELL checks between each stall (**critical element**).
- (b) Selects a suitable aircraft configuration for the stall.
- (c) Does not use aileron in the initial recovery (**critical element**).
- (d) Prevents further yaw with rudder.
- (e) Reduces angle of attack and minimises the height loss by the correct use of power (**critical element**).
- (f) Re-establishes the aircraft in straight and level flight on the nominated reference point or heading and altitude.

## Action:

- (a) Require the candidate to demonstrate a wing drop stall, in the candidate's own time and place.
- (b) Place emphasis on checks, lookout and safe height.
- (c) Place emphasis on the correct recovery technique.
- (d) Observe the candidate's performance and determine that it meet the objectives.

			Wing Drop Stalling		
Ra	ting Not yet competent	70	COMPETENT	85	100 100
(1)	Neglects to do HASELL checks	(1)	Completes HASELL/HELL checks (critical element)	(1)	Completes HASELL/HELL checks as required in accordance with the recommended procedure
(2)	Does not select an appropriate commencement altitude	(2)	Selects an appropriate reference altitude (critical element)	(2)	Selects an appropriate reference point and altitude
(3)	Cannot establish an appropriate configuration to induce a wing drop	(3)	Selects a suitable configuration for the stall	(3)	Selects a suitable configuration, so as to induce a wing drop stall
(4)	Uses full aileron in an attempt to pick up the down going wing or accidentally enters a spin ( <b>critical</b> <b>element</b> )	(4)	Initially prevents further yaw with rudder but also uses a small amount of aileron		
(5)	Does not reduce angle of attack and/or apply power to minimise the height loss	(5)	Reduces angle of attack and applies full power to minimises the height loss ( <b>critical element</b> )	(5)	Simultaneously reduces angle of attack, using sufficient rudder to prevent further yaw whilst maintaining ailerons neutral and applying full power to minimise the height loss
(6)	Makes no attempt to re-establish straight and level flight	(6)	Returns to straight and level flight at the reference altitude	(6)	Promptly regains straight and level flight, returning to the reference point or heading and altitude

# Task: Stalling in a steep turn

# **Objective:**

To determine that the candidate;

- (a) Carries out HASELL/HELL checks as required (critical element).
- (b) Selects a suitable aircraft configuration for the stall.
- (c) Recognises the indications of a stall and promptly recovers at onset or the stall (examiner discretion) by reducing the angle of attack and applying full power to minimise height loss.
- (d) Centralises aileron in the initial recovery (**critical element**).
- (e) Prevents further yaw with rudder.
- (f) Minimises the height loss by the correct use of power (**critical** element).
- (g) Re-establishes the aircraft in straight and level flight or (at examiner discretion) to continue the turn at a reduced angle of bank at the nominated reference altitude.

# Action:

- (a) Require the candidate to demonstrate a stall from a steep turn, in the candidate's own time and place.
- (b) Nominate recovery at onset or at the stall, with recovery to straight and level or to continue the turn (examiner's discretion).
- (c) Place emphasis on checks, lookout and safe height.
- (d) Place emphasis on the correct recovery technique.
- (e) Observe the candidate's performance and determine that it meets the objectives.

	Stall in a Steep Turn						
Ra	ting	70		85	100		
	Not yet competent	-	COMPETENT		Ideal		
(1)	Neglects to do HASELL checks	(1)	Completes HASELL/HELL checks as required ( <b>critical element</b> )	(1)	Completes HASELL/HELL checks as required in accordance with the recommended procedure		
(2)	Does not select an appropriate commencement altitude	(2)	Selects an appropriate reference altitude (critical element)				
(3)	Cannot establish an appropriate configuration to induce the stall	(3)	Selects a suitable configuration for the stall	(3)	Selects a suitable configuration, so as to facilitate a stall from a steep turn		
(4)	Does not recognise stall onset and permits the aircraft to stall ( <b>critical</b> element)	(4)	Initiates recovery at onset or at the stall (examiner discretion)	(4)	Clearly recognises stall onset (nominated symptom or buffet) and takes prompt recovery action		
(5)	Accidentally enters a spin or uses full aileron in an attempt to pick up the down going wing ( <b>critical element</b> )	(5)	Initially prevents further yaw with rudder but also uses a small amount of aileron				
(6)	Does not reduce angle of attack and/or apply full power to minimise the height loss or reduce the angle of bank	(6)	Reduces angle of attack, applies power to minimise the height loss and reduces the angle of bank ( <b>critical</b> <b>element</b> )	(6)	Simultaneously reduces angle of attack, ailerons neutral, using sufficient rudder to prevent further yaw, applies full power to minimise height loss and reduces angle of bank		
(7)	Makes no attempt to re-establish straight and level flight or an appropriate bank angle	(7)	Returns to straight and level flight or the turn (as briefed by the examiner) at the reference altitude	(7)	Promptly regains straight and level, returning to the reference altitude and heading or continues the turn at an appropriate bank angle (as briefed)		

## Task: Forced landing without power (critical task)

#### **Objective:**

To determine that the candidate;

- (a) Demonstrates situational awareness by quickly choosing the best available landing area for a forced landing without power (**critical element**).
- (b) Exhibits adequate knowledge of the recommended procedures, including the initial actions, to be used in the event of engine failure (above 1000') (critical element).
- (c) Maintains accurate control of the aircraft during all phases of the simulated emergency (**critical element**).
- (d) Maintains airspeed within  $\pm 5$  knots of the nominated glide speed.
- (e) Plans and follows a flight pattern to the selected landing area, considering altitude, wind, terrain, obstructions and other relevant factors so as to achieve the 1/3 aim point from 500' AGL (critical element).
- (f) Attempts to determine the reason for the simulated malfunction by following an appropriate emergency checklist (**critical element**).
- (g) Initiates the missed approach at the minimum safe altitude, or higher as directed by the flight examiner (**critical element**).

#### Action:

- (a) Simulate an engine failure at a suitable altitude (not below 1000' AGL) and determine that the candidate's performance meets the objectives.
- (b) Place emphasise on the candidate's timely choice of the most suitable landing area within easy gliding distance.

- (c) Place emphasis on the candidate's aircraft control, judgement, planning, checklist use and passenger handling during the simulated emergency.
- (d) Place emphasis on the candidate's ability to achieve the 1/3 aim point from 500' AGL at the first attempt.
- (e) Place emphasis on the candidate's termination of the simulated emergency procedure not below minimum safe height.
- (f) Place emphases on the candidate's go around procedure.

	Forced Landing without Power					
Ra	ting	70		85	100	
	Not yet competent		COMPETENT		Ideal	
(1)	Does not react to the simulated engine failure or panics or cannot make a decision on field choice	(1)	Demonstrates situational awareness by quickly choosing a suitable landing area ( <b>critical element</b> )	(1)	Rapidly chooses the most suitable landing area for the conditions	
(2)	Cannot recall or does not complete the recommended initial actions	(2)	Completes all initial actions ( <b>critical</b> element)	(2)	Reacts decisively and promptly completes all initial actions	
(3)	Seriously neglects aircraft control	(3)	Gives priority to aircraft handling (critical element)	(3)	Flys the aircraft accurately at all times	
(4)	Maintains $\pm$ 5 knots in excess of the nominated glide speed	(4)	Maintains an airspeed within $\pm 5$ knots of the nominated glide speed	(4)	Establishes and maintains the nominated glide speed accurately	
(5)	Fails to instigate or follow a plan of action at all, acts indecisively or could not achieve the 1/3 aim point from 500' AGL	(5)	Plans a course of action in accordance with recommended procedures and achieves a successful outcome ( <b>critical element</b> )	(5)	Plans and follows a course of action in accordance with the recommended procedure, manages the aircraft and passengers competently, and achieves a favourable outcome	
(6)	Does not carry out any emergency or partial power checks and/or fails to conduct engine warm/clear	(6)	Carries out emergency checks and partial power checks ( <b>critical</b> <b>element</b> ) warming/clearing the engine every 1000'	(6)	Uses the checklist to establish the cause of the simulated malfunction, checks for partial power and completes securing (touch) checks; smoothly warming/clearing the engine as appropriate to the conditions	
(7)	Descends below the minimum safe height	(7)	Initiates missed approach at minimum safe height ( <b>critical element</b> )	(7)	Initiates the missed approach so that safe height will not be breached	

#### **Forced Landing without Power**

#### Task: Forced landing with power (critical task)

#### **Objective:**

To determine that the candidate;

- (a) Recognises the conditions under which a precautionary landing is advisable (**critical element**).
- (b) Maintains accurate control of the aircraft during all phases of the simulated emergency (**critical element**).
- (c) Adopts the recommended aircraft configuration and procedure, considering altitude, wind, terrain, obstructions and other relevant factors (**critical element**).
- (d) Selects a suitable landing area for a forced landing with power within a reasonable time (**critical element**).
- (e) Initiates the missed approach at the minimum safe height, or higher as directed by the flight examiner (**critical element**).

#### Action:

- (a) Simulate an emergency that would require a precautionary landing (failing light, low and decreasing oil pressure, fuel or weather).
- (b) Nominate the simulated cloud base, visibility and daylight remaining or time constraint (as applicable, maximum 15 minutes).
- (c) Place emphasis on the candidate's accurate control of the aircraft and execution of the recommended procedure and determine that the objectives are met.
- (d) Place emphasis on the candidate's termination of the emergency procedure not below minimum safe height.

Forced Landing with Power					
Ra	ting Not yet competent	70	COMPETENT	_85	100 100
(1)	Does not react to the situation or panics	(1)	Reacts adequately and prevents escalation of a critical situation ( <b>critical element</b> )	(1)	Reacts promptly, decisively and appropriately to the situation
(2)	Seriously neglects control of the aircraft	(2)	Gives priority to correct aircraft handling ( <b>critical element</b> )	(2)	Flys the aircraft accurately at all times
(3)	Maintains an inappropriate aircraft configuration for the situation	(3)	Selects an appropriate configuration for the selection and inspection of suitable landing sites, in accordance with recommended procedures, with minimal deviations in altitude and airspeed ( <b>critical element</b> )	(3)	Selects the appropriate configuration and maintains exactly, the altitude, airspeed, and power settings appropriate to the recommended inspection configuration and flight phase
(4)	Chooses a completely inappropriate precautionary landing site when a more obvious suitable area is within easy reach	(4)	Selects a suitable precautionary landing site from those available ( <b>critical element</b> )	(4)	Rapidly selects the most suitable precautionary landing site from those available
(5)	Acts indecisively (critical element)	(5)	Achieves a successful and timely outcome (within 15 minutes)	(5)	Manages aircraft, passengers and crew in a competent manner to achieve a timely and favourable outcome
(6)	Descends below minimum safe height	(6)	Initiates the missed approach at minimum safe height ( <b>critical</b> <b>element</b> )	(6)	Initiates the missed approach at an altitude that ensures the minimum safe height will not be breached due to inertia during the go around

## Task: Descent

#### **Objective:**

To determine that the candidate is capable of;

- (a) Maintaining the nominated descent speed  $\pm 5$  knots.
- (b) Trimming the aircraft to maintain the descent attitude.
- (c) Maintaining the aircraft's engine temperatures and pressures within acceptable limits in accordance with the aircraft's flight manual and recommended procedures (**critical element**).
- (d) Clearing the flight path ahead of the aircraft by use of a recommended procedure (**critical element**).

#### Action:

- (a) Nominate the type of descent to be demonstrated.
- (b) Place emphasis on the candidate's demonstration of accurate airspeed and balance control.
- (c) Ensure the aircraft is trimmed accurately for the descent attitude.
- (d) Place emphasis on the candidate's monitoring and control of engine temperature.
- (e) Place emphasis on the candidate's procedure for clearing the flight path ahead of the aircraft.
- (f) Make allowance for airspeed fluctuations due to turbulence (but not excessively so).

Descent							
Ra	iting	708			100		
	Not yet competent	Not yet competentCOMPETENT			Ideal		
(1)	Maintains an airspeed in excess of $\pm 5$ knots of the nominated descent speed	(1)	Maintains the nominated airspeed within $\pm$ 5 knots	(1)	Maintains the nominated airspeed accurately		
(2)	Makes no attempt to trim the aircraft	(2)	Trims for the descent attitude	(2)	Trims accurately for the descent attitude (including rudder, if applicable)		
(3)	Would exceed engine limitations without examiner's intervention	(3)	Operates the engine within all limiting parameters ( <b>critical element</b> )	(3)	Operates the engine smoothly, precisely and prudently, within all limiting parameters at all times		
(4)	Fails to clear the flight path ahead of the aircraft using a recommended procedure, and would, if permitted, enter cloud or descend below MSA	(4)	Clears the airspace ahead of the aircraft regularly ( <b>critical element</b> )	(4)	Clears the airspace ahead and below the aircraft, in accordance with the recommended procedure and an obvious awareness of VMC and MSA restrictions		

#### Task: Descending turns

#### **Objective:**

To determine that the candidate is capable of;

- (a) Maintaining the nominated descent speed  $\pm 5$  knots at the nominated power setting.
- (b) Maintaining an angle of bank of 30 degrees  $\pm$  5 and balance within  $\frac{1}{4}$  ball deflection.
- (c) Maintaining the aircraft's engine temperatures and pressures within acceptable limits (**critical element**).
- (d) Clearing the flight path ahead of the aircraft by use of a recommended procedure (**critical element**).

#### Action:

- (a) Nominate the power setting and type of descent to be demonstrated.
- (b) Require the candidate to demonstrate a descending turn through at least 180° both left and right.
- (c) Place emphasis on the candidate's demonstration of accurate airspeed and balance control.
- (d) Place emphasis on the candidate's maintenance of an accurate 30 degree bank angle.
- (e) Place emphasis on the candidate's monitoring and control of engine temperature.
- (f) Place emphasis on the candidate's procedure for clearing the flight path ahead of the aircraft.
- (g) Make allowance for airspeed fluctuations due to turbulence (but not excessively so).

Descending Turns						
Rating		_70			100	
	Not yet competent		COMPETENT		Ideal	
(1)	Maintains an airspeed in excess of ± 5 knots of the nominated descent speed	(1)	Maintains the nominated airspeed within $\pm$ 5 knots	(1)	Maintains the nominated airspeed accurately	
(2)	Overbanks	(2)	Maintains 30 degrees angle of bank ± 5 degrees	(2)	Maintains 30 degrees angle of bank accurately	
(3)	Maintains in excess of ¼ ball deflection	(3)	Averages no more than <sup>1</sup> /4 ball deflection	(3)	Maintains accurate balance throughout	
(4)	Would exceed engine limitations without examiner's intervention	(4)	Operates the engine within all limiting parameters ( <b>critical element</b> )	(4)	Operates the engine smoothly, precisely and prudently, within all limiting parameters at all times	
(5)	Fails to clear the flight path ahead of the aircraft using a recommended procedure, and would, if permitted, enter cloud or descend below MSA	(5)	Clears the airspace ahead of the aircraft regularly ( <b>critical element</b> )	(5)	Clears the airspace ahead and below the aircraft, in accordance with the recommended procedure and an obvious awareness of VMC and MSA restrictions	

# Task: Steep gliding turns

#### **Objective:**

To determine that the candidate;

- (a) Enters, maintains, and exits from gliding turning manoeuvres with smooth and coordinated control applications.
- (b) Increases airspeed at bank angles in excess of 30 degrees (**critical** element).
- (c) Maintains situational awareness and orientation through lookout and the selection of a good reference point (**critical element**).

# Action:

- (a) Place emphasis on the candidate's lookout.
- (b) Place emphasis in the candidate's coordination during entry and roll out.
- (c) Require the candidate to enter a straight glide, enter a medium gliding turn, then increase the angle of bank to demonstrate a 45 degree angle of bank gliding turn through 180° both left and right.
- (d) Place emphasise on the candidates increase and control of airspeed through 30 degrees angle of bank.
- (e) Place emphasis on the candidate's procedure for clearing the flight path ahead of the aircraft.
- (f) Observe the candidate's performance and determine that it meets the objectives.

Steep Gliding Turns						
Ra	ting'	7085_	100			
	Not yet competent	COMPETENT	Ideal			
(1)	Fails to complete a lookout prior to entering the turn, or to maintain an adequate lookout during the turn	<ol> <li>Completes a lookout prior to entering the turn and maintains an adequate lookout throughout the turn (critical element)</li> </ol>	<ol> <li>Completes an excellent lookout prior to entering the turn and maintains it during, and on exit from, the turn</li> </ol>			
(2)	Rough, uncoordinated control applications	(2) Uses coordinated control movements (2 most of the time	<ol> <li>Uses smooth coordinated control movements at all times</li> </ol>			
(3)	Reduces airspeed (below glide speed) through 30 degrees angle of bank or allows airspeed to increase excessively	<ul> <li>(3) Increases airspeed passing through 30 degrees angle of bank (critical element)</li> </ul>	B) Increases airspeed passing through 30 degrees angle of bank and accurately stabilises airspeed at an appropriately (nominated) increased speed			
(4)	Excessively varies the bank angle during the turn	(4) Maintains the nominated angle of $(4)$ bank $\pm 5$ degrees	<ul> <li>Accurately maintains the nominated angle of bank throughout the turn</li> </ul>			
(5)	Maintains in excess of ¼ ball deflection	(5) Averages no more than <sup>1</sup> / <sub>4</sub> ball (5) deflection	5) Maintains accurate balance throughout			

# Task: Flap usage or sideslipping

#### **Objective:**

To determine that the candidate is capable of;

- (a) Correct operation and use of flap (**critical element**).
- (b) Maintaining airspeed within the required speed range for flap operation and use (**critical element**).
- (c) Carrying out a straight sideslip and whilst turning (if applicable to aircraft type).
- (d) Increasing the airspeed appropriate to the sideslip (**critical** element).

## Action:

- (a) Observe the candidate's use of flap or sideslip and determine that it meets the objective.
- (b) Place emphasis on airspeed control.
- (c) Only examine sideslipping as an individual exercise if it is applicable to aircraft type.

		Flap Usage or Sideslipping						
Ra	ting	70			100			
	Not yet competent		COMPETENT		Ideal			
(1)	Exceeds, or would exceed without the examiner's intervention, the maximum flap speed during their use or operation	(1)	Maintains airspeed within the flap operating range during their use or operation ( <b>critical element</b> )	(1)	Maintains airspeed safely within the flap operating range at all times during their use or operation			
(2)	Raises flap rapidly or without increasing power or airspeed	(2)	Increases power prior to raising flap progressively ( <b>critical element</b> )	(2)	Increases power prior to raising flap progressively, confirming an increasing airspeed and positive rate of climb prior to raising first stage flap			
(3)	Executes, or would execute without the examiner's intervention, a sideslip when sideslipping is prohibited by the aircraft's flight manual	(3)	Uses sideslip when appropriate	(3)	Uses sideslip when appropriate, avoiding full control deflection			
(4)	Allows the airspeed to decrease below the nominated glide or recommended speed for the sideslip procedure ( <b>critical element</b> )	(4)	Increases the nominated glide speed as the sideslip commences	(4)	Increases the airspeed appropriate to the manoeuvre and degree of sideslip being used			

### Task: Low flying in simulated poor visibility

#### **Objective:**

To determine that the candidate;

- (a) Enters the low flying area (if applicable) in accordance with recommended procedures.
- (b) Adopts the recommended poor visibility configuration when confronted with simulated poor visibility conditions.
- (c) Maintains altitude  $\pm$  50' and airspeed  $\pm$  5 knots whilst manoeuvring in the poor visibility configuration.
- (d) Limits the bank angle whilst turning in the poor visibility configuration to a maximum of 45°.
- (e) Is capable of carrying out (at examiner discretion) a coastal reversal turn and/or weather avoidance and/or restricted terrain and/or constant radius type turn in accordance with the recommended procedure.

#### Action:

- (a) Simulate conditions that would make adoption of the poor visibility configuration advisable.
- (b) Place emphasis on the candidate's altitude, airspeed and angle of bank control throughout all manoeuvres.
- (c) Simulate conditions that would require execution of a coastal reversal and/or weather avoidance and/or restricted terrain and/or constant radius type turn.
- (d) Observe the candidate's performance and determine that it meets the objectives.

_	Low Flying in Simulated Poor Visibility						
Ra	8	70		_85	100		
	Not yet competent		COMPETENT		Ideal		
(1)	Fails to carry out the necessary checks prior to entering the low flying area (if applicable)	(1)	Completes the necessary checks prior to entering the low flying area (if applicable)	(1)	Prior to entering the low flying area, completes all checks and inspections according to recommended practice		
(2)	Maintains an inappropriate aircraft configuration for the simulated conditions	(2)	Selects an appropriate configuration for the simulated conditions	(2)	Selects an appropriate configuration, in accordance with recommended procedures, for simulated conditions		
(3)	Maintains an airspeed, more than 5 knots in excess of the nominated configuration or manoeuvre speed, or permits airspeed to decrease whilst manoeuvring in the poor visibility configuration	(3)	Maintains airspeed within 5 knots of the nominated configuration or manoeuvre speed and does not permit any decrease in airspeed whilst manoeuvring in the poor visibility configuration	(3)	Establishes and maintains the nominated configuration airspeed accurately, increasing the airspeed and power appropriately, whilst manoeuvring in the poor visibility configuration		
(4)	Frequently exceeds $\pm$ 50 feet of the nominated altitude	(4)	Maintains the nominated altitude $\pm$ 50 feet	(4)	Accurately maintains the nominated reference altitude at all times		
(5)	Consistently or grossly exceeds the maximum bank angle (45 degrees)	(5)	Rarely exceeds the maximum bank angle by a maximum of 5 degrees	(5)	Accurately maintains the maximum bank angle (when required)		
(6)	Fails to instigate or follow the recommended procedure for a coastal reversal, weather avoidance, restricted terrain or constant radius turn (as applicable)	(6)	Executes the recommended procedure for a coastal reversal, weather avoidance, restricted terrain and/or constant radius turn (as applicable)	(6)	Executes the coastal reversal, weather avoidance, restricted terrain and/or constant radius turn in accordance with the recommended procedure, managing the aircraft competently		

# Low Flying in Simulated Poor Visibility

# Task: Joining the Circuit

#### **Objective:**

To determine that the candidate;

- (a) Completes the pre joining checks in accordance with the checklist and records the latest ATIS information where appropriate.
- (b) Obtains the necessary ATS clearances where appropriate (**critical** element).
- (c) Carries out the nominated circuit joining procedure in accordance with the recommended procedure or ATS requirements where appropriate (**critical element**).
- (d) Demonstrates situational awareness (critical element).

# Action:

- (a) Ask the candidate to demonstrate a standard overhead circuit joining procedure or alternative joining procedure and determine that the candidate's performance meets the objective.
- (b) Place emphasis on the candidate's compliance with circuit joining procedures and ATS clearances (if applicable).
- (c) Place emphasis on the candidate's situational awareness.

	Joining the Circuit						
Ra	8	70		85_	100		
	Not yet competent		COMPETENT		Ideal		
(1)	Does not carry out pre-joining checks	(1)	Completes pre-joining checks	(1)	Completes the pre-joining checks in accordance with the checklist		
(2)	Does not obtain ATIS when it is available and desirable	(2)	Obtains ATIS but does not record it	(2)	Obtains current ATIS and records all relevant details		
(3)	Does not obtain an ATS clearance or broadcast intentions, when applicable and required	(3)	Obtains an ATS clearance or broadcasts intentions, when applicable and appropriate ( <b>critical element</b> )	(3)	Obtains an ATS clearance or broadcasts intentions, when appropriate, in accordance with standard procedures		
(4)	Turns the wrong way and flys against the circuit direction or joins for an inappropriate runway	(4)	Carries out the nominated circuit joining procedure, for a suitable runway, in accordance with ATS instructions or the recommended standard procedure ( <b>critical element</b> )	(4)	Carries out the nominated circuit joining procedure in accordance with ATS instructions or the standard overhead joining procedure, in accordance with recommended procedures, entering the circuit at the correct height for a suitable runway, considering W/V and Group Rating System or aircraft flight manual		
(5)	Maintains an inadequate lookout or listen out, cutting in front of other aircraft in the circuit or causing a traffic conflict	(5)	Observes traffic in the circuit, keeping possibly conflicting traffic in any alternative circuit in sight and giving way to all traffic as required ( <b>critical</b> <b>element</b> )	(5)	Determines circuit traffic's position and sequences the aircraft to avoid a traffic conflict, giving way as appropriate		

## Task: Normal approach and landing

#### **Objective:**

To determine that the candidate is capable of;

- (a) Carrying out a normal approach and landing using flap as applicable.
- (b) Maintaining the nominated approach speed  $\pm 5$  knots.

#### Action:

- (a) Observe the candidate's demonstration of a normal approach and landing and determine that the candidate's performance meets the objective.
- (b) Place emphasis on a stabilised approach speed and profile.

	Normal Approach and Landing							
Ra	ting	70			100			
	Not yet competent		COMPETENT		Ideal			
(1)	Excessive convergence/divergence downwind, or maintains $\pm$ 50' in excess of circuit height		ys circuit pattern correctly and aintains circuit height $\pm$ 50'	(1)	Flys an accurate circuit pattern maintaining the correct circuit height			
(2)	Does not carry out pre-landing checks		ompletes pre-landing checks ritical element)	(2)	Completes pre-landing checks in accordance with the checklist			
(3)	Does not obtain an ATS clearance when required	(-)	btains an ATS clearance when quired ( <b>critical element</b> )	(3)	Obtains clearances when required, requesting an alternative if necessary			
(4)	Does not use full flap when appropriate	(4) Us	ses full flap when appropriate	(4)	Establishes a normal approach using full flap when appropriate			
(5)	Frequent airspeed variations in excess of $\pm$ 5 knots on final		faintains the recommended approach beed $\pm 5$ knots	(5)	Maintains the recommended approach speed accurately			
(6)	Fluctuates between or maintains a gross overshoot or undershoot		aintains an acceptable and steady pproach profile	(6)	Maintains a steady, optimum approach profile, to the round out			
(7)	Misjudges round out or touch down point and <b>does not</b> initiate a go-round ( <b>critical element</b> )		ontrols round out and touch down prrectly	(7)	Smooth, timely and correct control applications during transition from approach to round out and landing			
(8)	Does not maintain direction, or grossly misuses brakes after touchdown		aintains direction after touch down, ing brakes correctly	(8)	Maintains runway centre line throughout the landing, using brakes as required			

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# Task: Flapless approach and landing

#### **Objective:**

To determine that the candidate is capable of;

- (a) Nominating an appropriate approach and threshold speed (**critical** element).
- (b) Choosing a suitable runway with due regard to the nominated threshold speed.
- (c) Carrying out a flapless approach and landing, maintaining the nominated approach speed  $\pm 5$  knots.

# Action:

- (a) Observe the candidate's demonstration of a flapless approach and landing and determine that the candidate's performance meets the objective.
- (b) Place emphasis on a stabilised approach speed and profile.

Ra	ting	70	Flapless Approach and Landing	85	100
	Not yet competent		COMPETENT		Ideal
(1)	Does not nominate an increased approach and/or threshold speed	(1)	Nominates an appropriately increased approach and/or threshold speed for the approach and landing without flap ( <b>critical element</b> )	(1)	Nominates an appropriately increased approach and/or threshold speed in accordance with recommended procedures
(2)	Attempts to use an unsuitable runway	(2)	Nominates an appropriate runway with due regard to the increased threshold speed		
(3)	Frequent airspeed variations in excess of $\pm$ 5 knots on final approach	(3)	Maintains the nominated approach speed $\pm$ 5 knots	(3)	Maintains the nominated approach speed accurately and achieves the nominated threshold speed
(4)	Fluctuates between, or maintains a gross overshoot or undershooting approach profile	(4)	Maintains an acceptable and steady approach profile	(4)	Maintains a steady, optimum approach profile, to the round out
(5)	Misjudges round out or touchdown point and <b>does not</b> initiate a go-round ( <b>critical element</b> )	(5)	Controls round out and touch down correctly	(5)	Makes smooth, timely and correct control applications during the transition from approach to round out and landing
(6)	Uses brakes before lowering the nose wheel or grossly misuses brakes after touchdown	(6)	Lowers the nose wheel after touch down, using brakes correctly	(6)	Gently lowers the nose wheel after touch down, using brakes as required, maintaining the runway centre line throughout the landing

# **Flapless Approach and Landing**

# Task: Crosswind approach and landing (at Examiner discretion)

#### **Objective:**

To determine that the candidate is capable of;

- (a) Assessing the crosswind component and operating the aircraft up to its maximum demonstrated crosswind component.
- (b) Carrying out a crosswind approach and landing, maintaining the nominated approach speed  $\pm 5$  knots.

Note: Crosswind approach and landing is not an optional task for BFR

#### Action:

- (a) Require the candidate to estimate or determine the crosswind component for actual or hypothetical conditions.
- (b) If conditions permit, observe the candidate's demonstration of a crosswind approach and landing (up to the aircraft's maximum) and determine that the candidate's performance meets the objective.
- (c) Place emphasis on a stabilised approach speed and profile.

	Cross-wind Approach and Landing (at Examiner discretion)							
Ra	ting'	70		85	100			
	Not yet competent		COMPETENT		Ideal			
(1)	Excessive convergence/divergence on downward leg or final	(1)	Allows for drift so as to maintain the final approach track	(1)	Allows for drift so as to accurately maintain the final approach track			
(2)	Cannot estimate the crosswind component and/or gives no consideration to cross- wind component in relation to aircraft limitations	(2)	Determines or estimates (at examiner discretion) the crosswind component and considers aircraft limitations prior to approach ( <b>critical element</b> )	(2)	Accurately determines or estimates (at examiner discretion) the crosswind component and considers aircraft limitations downwind before making a sound decision to continue or abort			
(3)	Does not configure the aircraft appropriately, using reduced flap when appropriate	(3)	Establishes an appropriate approach configuration, using reduced flap when appropriate ( <b>critical element</b> )	(3)	Establishes an appropriate approach configuration, in accordance with recommended procedures			
(4)	Frequent airspeed variations in excess of $\pm 5$ knots on final	(4)	Maintains the nominated approach speed $\pm 5$ knots	(4)	Maintains the nominated approach speed accurately			
(5)	Fluctuates between, or maintains a gross overshoot or undershoot	(5)	Maintains an acceptable and steady approach profile	(5)	Maintains a steady, optimum approach profile, to the round out			
(6)	Misjudges round out or touchdown point and <b>does not</b> initiate a go-round ( <b>critical element</b> )	(6)	Controls round out and touch down correctly	(6)	Makes smooth, timely and correct control applications during the approach, round out and landing			
(7)	Does not correct for drift to touch down aligned with the runway	(7)	Corrects drift to touch down aligned with the runway ( <b>critical element</b> )	(7)	Corrects for drift, touching down aligned with the runway centre line			
(8)	Does not maintain direction after touchdown	(8)	Maintains direction after touch down (critical element)	(8)	Maintains centre line throughout, positioning controls correctly			

## **Cross-wind Approach and Landing (at Examiner discretion)**

# Task: Glide approach and landing (at Examiner discretion)

#### **Objective:**

To determine that the candidate is capable of;

- (a) Completing the forced landing without power, having achieved a point from which the aircraft could reach the 1/3 aim point from 500' AGL for the nominated field.
- (b) Demonstrating the procedures applicable to the aircraft type for modifying the touch down point, so as to touchdown between the threshold and the 1/3 aim point (**critical element**).

#### Action:

- (a) Nominate a glide approach on the downwind leg or earlier and permit the candidate to position the aircraft at the 1000' area in relation to the runway in use at the correct height and glide speed before closing the throttle fully.
- (b) Observe the candidate's demonstration of a glide approach to achieve the 1/3 aim point at 500' AGL.
- (c) Place emphasis on the candidate's ability to modify the touch down point from 500' AGL so as to land short of the 1/3 aim point.

Ra		Approach and Landing (at Examiner dis 70	
	Not yet competent	COMPETENT	Ideal
(1)	Maintains $\pm$ 5 knots in excess of the nominated glide speed	<ol> <li>Maintains an airspeed within ± 5 knots of the glide speed</li> </ol>	(1) Establishes and maintains the nominated glide speed accurately
(2)	Clearly could not achieve the 1/3 aim point from 500' AGL	(2) Could achieve the 1/3 aim point from 500' AGL	<ul><li>(2) Could easily achieve the 1/3 aim point from 500' AGL</li></ul>
(3)	Makes no attempt to reduce the touchdown point from the 1/3 aim point	<ul><li>(3) Uses flap to land short of the 1/3 aim point (critical element)</li></ul>	<ul><li>(3) Uses the recommended procedures (as applicable) for reducing the touchdown point from the 1/3 aim point to cross the threshold at or below 50'</li></ul>

#### Glide Approach and Landing (at Examiner discretion)

#### Task: Short field approach and landing

**Objective:** To determine that the candidate is capable of;

- (a) Carrying out an approach and landing into a field of minimal length, as determined by the use of performance charts or the Aircraft's Flight Manual, factored in accordance with AC91-3.
- (b) Modifying the approach and threshold speed for the conditions in accordance with recommended procedures and re-evaluating the advisability of continuing the approach.
- (c) Regulating the rate of descent with power to a pre-selected touch down point.
- (d) Nominating a decision point or height and progressively reducing airspeed to the nominated threshold speed, either at the threshold or the decision height which should be (for this demonstration) a maximum of 300' AGL.
- (e) Making an appropriate decision to continue or abort at the decision height or point (**critical element**).

Action: The examiner/instructor will;

- (a) Observe the candidate's demonstration of an approach to a simulated field of minimal length and the subsequent landing, and determine that the candidate's performance meets the objective.
- (b) Place emphasis on the candidate's assessment of an appropriate threshold speed for the conditions and the advisability of continuing the approach.
- (c) Place emphasis on a stabilised approach profile and achievement of the threshold target speed (Vtt).
- (d) Place emphasis on the candidate's decision making process approaching and/or at the decision height or point.

		Short Field Approach and Landing							
Ra	iting	70		85	100				
	Not yet competent	-	COMPETENT		Ideal				
(1)	Does not confirm sufficient runway length is available prior to landing	(1)	Confirms sufficient runway length is available prior to landing ( <b>critical element</b> )	(1)	Confirms sufficient landing distance is available through use of 'P' charts or flight manual prior to approach				
(2)	Does not modify the approach threshold speed for the conditions	(2)	Modifies the approach or threshold speed (Vtt) when conditions warrant	(2)	Modifies the approach and threshold speed for the conditions and makes a sound decision to continue or divert				
(3)	Does not configure the aircraft appropriately for the approach and landing, using full flap	(3)	Establishes an appropriate approach and landing configuration, using full flap	(3)	Establishes the appropriate configuration, using full flap in accordance with the flight manual				
(4)	Frequent airspeed variations, or threshold speed in excess of $\pm 5$ knots	(4)	Achieves threshold speed at 300' AGL and maintains it to the threshold within $\pm$ 5 knots	(4)	Smoothly reduces the approach speed and accurately achieves the threshold speed at the threshold				
(5)	Fluctuates between, or maintains a gross overshooting or undershooting approach profile	(5)	Maintains an acceptable, steady approach profile with power	(5)	Maintains a steady, optimum profile, controlling rate of descent with power application to the flare				
(6)	<b>Does not</b> initiate a go-round prior to the decision point or height when a landing is not assured	(6)	Initiates a go-round at the decision point or height when a landing is not assured ( <b>critical element</b> )	(6)	Makes an early decision to go-round if a landing cannot be assured				
(7)	Grossly misuses brakes, or gets airborne again after touch down	(7)	Uses brakes correctly	(7)	Uses brakes as required, maintaining runway centre line throughout				

# Short Field Annroach and Landing

# Task: Approach and go-round

#### **Objective:**

To determine that the candidate is capable of;

(a) Carrying out a go-round from below 50' in accordance with the recommended procedure.

## Action:

- (a) Brief the candidate to carry out a go-round during at least one approach (but preferably not the short field approach) from 50' or below and observe the candidate's performance to ensure it meets the objective.
- (b) Place emphasis on correct flap retraction, in accordance with the pilot's operating handbook and recommended procedures.
- (c) Place emphasis on tracking runway centre line.

	Approach and Go-round						
Ra	ting	70		_85	100		
	Not yet competent		COMPETENT	_	Ideal		
(1)	Does not recognise a situation which requires the execution of a go-round such that safety is compromised ( <b>critical element</b> )	(1)	Executes a go-round from below 50' as briefed	(1)	Identifies any situation requiring a go- round and promptly initiates the go- round without prompting		
(2)	Does not lead with power or slams the throttle ( <b>critical element</b> )	(2)	Leads with power (rapidly)	(2)	Smoothly and promptly leads with power, confirming carburettor heat off (cold)		
(3)	Raises flap rapidly	(3)	Raises flap progressively ( <b>critical</b> element)	(3)	Raises second stage flap progressively, and at a safe height, airspeed and positive rate of climb, raises first stage flap in accordance with the recommended procedure		
(4)	Grossly deviates from runway centre line	(4)	Tracks runway centre line	(4)	Accurately tracks runway centre line throughout the missed approach		

#### 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							
Rat	ting7		5100					
	Not yet competent	COMPETENT	Ideal					
(1)	The candidate's situational awareness is compromised and/or not applied to the operational situation (as simulated if applicable)	<ul> <li>(1) The candidate exhibits a competent level of situational awareness in relation to the operation (as simulated if applicable)</li> </ul>	(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	<ul><li>(2) The candidate exhibits a competent level of human factors in those factors relevant to the operation</li></ul>	(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	<ul> <li>(3) The candidate verbalises the decision making process and highlights any decision influenced by the operational environment</li> </ul>	(3) The candidate verbalises the decision making process with emphasis on any decision influenced by the operational environment					

# 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 at all times.

#### Action:

- (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.

Ra	ting	708	85100
	Not yet competent	COMPETENT	Ideal
(1)	Pays little attention to radio in high traffic density airspace	(1) Maintains an adequate listening watch	<ol> <li>Maintains a continuous listening watch, guarding the appropriate radio frequencies</li> </ol>
(2)	Communication style un intelligible on radio	(2) Communicates adequately by radio	<ul><li>(2) Uses a clear concise, and well modulated voice when communicating by radio</li></ul>
(3)	Adopts a non-assertive, excessively assertive or verbose communication style	(3) Communicates in an adequately assertive manner	(3) Communicates in an appropriately authoritative and assertive manner
(4)	Seldom uses correct aviation phraseology	(4) Uses correct aviation phraseology	(4) Uses correct aviation phraseology at all times

## Dedictolophony Tuning and Drocodures

# Task: Lookout (critical task)

#### **Objective:**

To determine that the candidate;

- (a) Maintains the correct scanning technique both on the ground and in the air for collision avoidance and separation from other aircraft (critical element).
- (b) Remains in VMC to comply with Visual Flight Rules (critical element).
- (c) Maintains situational awareness (critical element).

#### Action:

- (a) Observe the candidate's performance and determine that it meets the objectives.
- (b) Require the candidate to report on the position of other aircraft.

	Lookout						
Ra	nting	70		85	100		
	Not yet competent		COMPETENT		Ideal		
(1)	Lookout grossly deficient – examiner needs to intervene	(1)	Maintains an adequate lookout ( <b>critical element</b> )	(1)	Maintains a continuous and systematic lookout both on the ground and in the air		
(2)	Demonstrates a lack of knowledge in the application of VMC for VFR or would enter cloud without examiner intervention ( <b>critical element</b> )	(2)	Maintains marginal VMC in accordance with the minimum requirements for VFR	(2)	Maintains VMC to ensure VFR flight at all times		
(3)	Pays little attention to situational awareness with no idea of the relative position of other traffic	(3)	Maintains an adequate level of situational awareness ( <b>critical</b> element)	(3)	Maintains a high level of situational awareness by building a mental picture of the relative position of all traffic which may potentially affect the flight		

# Task: Flight orientation

#### **Objective:**

To determine that the candidate;

- (a) Demonstrates familiarity with airspace boundaries including control zones, VFR lanes and reporting points (**critical element**).
- (b) Can identify airspace boundaries and reporting points by use of map reading or local knowledge.

#### Action:

- (a) Observe the candidate's navigational procedures and determine that the candidate's performance meets the objectives.
- (b) Question the candidate to determine knowledge of local operating procedures.

Flight Orientation									
Rating		70		85	100				
Not yet competent		COMPETENT		Ideal					
(1)	Knowledge of local airspace deficient	(1)	Shows familiarity with airspace in the local area	(1)	Demonstrates thorough knowledge of the airspace boundaries, VFR lanes and reporting points of the local area				
(2)	Infringes controlled airspace	(2)	Does not infringe controlled airspace ( <b>critical element</b> )	(2)	At all times during the test remains orientated with no likelihood of unintentionally infringing controlled airspace				
(3)	Neglects compulsory VFR reporting reports	(3)	Uses VFR reporting points and makes compulsory position reports ( <b>critical</b> <b>element</b> )	(3)	Uses VFR reporting points and makes compulsory position reports correctly and punctually				

#### 

# Task: Pilot judgement (critical task)

### **Objective:**

To determine that the candidate;

(a) Demonstrates adequate pilot judgement skills (critical element).

# Action:

The examiner/instructor will;

(a) Observe the candidate's performance of pilot judgement and decision making in relation to aircraft operation and procedures and determine that the candidate's demonstration meets the objective.

Pilot Judgement									
Rating		70		85	100				
	Not yet competent		COMPETENT		Ideal				
(1)	Inadvertently exceeds, through carelessness or ignorance, or would exceed (without examiner intervention) the aircraft's performance limitations	(1)	Demonstrates sound judgement through operation of the aircraft within it's performance envelope ( <b>critical element</b> )	(1)	Demonstrates sound judgement through operation of the aircraft well within it's performance envelope at all times when there is no operational requirement to operate at the limits				
(2)	Fails to modify the taxi, take-off, manoeuvring and/or approach speeds appropriately for the conditions and/or is ignorant of the effects on aircraft performance of modifying recommended speeds	(2)	Demonstrates sound judgement for the conditions through the selection and appropriate modification of taxi, take-off, manoeuvring and approach speeds ( <b>critical element</b> )	(2)	Demonstrates sound judgement through the selection of appropriate taxi, take-off, manoeuvring and approach speeds for the conditions with a clear understanding of the performance and operational effects				
(3)	Immediately accepts and attempts to comply with all ATS clearances and/or instructions without consideration of operational requirements that may affect the safety of the aircraft	(3)	Demonstrates sound judgement through the assessment of ATS clearances and instructions ( <b>critical</b> <b>element</b> )	(3)	Demonstrates sound judgement through the assessment of ATS clearances and instructions before complying or rejecting as appropriate				
(4)	Fails to respond to in-flight situations that threaten the safety of the aircraft and/or makes ill-informed and/or ill- considered decisions in relation to flight safety	(4)	Demonstrates sound judgement when responding to in-flight situations ( <b>critical element</b> )	(4)	Demonstrates sound judgement when responding to in-flight situations by promptly and decisively managing the aircraft to maintain safe flight				