**Safety & Airspace Regulation Group** Flight Operations: Training Standards & Policy Group



# CAA Standards Document 3, Version 11

# CPL Skill Test (Aeroplanes) - Policy and Guidance for Applicants and Examiners

This Standards Document defines UK policy and means of compliance with (UK) Part FCL, Subpart D Commercial Pilot Licence (CPL) and the associated Appendices, Guidance Material and Acceptable Means of Compliance

CAA "examiners" is required to maintain a database of examiners' names and personal email addresses. If you change your email address, please ensure that you use the email address below to inform us of any changes. Simply enter your **CAA reference number** in the message field, and then send to examiners@caa.co.uk. Examiners are strongly advised to sign up to the SkyWise notification service to be advised of updates to CAA CAPs, CAA Standards Documents, TrainingCom, and application forms etc.

> All amendments to this document will be notified via SkyWise. The latest version of this document can be viewed on the CAA website.

#### Contents

#### Foreword

Changes to Version 11

#### **Glossary of Terms**

Part 1 General Information

#### Part 2 Preparation, Provision of Aeroplanes and Test Bookings

- 2.1 Flight Test Preparation
- 2.2 Provision of Aeroplanes
- 2.3 Test Bookings

#### Part 3 Conduct of the Test

- 3.1 Preview of events
- 3.2 Initial Briefing
- 3.3 Planning
- 3.4 Weather Minima
- 3.5 Main Briefing
- 3.6 The Flight
- 3.7 Post Flight Action

#### Part 4 Assessment Criteria and Administrative Procedures

- 4.1 Assessment Criteria
- 4.2 Administrative Procedures
- 4.3 Applicant's Appeal Procedure

#### Appendices

- Appendix 1CPL Skill Test Schedule and StandardAppendix 2CPL Skill Test Tolerances
- Appendix 3 Skill test Managing Stress

#### Foreword

This document provides guidance for applicants taking the CPL Skill Test for the grant of a Commercial Pilot Licence (CPL) (Aeroplanes). The information will help applicants prepare for the test, but it must be remembered that aspects mentioned here are of a general nature only and do not give precise details of every potential exercise or manoeuvre.

This document is intended as a reference document for pilots, instructors, and examiners, to explain the administrative procedures required to undertake the skill test for a CPL and to ensure that the way skill tests are conducted is standardised across the aviation community.

Nothing in this document is intended to conflict with the UK Aircrew Regulation or other UK statute law where applicable. Whilst every effort is made to ensure that all information is correct at the time of publication, the CAA reserves the right to amend this document as required to accommodate changes to the primary authority documents, to correct errors and omissions and to reflect changes in national policy and best practice.

The Civil Aviation Authority is the UK's competent authority responsible for the issue of pilot licences, ratings and certificates in accordance with the Aircrew Regulation (Regulation (EC) 1178/2011 as amended), and for the oversight of their implementation and use. In fulfilling this role, the UK CAA is required to provide oversight documentation, including standards documents, guidance material and acceptable means of compliance that may be used by relevant personnel and organisations to allow them to perform their tasks, discharge their responsibilities and establish compliance with the Basic Regulation.

This document and other Civil Aviation Authority (CAA) Standards or Guidance Documents are available on the CAA web site at: <u>www.caa.co.uk/standardsdocuments</u>. These may be downloaded without charge.

The CAA Scheme of Charges and application and report forms are also available from the website at <u>www.caa.co.uk</u>.

If, after reading this document, there are any queries or comment, please contact Flight Operations (ATO & FCL).

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# **Changes to Version 11**

The major change to Standards Document 3 V11 is administrative and reflects the fact that the UK is no longer a member of EASA. References to test series have been removed.

# **Glossary of Abbreviations and Terms**

AFM	Aircraft Flight Manual
AI or ADI	Attitude Indicator or Attitude Direction Indicator
AIC	Aeronautical Information Circular
AIP	Aeronautical Information Publication
AMC	Acceptable means of compliance
ANO	Air Navigation Order
APV	(Instrument) Approach with Vertical Guidance
ATC	Air Traffic Control
ATO	Approved Training Organisation
ATPL	Airline Transport Pilots Licence
CDFA	Continuous Descent Final Approach
CPL	Commercial Pilot Licence
CRE	Class Rating Examiner
CRE/IRR	Class Rating Examiner with Instrument Rating Revalidation/Renewal Privileges
CRI	Class Rating Instructor
CRM	Crew Resource Management
DA/H	Decision Altitude/Height
DD A/H	Derived Decision Altitude/Height
DTO	Declared Training Organisation
EASA	European Aviation Safety Agency
EFATO	Engine Failure After Take-off
EIR	En-Route Instrument Rating
FEM	Flight Examiners Manual
FE (CPL)	Flight Examiner Commercial Pilot Licence
FE (PPL)	Flight Examiner Private Pilot Licence
FI	Flight Instructor
FIE	Flight Instructor Examiner
FNPT or FNPT II	Flight Navigation Procedures Trainer
FOTI	Flight Operations Training Inspector (CAA Staff Flight Examiner)
FS or FFS	Flight Simulator or Full Flight Simulator
FSTD	Flight Simulation Training Device
GR	Ground Examiner
GPS	Global Positioning System
GM	Guidance Material
GNSS	Global Navigation Satellite System
HPA	High Performance Aeroplane
IFR	Instrument Flight Rules
ILS	Instrument Landing System
IMC	Instrument Meteorological Conditions
IR	Instrument Rating
IRE	Instrument Rating Examiner
IRI	Instrument Rating Instructor
LNAV	Lateral Navigation
LPC	Licensing Proficiency Check

LPV	Localiser Performance with Vertical Guidance
LST	Licensing Skill Test
MDA/H	Minimum Descent Altitude/Height
ME	Multi-Engine
MEP	Multi-Engine Piston Aeroplane
MP or MPA	Multi-Pilot or Multi-Pilot Aeroplane
OPC	Operator Proficiency Check
(UK) Part FCL	UK Aircrew Regulation - Annex 1 – Part-FCL
(UK) Part-NCO	UK Air Operations Regulation – Annex VII – Part-FCL
РОН	Pilot's Operating Handbook
Proficiency check	Demonstration of skill for the revalidation or renewal of a licence or rating including such oral examinations as may be required.
RNAV	Area Navigation
RNP	Required Navigation Performance
RT	Radiotelephony
RTO	Rejected Take-off
SE	Senior Examiner
SE (A)	Single-Engine
SEP	Single-Engine Piston Aeroplane
(UK) SERA	UK Standardised European Rules of the Air
SET	Single-Engine Turboprop Aeroplane
Skill Test	Demonstration of skill for the issue of a licence or rating
SP or SPA	Single-Pilot or Single-Pilot Aeroplane
SP HPCA	Single-pilot high-performance complex aeroplane
TEM	Threat and Error Management
TMG	Touring Motor Glider
TRE	Type Rating Examiner
VFR	Visual Flight Rules
VMC	Visual Meteorological Conditions
VNAV	Vertical Navigation

## **Editorial Convention**

Throughout these notes the following editorial practices and definitions shall apply:

- "Shall" and "Must" are used to indicate a mandatory requirement.
- "Expect" and "Should" are used to indicate strong obligation.
- "May" is used to indicate discretion.
- "Examiner" is used to indicate a person who holds a valid examiner authorisation certificate issued by the UK CAA.
- "Applicant" is used to indicate a person who is seeking the issue or renewal of a pilot's licence or rating.
- A Skill Test is a demonstration of skill for the initial licence issue, licence renewal, rating issue or rating renewal. Such tests include oral examination and flight test as appropriate.
- "He/She". The pronoun 'he' is used throughout for ease of reading.
- "Test" is used in this document to describe licensing skill tests and proficiency checks.

#### Part 1 - General Information

- 1.1 An applicant for the CPL Skill Test shall have received instruction in a single pilot aeroplane of the same class or type of aircraft to be used in the test. If all the pre-requisite training has been completed and additional testing requirements have been met (e.g. the written theoretical knowledge examination for a ME class rating or type rating), a successful CPL Skill Test will also satisfy the requirements for the issue, revalidation or renewal of the relevant class or type rating.
- 1.2 All relevant sections of the skill test shall be completed within 6 months. Failure to achieve a pass in all relevant sections of the test in two attempts will require further training. Further training may be required following any failed skill test. There is no limit to the number of skill tests that may be attempted.
- 1.3 The class/type rating issued following a successful CPL Skill Test will be valid for the period stated in Part-FCL, Subpart H.

#### Part 2 - Preparation, Provision of Aeroplanes and Test Booking

#### 2.1 Flight Test Preparation

#### 2.1.1 **Requirements**

It is important that applicants have acquired the prerequisite experience and completed all the theoretical knowledge and flight instruction required by Part-FCL, and as indicated in the approved syllabus, before test. A cancellation fee equivalent to the test fee may be charged by the CAA if a test (once booked) is cancelled due to the above requirements not being met. Likewise, applicants may expect examiners to charge an expense following travel for a test that is subsequently cancelled because the applicant's training is not complete, or they do not meet the experience requirements. It is strongly recommended therefore, that a test is only booked once all training is complete, and the applicant has a course completion certificate and recommendation for test from the ATO.

#### 2.1.2 Ground theoretical knowledge examinations and training

Applicants on modular training courses shall have passed the associated theoretical knowledge examinations before undergoing the skill test. Applicants on integrated training courses may undertake the CPL skill test (as a progress test) prior to completing the theoretical knowledge examinations. However, all the relevant theoretical knowledge instruction for the associated examinations shall have been completed.

2.1.3 An applicant for a CPL Skill Test shall be recommended for the test by the organisation responsible for the training once the training is completed. The training records shall be made available to the examiner. Applicants for a skill test must provide written evidence to the examiner that that they have been recommended for the test in accordance with Part-FCL.030 and the procedures at their ATO. This recommendation must be signed by the person making the recommendation, with the name and the date of the authorising signatory.

#### 2.1.4 Previous tests - SRG 2130 & SRG 2129

Applicants who have previously attempted the CPL Skill Test must produce to the examiner the previous Examiners' Report Forms (SRG 2130 and SRG 2129), which shows the items and sections failed and any further training requirement.

#### 2.1.5 Flight Simulation Training Devices (FSTDs)

Some approved courses may include training in flight simulation training devices. Applicants should be aware that each training device must have been approved for the course and be awarded a qualitative credit that specifies the maximum hours that applicants may claim towards their training.

#### 2.1.6 Medicals

Applicants must be in possession of a UK Class 1 medical certificate at the time of the test. The medical certificate shall be shown to the examiner. If the certificate is out of date, the examiner may still conduct the test, but the applicant should be aware that, regardless of the outcome, the licence will not be issued until the medical certificate is renewed.

#### 2.1.7 Multi-engine aeroplanes

Before taking the CPL skill test in a ME aeroplane, the applicant must either hold a ME class/type rating or have completed the training course specified in Part-FCL, Subpart H for the issue of such a rating.

2.1.8 Night Rating

Before taking the CPL skill test, the applicant must either hold a night rating or have completed the training course for the issue of a night rating.

#### 2.1.9 Flight Radio Telephony Operator's (FRTO) Licence

An applicant will be required to hold a FRTO licence or have passed the required practical and written examinations prior to attempting the CPL Skill Test.

#### 2.2 **Provision of Aeroplanes**

- 2.2.1 The applicant's Approved Training Organisation shall be responsible for ensuring that the aircraft used for test meets the appropriate requirements. On the day of the test, should the examiner determine that the aircraft is not fit for the purposes of the scheduled test (for example: unserviceable ancillary equipment, systems, instruments or radio navigation aids) the Head of Training should be informed and given every reasonable opportunity to rectify the issue. Where the issue cannot be rectified, or will result in an unreasonable delay, the examiner may elect to cancel the test. In these circumstances, all test fees may be forfeited and, when necessary, a new test booking will be required and will be subject to the appropriate fee(s). Where private aircraft are used, this paragraph still applies except that the owner/operator is responsible for ensuring the aircraft is suitable for use on test.
- 2.2.2 The CAA shall not be responsible for the provision of insurance for the applicant taking the CPL Skill Test. The aeroplane operator should maintain an insurance policy which adequately covers the aeroplane, applicant and the examiner during the conduct of the flight test and which complies with UK Law.

#### 2.3 Test Bookings

2.3.1 Applications for test must be made through the ATO conducting the training to Flight Test Bookings at Gatwick flighttestbookings@caa.co.uk . An examiner will be designated for each test: some applicants will be tested by CAA authorised examiners and some by a CAA FOTI (CAA Staff Flight Examiner). Once an examiner has been designated, it is assumed and expected that the applicant will be tested by this examiner. In exceptional circumstances, for example following a delayed test due to weather where the examiner is unable to accommodate the re-scheduled test, the CAA may designate a different examiner. Tests are normally arranged for a date as close as possible to the date of the application for a test but applicants will be expected to accept a delay where necessary. The fee for the CPL skill test is prescribed in the CAA Scheme of Charges which is available on the CAA website. Fees must be paid at the time of the booking.

#### Part 3 - Conduct of the Test

#### 3.1 **Preview of Events**

- 3.1.1 This section outlines those items that the examiner considers as he constructs the profile. Section 3.2 gives details of the contents of the Initial Briefing; Sections 3.3 and 3.4 describe the Planning and Weather considerations that are required. Sections 3.5 to 3.7 detail the Main Briefing, Flight and Debrief.
- 3.1.2 The CPL Skill Test will be conducted by a Flight Examiner (CPL) designated by the CAA and certified in accordance with (UK) Part-FCL. The examiner is required to complete each test in compliance with the required schedule and tolerances to achieve a meaningful, fair and valid assessment. The applicant will be given a clear and unhurried briefing and airborne direction so that he understands what is being asked of them.
- 3.1.3 Applicants will be assessed on all aspects of the operation. Sound basic handling skills are essential as well as threat and error management (airmanship), navigation, instrument flying,

correct R/T phraseology, cockpit checks and procedures and overall flight management. The examiner may elect to evaluate certain aspects by oral questioning.

- 3.1.4 The CPL Skill Test is divided into six main sections:
  - Section 1 Pre-flight Operations and Departure
  - Section 2 Airwork
  - Section 3 En-route procedures
  - Section 4 Approach and landing procedures
  - Section 5 Abnormal and emergency procedures
  - Section 6 Simulated asymmetric flight and relevant class or type items
- 3.1.5 All sections of the test are normally to be completed during one flight. The sequence of sections may vary depending on circumstances and the examiner's briefing will outline the expected profile. Examiners are responsible for ensuring an efficient test, but applicants must remain flexible, particularly if weather conditions, ATC requirements etc dictate a different scenario during the flight. Sections 5 and 6 may be combined, at the discretion of the examiner, with Sections 1 through 4. Applicants can expect the test to last between 90 minutes and 2 hours 30 minutes.
- 3.1.6 The CPL Skill Test is very demanding. It is appreciated that even the most 'professional' or 'talented' pilots can make mistakes. This does not necessarily mean that a failure should result.
- 3.1.7 The following notes reflect the style and sequence of the briefing that the applicant may expect to hear. However, the examiner may make variations in the delivery of the briefing and may have to modify the sequence in which items are briefed and flown.

#### 3.2 Initial Briefing

- 3.2.1 The purpose of the initial briefing is to check that the applicant has completed the necessary training and meets the prerequisite experience requirements. Additionally, it establishes the aim of the flight. At this stage examiners should try to generate a sense of purpose, i.e. that the applicant is preparing for a commercial, passenger carrying flight. The examiner should also check that the applicant is familiar with the building's facilities, fire escape etc; and has full access to all the planning resources that will be required. This briefing will normally take about 15 minutes.
- 3.2.2 At the pre-arranged time, the examiner will meet the applicant. A check will be made to ensure that the applicant has the necessary equipment and documentation including:
  - Pilot licence with aeroplane rating (if applicable) and personal flying logbook (including evidence of any further training if this is not the first attempt).
  - Training Records
  - A UK Class 1 medical certificate. This need not be current, but the applicant should be advised that the licence will not be issued without a valid medical certificate.
  - A form of photo identity; e.g. a valid passport, photo driving licence or UK Forces ID card.
  - A course completion certificate and recommendation for test from the ATO.
  - A current copy of the ATO's Operations Manual.
  - Current aeroplane documents as required by (UK) Part-NCO.GEN.135 (Documents, manuals and information to be carried).
  - Two headsets most examiners will carry their own headset, but a spare unit should be available for the flight.
  - Two copies of the ATO's current aeroplane check list.
  - Suitable view limiting device(s) to simulate IMC for those manoeuvres to be flown by sole reference to instruments.
  - Current publications for the routing and airfields.
  - Planning material including a blank flight log, map, and navigation equipment.
  - Any relevant CAA correspondence such as a letter of assessment or further training requirements.
- 3.2.3 The examiner will outline the content of the skill test, which includes the route and any other airfields to be used. The navigation route will be chosen to give a leg time of at least 20 minutes.

- 3.2.4 The examiner will give his weight plus the weight of any bags intended to be taken on board the aircraft so that the applicant may complete mass and balance calculations and performance planning.
- 3.2.5 When the applicant is clear about the format for the flight, he will be given time to complete the necessary planning and pre-flight preparation, normally 45 60 minutes depending upon the circumstances. The examiner will specify the time to meet for the main briefing.

#### 3.3 Planning

- 3.3.1 Appropriate planning facilities should be available at the ATO, or aerodrome flight planning facility. The examiner will check that the applicant is aware of the planning resources available. A quiet briefing room should be used so that the planning can be completed without interruption or distraction.
- 3.3.2 Planning shall be completed without assistance from other pilots or instructors.
- 3.3.3 Current ATC, Met and NOTAM information shall be obtained from an appropriate source and retained for inspection by the examiner.
- 3.3.4 A flight log must be prepared, and the examiner may require a copy. The log must include such items as:
  - Route (including flight to the planned alternate aerodrome).
  - Communication and navigation aid frequencies (note that where this information is clearly displayed elsewhere, such as the charts to be used, it is not necessary to copy that information to the log).
  - Planned operating levels and altitudes.
  - Timings, ETA, revised ETA and ATA.
  - Minimum Safe Altitudes.
  - A fuel plan showing fuel required for the flight, useable fuel plus any contingency fuel. There should be space for the applicant to log fuel remaining at various points throughout the flight.
  - Space for logging ATIS and ATC clearances/instructions in a chronological order.
- 3.3.5 The route may require flight through airspace other than Class G airspace and consideration should be given to any special precautions during planning.
- 3.3.6 Computerised flight/navigation plans or aeroplane performance and mass and balance calculations may be used during the allowed planning period. However, the applicant should expect to be questioned on the process underlying the calculations. The applicant remains solely responsible for all planning calculations howsoever derived.
- 3.3.7 Applicants will be required to calculate take-off and landing performance for the conditions prevailing. The applicant is expected to apply any additional factors that would be required for a flight in accordance with Commercial Air Transport (Part-CAT) requirements. Consideration should be given for the most limiting runway expected at the base or alternate airfields, and the applicant will be expected to explain to the examiner how the performance calculations plus any additional factors were derived.

#### 3.4 Weather Minima

3.4.1 The pre-flight preparation for the CPL Skill Test requires the applicant to assess the weather conditions and make a sound decision whether to proceed with the flight. In arriving at this decision, the applicant must consider the requirements of all sections of the test. The applicant is required to conduct the flight in accordance with the visual flight rules (VFR) and to maintain Visual Meteorological Conditions (VMC) throughout. Notwithstanding this, and at the examiner's discretion, it may be appropriate to conduct some aspects of the flight in Instrument Meteorological Conditions (IMC) and in accordance with the Instrument Flight Rules: for example, to climb through a layer of cloud to VMC on top to complete visual air-work manoeuvres. Where this is the case, it must be made clear that the aircraft is being operated in accordance the privileges of the examiner's licence and ratings. Appropriate hood, visor or

goggles will be used to simulate IMC for those Sections/items of the test which are required to be flown by sole reference to instruments.

- 3.4.2 Applicants shall comply with published aerodrome operating minima in accordance with (UK) SERA, or the minimum weather conditions specified in the ATO's Operations Manual. Whenever the actual and forecast conditions are better than the minimum conditions specified in the Operations Manual, the applicant will normally be expected to proceed with the test. However, when extreme conditions such as high wind speed, severe turbulence, icing or thunderstorms exist, the examiner may determine that this would make the flight difficult to assess and may override the applicant's willingness to proceed. The flight should not proceed if all planned sections cannot be achieved, or the forecast would prevent a return to base or a suitable alternate aerodrome.
- 3.4.3 Awareness of potential or actual engine and airframe icing conditions must be displayed and the applicant should be able to use correctly any anti/de-icing equipment fitted to the aeroplane. ATO's must ensure that operating procedures are established for any aeroplane anti/de-icing equipment. The aeroplane must not be flown deliberately into icing conditions if this is contrary to the aeroplane flight manual.

#### 3.5 Main Briefing

- 3.5.1 Once the applicant has completed the flight planning, the examiner will give a comprehensive briefing covering all aspects of the flight. Throughout the briefing, the examiner will ask questions to establish the applicant's knowledge and understanding of the privileges of a commercial pilot. The applicant should ask questions at any time if unclear about any aspect of the test. This briefing will normally take approximately 30 minutes. The examiner may not always brief in the sequence below but will ensure to cover all the relevant items.
- 3.5.2 The briefing will include:

#### a. The purpose of the flight

The purpose of the flight is for the applicant to demonstrate the ability to plan and conduct a Commercial Air Transport Flight (simulated) whilst acting as pilot-in-command and operating as a single crewmember. The briefed profile shall be conducted in VMC, and the flight will include simulated abnormal or emergency procedures, weather avoidance and general instrument and visual flying manoeuvres. Passenger safety and comfort must be considered throughout the flight. The applicant must assume that the examiner is a passenger who cannot provide any assistance with decision making or operating the aircraft. Notwithstanding this, the examiner will act as the safety (lookout) pilot when the applicant is flying by sole reference to instruments and will assume responsibility for ATC liaison and Navigation at certain points in the flight.

#### b. The applicant's responsibilities

The applicant is responsible for all the duties and decisions necessary for the safe and practical conduct of the flight, in accordance with the privileges of a commercial pilot licence holder and current legislation. The applicant is responsible for ATC liaison and compliance and should assume that ATC instructions always take precedence over any manoeuvres briefed by the examiner prior to the flight. The examiner will only intervene if necessary for flight safety or to ensure completion of the test requirements.

c. Check lists

Throughout the flight the applicant will be expected to use the aeroplane checklist and operate in accordance with ATO (company) SOPs. Unless briefed otherwise, the applicant is to assume that the aircraft is on its first flight of the day and checks should be conducted accordingly. Airborne checks may be completed from memory but must be in accordance with the checklist.

#### d. Planning check

The examiner will assess the applicant's ability to check the appropriate aeroplane documents before flight, including servicing and airworthiness certificates, defect logs etc. He will expect to be briefed by the applicant on the forecast and actual weather conditions and overall suitability of the prevailing conditions for the planned flight. The examiner will check the flight navigation log and may take a photocopy. He may question the applicant on

any aspect of the planning, for example: choice of operating altitudes, safety altitudes (heights), fuel planning and the interpretation of NOTAM information. The applicant's calculations of the aeroplane's mass and balance and performance (take-off, climb, cruise, approach and landing) will be assessed.

#### e. The Profile

The examiner will go through the flight, item by item, explaining to the applicant what is required and asking questions as appropriate to check knowledge and understanding. To avoid repetition, the briefed items are expanded at paragraph 3.6 - "The Flight". The examiner will not instruct the applicant on **how** to fly or manage the flight but will advise what is required and what will be assessed. Conditions, such as when navigation aids, autopilot, GPS etc may be used, will be covered. Procedures for the use of view limiting devices will be advised, including a reminder that, when these are in use, the examiner will be responsible for lookout.

#### f. Aeroplane control

The aeroplane must be operated in accordance with the AFM or POH, as appropriate, and the operating procedures should follow those specified in the ATO Operations Manual. The examiner will require confirmation of the various speeds and configurations to be used at each phase of flight. During the navigation section, a representative power setting and cruise speed for the aircraft should be used as per commercial aviation practice; however, speeds may be adjusted to meet different conditions or circumstances and the examiner must be advised of the new target speed at that time.

#### g. Emergencies and abnormal conditions

The examiner will discuss the actions, roles and responsibilities should any actual emergency or abnormal condition occur during the flight. In general, the applicant is to control, assess, and manage any abnormal situation or emergency. The examiner, as aeroplane commander, may elect to take control at any stage.

#### h. Simulated Emergencies

See also paragraph 3.6.12. The examiner will brief on how simulated abnormal, or emergency procedures will be introduced. In general, these should be "scenario based". The examiner will describe the symptoms of a system failure, aircraft fault or simulated emergency and the applicant will be expected to work through an appropriate set of checks or procedures and decide upon an appropriate course of action to either resolve the situation or contain it whilst a safe recovery is made to a suitable airfield. The examiner may terminate the emergency/abnormal procedure at any time, but not normally before the applicant has demonstrated a sound decision making process that would likely have led to a safe outcome.

#### i. Oral questioning

The examiner will ask practical questions relating to the flight on subjects such as aeroplane performance and technical aspects, icing procedures, emergency handling and the aeroplane documents.

3.5.3 The examiner may stop the test at any stage if he considers that the applicant's demonstration of skill and/or knowledge requires a complete retest.

#### 3.6 The Flight

3.6.1 Use of the aeroplane checklists, airmanship, control of the aeroplane by external visual reference, anti-icing/de-icing procedures, and principles of threat and error management will be assessed in all sections.

#### 3.6.2 **Pre-Flight Operations and Departure (Section 1)**

The applicant will be observed carrying out a pre-flight inspection of the aeroplane (either a full "A check" or transit check) and can expect to be questioned on any aspect of the check and the servicing operations that he is entitled to carry out as a commercial pilot. The applicant will be expected to proceed with the check at a practical pace and with reference to the checklist. Expanded checklists are not permitted. Pre-flight checks should also include functional checks of the radio, navigation equipment, autopilot, and any of the other installed equipment that the applicant proposes to use during the flight. The Examiner must be briefed, as a passenger, as required by the ANO 2016 Article 73(1) and AMC1 (UK) Part-NCO.OP.130. The applicant must instruct the Examiner in the emergency actions which he should take. Use of passenger briefing cards are acceptable, but the examiner may ask questions.

Although a commercial pilot would not normally give a "take-off safety brief" to a passenger the applicant is expected to verbalise such a brief to the examiner. The applicant must be prepared to deal with actual or simulated abnormal or emergency procedures at any stage. The examiner may simulate, for example, an engine fire during start-up.

When ready for departure, the applicant should assess the crosswind component and confirm this to the examiner. The departure should comply with any instructions given by ATC.

#### 3.6.3 The En-route Procedures (Section 3)

The navigation part of Section 3 is usually flown after departure to ensure an efficient flow to the flight. During this section, the aeroplane is assumed to be on a passenger carrying operation under Visual Flight Rules. The first navigation leg should normally be planned in the most expeditious manner from the departure airfield to the planned destination unless airspace restrictions, published departure procedures or good airmanship dictates otherwise. Once the applicant has established the aeroplane at cruising altitude, cruising speed and on a steady heading for the first leg, he should confirm this to the examiner. Any subsequent changes should be advised to the examiner - for example, "2 minutes late at my halfway point, my revised ETA is now...." The applicant is expected to navigate by maintaining a steady drift-corrected heading and taking occasional position fixes to assess progress. Any changes to heading to correct track deviations, or revisions to ETA are expected to be logged such that the flight can be reconstructed after the event. Numerous heading, time or altitude changes that are the result of poor navigation technique (e.g. feature crawling) or the inability to trim the aircraft may constitute a fail in this section. Radio navigation aids may not be used during the first leg of the en-route section. However, they may be tuned and identified in anticipation of use later in the flight.

At or before the first destination, the applicant will be instructed to carry out a diversion directly (unless airspace restrictions or good airmanship dictates otherwise) to an alternative destination or airfield. Although this is not an emergency procedure, planning and execution of the diversion should be carried out in an expeditious manner. A prominent alternative destination or airfield approximately 10 to 15 minutes flying time away will be pinpointed on the applicant's chart. The applicant may be asked to commence the diversion at or before the original destination. Use of the autopilot during the diversion planning process is not permitted. The applicant should nominate the heading, altitude and ETA for the diversion and again use recognised techniques and position fixing to navigate to the second destination.

During the diversion leg the applicant may supplement visual navigation techniques with the use of ground or space-based navigation information. GNSS raw data including latitude and longitude, or range and bearing to/from a waypoint to plot a fix, may be used, but moving map displays or the use of a "direct to" facility will not be permitted to track to the destination. If navigation aids are used, the applicant will be assessed on their correct use (i.e. select, identify, display).

During the legs to the first destination and to the diversion destination the applicant is responsible for maintaining VMC. Should the applicant consider that the prevailing weather conditions would make continuing en-route inadvisable, he must make that decision and should formulate a plan to bring the aircraft back to base or to another suitable airfield. The examiner will then discuss with the applicant whether any other sections of the test can be completed.

Demonstration of radio aid tracking in VMC will be required at some stage during the flight; the examiner will decide when to ask for this exercise to ensure efficient use of time and airspace. He will nominate the facility to be used and the track to be intercepted and maintained either towards or away from the facility. This item requires the demonstration of satisfactory skill in heading selection and drift assessment; therefore, it must be completed using an RMI, RBI, HSI or CDI display. This is a visual flying exercise using radio aids to assist navigation.

#### 3.6.4 General Airwork (Section 2)

At some stage during the test, the examiner will simulate that the weather is deteriorating (lowering cloud, reduced visibility etc) along and to either side of the planned track. Shortly after this he will erect the screens and/or ask the applicant to don the hood/visor/goggles to simulate inadvertent entry into Instrument Meteorological Conditions (IMC).

The applicant will be expected to maintain control of the aeroplane and take prompt, appropriate action to continue the flight in IMC whilst attempting to regain VMC. The applicant is expected to indicate any additional considerations such that the safe recovery of the flight to VMC is never in doubt. These considerations include, but are not limited to, awareness of the proximity of terrain, the selection of appropriate safe operating altitudes, consideration of icing, awareness of the proximity of controlled airspace, obtaining an appropriate level of service and assistance from ATC and appropriate use of navigation aids for orientation and position awareness.

Depending on the location and actual weather conditions prevailing, the examiner may accept a verbal briefing from the applicant on some of the actions he intends to take. This may be appropriate if, for example, a climb or turn would put the aircraft into actual IMC or infringe controlled airspace. The applicant should not anticipate this; however, he will be expected to initiate such actions and manoeuvre the aircraft as intended until directed otherwise.

The applicant will then be briefed to fly the instrument air-work items. This is a safety module to ensure competence in instrument flight should a period in IMC become unavoidably protracted. The examiner will be responsible for lookout, ATC liaison and navigation.

Full Panel (FP): Flight by reference to full panel instruments will include to level flight in the cruise configuration, climbing and descending turns with 10°-30° bank and recoveries from unusual attitudes.

Radio-aids Fix (Section 3): The examiner will indicate a heading and altitude to maintain and brief the applicant to take a position fix. The autopilot shall not be used during this item. The applicant must demonstrate the correct use of appropriate facilities to plot a fix on his chart and enter details of it in the flight log. The fix shall be made using a combination of range and/or bearing information from one or more of the following facilities: VDF, VOR, NDB, DME. If none of these aids are available, GPS may be used, but only to obtain range and/or bearing from a waypoint. If GPS is used, the applicant must demonstrate correct selection, identification and display of a facility at some other stage of the test, e.g. during the tracking exercise.

Limited Panel (LP): Where no standby turn coordinator/needle and/or magnetic compass is fitted, this item may be conducted using whatever standby instruments are available to the pilot following a failure of the primary attitude and heading reference. Flight by reference to limited panel instruments will include straight and level flight at given speeds, level turns onto given headings at rate one and recovery from unusual attitudes to trimmed straight and level flight with minimum loss or gain of height.

On completion of all the instrument air-work, and the IMC fix, the examiner will remove the screens or ask the applicant to remove the hood/visor/goggles and will confirm their location. The applicant will be responsible for lookout and collision avoidance throughout the remainder of the flight.

#### 3.6.5 Visual Airwork

The examiner will remind the applicant of the visual airwork exercises to be flown. During the visual airwork the examiner, although ultimately responsible for ATC liaison and navigation, will brief the applicant to operate in an area bounded by prominent landmarks pointed out by the examiner. The applicant will be expected to display appropriate airmanship and take due account of wind and weather conditions to position the aircraft and demonstrate the exercises. The applicant is still responsible for lookout and maintaining VMC. The unrestricted use of navigation aids including GPS will be permitted if required to aid situational awareness throughout this section.

The following items will be flown:

• Straight and level flight at various airspeeds and configurations. Climbing and descending at various speeds and rates including best angle (V<sub>X</sub>) and best rate (V<sub>Y</sub>). Flight at critically low airspeeds and slow flight manoeuvres.

Note: Slow flight requirements may be assessed during one or more of the following exercises:  $V_X$  climb, steep gliding turns (SE only), approach to and recovery from the stall, achievement and recovery from Critical Speed (ME only) and low-level bad visibility circuit. The applicant may also be briefed to demonstrate items such as the  $V_X$  and  $V_Y$  climbs at more representative stages of the flight, for example by climbing at  $V_X$  after take-off or going around from the forced landing to simulate an obstacle clearance manoeuvre.

- Turns, including turns in landing configuration; steep turns at not less than 45° bank, steep turns in a gliding configuration (SE aeroplanes only).
- Flight at critically high airspeeds (approaching V<sub>NE</sub>) and recognition of, and recovery from, spiral dives. These manoeuvres are often combined; the examiner may put the aeroplane into a steep spiral dive with speed increasing rapidly then hand control to the applicant to initiate appropriate recovery action. Generally, this should be to straight and level flight with the emphasis being on avoiding excessive loads on the airframe, particularly any tendency to roll and pull simultaneously.
- Recognition and recovery from stalls. A series of stalls will be required, and the examiner will brief the sequence of these both pre-flight and in the air.
  - Normally the first stall will be in the clean configuration, entered from straight and level flight, with the throttle(s) closed. The applicant is to recover on his own initiative when the aircraft has reached the stalled flight condition<sup>1</sup>.
  - The second stall will be from an approach configuration, with approach flap setting gear down and low power. The stall should be initiated from a turn (level or slightly descending with between 20° and 30° bank angle) and the applicant should recover at the first indication of a stall<sup>2</sup>.
  - The third stall will be in the landing configuration with full flap, gear down, and low power. The stall should be initiated from straight flight in a slight descent as if established on final approach to land (i.e. not climbing); the applicant should recover at the first indication of a stall<sup>2</sup>.
  - All recoveries should be using the SSR technique with minimum loss of height and returning to a clean climb configuration at V<sub>Y</sub> maintaining directional control, or to level flight as otherwise directed by the examiner.

Note<sup>1</sup>: A stalled flight condition can exist at any attitude and airspeed, and may be recognised by at least one of the following:

- a) continuous stall warning activation (if fitted and serviceable)
- b) buffeting, which could be heavy at times;
- c) lack of pitch authority and/or roll control; and
- d) inability to arrest the descent rate

Note<sup>2</sup>: First indication of a stall means the initial aural, tactile or visual sign of an impending stall, which can be either naturally or synthetically induced.

After any period where the examiner has been responsible for navigation and ATC liaison, he is to ensure that the applicant is made aware of the position of the aircraft relative to any controlled airspace and airfields, and the ATC service provider and level of service before handing full responsibility for the flight back to the applicant. The examiner must ensure that adequate time is available for the applicant to complete any necessary duties for the next briefed event; as a guide 10 minute prior to entering an ATZ should be sufficient. If the remaining distance is less than this, the aircraft should not be left on a closing heading at the time of handover.

#### 3.6.6 Approach and Landing Procedures (Section 4)

This section should normally be flown at an alternate aerodrome nominated by the examiner before the flight. If circumstances dictate that the circuits should be flown at the base aerodrome, at least a join and one approach should be flown at an alternate airfield. Applicants will be responsible for ATC liaison and will be expected to carry out a safe and expeditious join to the circuit, using any practical navigation means available. This involves entry to the most convenient point in the circuit, or as directed by ATC, with the aeroplane in the appropriate configuration and at the correct speed. The Autopilot may be used while setting up the join. Applicants will be expected to carry out several approaches and landings (usually 'touch and go' landings) involving the following:

- Normal landing.
- Cross wind landing (when practical).
- Go around from a low height/altitude.
- Short field or Performance landing. This may be combined with a bad visibility/low level circuit as part of the assessment of low-speed handling. To assess this exercise, the examiner may specify a simulated cloud-base and limit the amount of runway available.
- Approach and landing without the use of power (glide approach SE aeroplanes only). The examiner may limit the amount of runway available.
- Approach and landing without the use of flaps (flapless).
- Post flight action. The applicant will be responsible for after-landing checks, taxying and parking, shut down checks, making the aircraft safe and the completion of aeroplane documentation.

#### 3.6.7 Abnormal and Emergency Procedures (Section 5)

The items of this section may be combined with Sections 1 through 4. The examiner will simulate an abnormal situation or emergency whereupon the applicant is expected to carry out the appropriate alternate/emergency actions and manage the flight accordingly. If drills involve the operation of fuel shut off valves, mixture controls, magnetos or any other critical engine or system control, operations should be simulated by "touch actions" only. If it's appropriate that ATC are aware that the applicant is operating under simulated abnormal or emergency conditions, the applicant should transmit a practise or simulated urgency call, for example, "Exam XX, down-wind, simulated asymmetric to land." Otherwise, it is acceptable that emergency radio calls are simulated in the cockpit. Nevertheless, the applicant is expected to state to the examiner, word for word, what would have been transmitted in the real case and not paraphrase. Applicants should not assume that any practice emergency or abnormal situation is complete until either a conclusion is reached or indicated by the examiner. The examiner may ask oral questions on abnormal and emergency operations. This section will include:

- Simulated engine failure after take-off (EFATO).
- Fire drill.
- Engine malfunctions.
- Equipment malfunctions.
- Practice Forced landings (PFL SE aeroplanes only).

For SE aeroplanes, the applicant will be expected to fly a forced landing pattern following a simulated engine fire, engine mechanical failure or complete/partial engine failure due to some other factor such as fuel starvation, carburettor icing or a faulty magneto. On occasion, it may also be appropriate to give a scenario where the engine is still running but delivering reduced power, or with signs of low oil pressure or overheating, such that the applicant must decide whether to shut down the engine and, if so, when. In any case, examiners should vary the causes of failure to ascertain that applicants are trained to recognise and manage the likely causes of full and partial engine failures and to manage the event safely. The applicant will be expected to nominate the chosen landing area and continue as if to land until told, to go-around by the examiner. It is assumed that the aircraft will be landed with the wheels down unless specifically briefed otherwise by the applicant.

#### 3.6.8 Simulated Asymmetric Flight (Section 6 items a. to e.)

Items a, b, c, d and e are applicable to ME aeroplanes only. These items may be combined with Section 1 or 4.

- Simulated engine failure after take-off (EFATO). At a safe height after take-off the examiner
  will simulate an engine failure by closing one of the throttles. The applicant is expected to
  retain control of the aeroplane, identify the 'failed' engine and carry out the appropriate
  engine shut down and propeller feathering procedures using touch drills. On completion of
  these drills, the examiner will be responsible for setting zero thrust and the management of
  the (simulated) failed engine.
- Asymmetric approach and go around. The applicant is expected to carry out a circuit to goaround under asymmetric power from his asymmetric committal altitude/height.
- Asymmetric approach and full stop landing. The applicant is expected to carry out a circuit to land under asymmetric power.
- Engine shutdown and restart. The applicant is required to carry out an actual engine shutdown and restart (ME aeroplanes only). This should be conducted in the aircraft. However, at the discretion of the examiner and after considering all factors including limitations imposed or advised by the aircraft manufacturer plus an assessment of threats and potential hazards, it may be conducted in an appropriately qualified FFS or FNPTII (see 3.6.10 below).
- ATC liaison and compliance, RT procedures and airmanship.

Applicants using a centreline thrust ME aeroplane will be expected to complete items a to d of this section on one engine but will not, obviously, be under asymmetric power. If a class rating is issued as the result of a successful skill test on such an aeroplane, it will be restricted to centre-line thrust aeroplanes only.

#### 3.6.9 Relevant Class or Type Items (Section 6 items f & g)

The items in this Section apply to all aeroplanes and may be combined with Sections 1 through 5. Applicants will be expected to show competence in the operation of systems such as the autopilot, pressurisation, de-icing and anti-icing, where fitted.

At either the start or the end of the flight the applicant will be required to perform a rejected take-off. The examiner will liaise with ATC to achieve this. Shortly after the applicant starts his take-off run, the examiner will announce some form of emergency, such as low oil pressure; the applicant will be expected to discontinue the take-off and bring the aeroplane smoothly to a halt using all of the remaining runway without harsh use of the brakes; any appropriate touch drills should be completed and any radio calls should be made 'in cockpit' to the examiner.

At the end of the flight the examiner may ask oral questions relevant to the aeroplane used for the test.

#### 3.6.10 Flight Simulator or Flight & Navigation Procedure Trainer

With Reference to Appendix 4 of Part-FCL, the following items may be performed in an FSS or FNPT II.

- Airwork (Section 2) items c and e (iv)
- Abnormal and Emergency Procedures (Section 5) all items
- Simulated Asymmetric Flying (Section 6) all items

The FFS or FNPT II can be used when the following conditions are met:

- a) The FNPTII must be qualified and approved in accordance with CS-FSTD(A) and Part-ORA.FSTD; it must represent the aircraft used for test and must accurately simulate the yawing moment, performance and trim changes of that aircraft associated with feathering and un-feathering a propeller in flight.
- b) The engine shutdown and restart item of the skill test must still be completed in the aeroplane but may be simulated by "touch drill".
- c) The applicant must either:
  - i) present to the examiner evidence\* that engine shutdown and restart procedures have been previously completed in an FNPTII to the satisfaction of a CRE (ME) or FE CPL (ME); or,
  - ii) be tested by the examiner on engine shutdown and restart procedures in an FNPTII before or after all other sections and items of the CPL(A) skill test schedule have been completed in the aircraft.

\* The CAA will accept an entry in the applicant's training records, logbook or recommendation for test, signed by the examiner who observed satisfactory completion of the item in the FNPT II. The entry must include the qualification reference number of the FSTD used.

This alleviation can only be used where the ATO course approval includes the use of a qualified FNPTII and the FNPTII meets the requirements of paragraph 3.6.10 (a) above. If these conditions are not met, the engine shutdown and restart must be completed in the aeroplane during the applicable skill test.

#### 3.7 **Post Flight Action**

- 3.7.1 Post-flight, the examiner will state the result of the test and conduct a debriefing to discuss the applicant's performance. Examiners may ask questions in order to clarify certain items or actions.
- 3.7.2 Notification of the result will be given on the Examiner Report forms SRG 2130 and SRG 2129 (if required). The forms will show the result of each item and section. Should the result be a Partial Pass or Fail, the examiner will explain the reasons for the failed item or items, retest requirements and any further training required, and give advice on how to improve upon those aspects of the test that were unsatisfactory. The applicant will be asked to sign the forms as having understood the result. The forms will be copied and distributed as required.
- 3.7.3 Appendix 1 gives a list of the criteria upon which examiners base their assessment. The criteria are arranged to reflect the order of items listed on the Examiner Report form SRG 2130.
- 3.7.4 Should an applicant have cause for concern about the *conduct* of the flight test, reference should be made to the Regulation 6 appeals procedure printed on the Examiner Report form. Details of the appeal procedure are given at Part 4.3.

#### Part 4 - Assessment Criteria and Administrative Procedures

#### 4.1 Assessment Criteria

- 4.1.1 The flight will be assessed as a simulated Commercial Air Transport flight. The safety and comfort, reassurance and briefing of passengers must be considered. The applicant shall:
  - Operate the aeroplane within its limitations.
  - Complete all manoeuvres with smoothness and accuracy.
  - Exercise good judgement and airmanship.
  - Apply aeronautical knowledge of procedures and regulations as they currently apply.
  - Always maintain control of the aeroplane in such a manner that the successful outcome of any flown procedure or manoeuvre is never seriously in doubt.
  - Demonstrate sound non-technical skills including the recognition and management of threats and errors.
- 4.1.2 Throughout the flight the aeroplane should be flown as accurately as possible. The limits for operation are given as guidance to applicants but do not necessarily indicate that a 'failure' will result if any tolerance is exceeded. Similarly, flight within the tolerances should not be achieved at the expense of smooth and co-ordinated techniques.
- 4.1.3 The examiner will make allowance for adverse weather conditions such as turbulence and the handling qualities and performance of the aeroplane used. The CPL Skill Test Tolerances shown at Appendix 2 are for general guidance.

#### 4.2 Administrative Procedures

- 4.2.1 In order to achieve a full pass, an applicant shall pass all the relevant sections of the skill test.
- 4.2.2 If any item in a section is failed, that section is failed. Failure in more than one section will require the applicant to take the entire test again.

- 4.2.3 An applicant failing only in one section shall repeat the failed section. Additionally, the applicant will be expected to carry out the actions necessary to put the aircraft in a position from which the failed section can be retested. Failure in any section of the retest, including those sections that have been passed on a previous attempt, will require the applicant to take the entire test again.
- 4.2.4 Further training may be required following any failed skill test. There is no limit to the number of skill tests that may be attempted. Failure to achieve a pass in all relevant sections of the test in two attempts will require further training.
- 4.2.5 An incomplete test may be awarded if the applicant discontinues the flight and the reasons for doing so are agreed by the examiner or if the examiner deems any part of the flight unassessable. To complete an incomplete test, the applicant will be required to fly only those sections or items not previously flown and assessed; these items must be completed before the overall result of the flight can be determined. No further fee is due (i.e. it is a free re-test) as the applicant has already paid the full test fee. However, if the applicant terminates the test for reasons considered inadequate by the examiner, he may forfeit the test fee and a further fee will be required before the next test.
- 4.2.6 Should an applicant fail the full test on 2 occasions, the examiner should notify Flight Test Bookings using flighttestbookings@caa.co.uk. The flight test booking cell may elect to designate a CAA FOTI (CAA Staff Flight Examiner) to conduct any subsequent tests.
- 4.2.7 After achieving a partial pass or failing a test with a particular examiner, the applicant may elect not to fly any re-test with the same examiner.
- 4.2.8 All relevant sections of the skill test shall be completed within 6 months. A new recommendation for test is required if all sections have not been completed within 6 months. Notwithstanding the previous statement, applicants for a CPL skill test credited with the Part-FCL training requirements that have not received training at an ATO, do not require a course completion certificate or recommendation for test.

### 4.3 Applicant's Appeal Procedure

4.3.1 The test forms (SRG 2129 and SRG 2130 (reverse)) contain an extract from the Civil Aviation Authority Regulations 1991, which is reproduced below:

Regulation 6(5) of the Civil Aviation Regulations 1991 provides as follows:

Any person who has failed any test or examination which he is required to pass before he is granted or may exercise the privileges of a personnel licence may within 14 days of being notified of his failure request that the Authority determine whether the test or examination was properly conducted. To succeed with an appeal, the applicant will have to satisfy the CAA that the examination or test was not conducted properly; mere dissatisfaction with the result will not be enough.

Should the applicant have concern about the conduct of the IR or EIR Skill Test they should refer to CAP 1049 (July 2020) – Guidance for Applicant: Review of conduct of test or exam. Regulation 6 of the Civil Aviation Authority Regulation 1991 and, if necessary, contact the CAA in writing to either: OGCMailbox@caa.co.uk or:

General Counsel and Secretary to the Civil Aviation Authority 5<sup>th</sup> Floor Westferry 11 Westferry Circus London E14 4HD

### Appendix 1 - CPL Skill Test Schedule and Standard

#### **Applicants' Notes**

These notes are intended to give applicants a detailed account of the exercises that are required in each section. The headings used relate to those shown on form SRG 2130. In the interests of openness, the standards to which applicants are assessed have also been included and these are shown in *italics*. It is emphasised that during the skill test applicants should concern themselves only with flying and operating the aeroplane to the best of their ability. The application of the test standards is the responsibility of the examiner.

#### **Examiners' Notes**

These guidance notes are published to establish the test standard required for the UK CPL Skill Test. Any flight test can only be a 'snapshot' of a pilot's ability. Therefore, to ensure overall pilot competence, Flight Instructors at an ATO are expected to use these standards when preparing applicants for the test. The applicant for a CPL Skill Test must exhibit a significantly higher level of knowledge and skill than is required for the PPL Skill Test. The examiner must apply the standards evenly and fairly and without prejudice.

#### **Section 1 – Departure**

#### a. Pre-flight:

- Check all documents required for a Commercial Air Transport flight are carried and correct.
- Complete mass and balance schedule.
- Obtain and assess all elements of the prevailing and forecast weather conditions.
- Obtain and assess all aeronautical information and NOTAM.
- Complete an appropriate flight navigation log and chart.
- Determine that the aeroplane is correctly fuelled for the flight.

#### b. Aeroplane inspection and servicing:

- Check aircraft servicing certificates and technical log.
- Perform all elements of the aeroplane pre-flight inspections as detailed.
- Confirm that the aeroplane is in a serviceable and safe condition for flight.
- Check and complete all necessary documentation.

#### c. Taxying and Take-off:

- Complete an appropriate passenger emergency procedure briefing.
- Complete all required taxying checks and procedures.
- Comply with airport markings and signals.
- Follow ATC instructions.
- Complete all departure checks and drills including engine operation.
- Obtain ATC departure clearance.
- Confirm any aeroplane performance criteria including crosswind condition.
- Position the aeroplane correctly for take-off and advance the throttle(s) to take off power with appropriate checks.
- Use the correct take off technique using the recommended speeds for rotation/lift-off and initial climb.
- Ensure a safe climb and departure adjusting power and aeroplane configuration as appropriate.
- Complete all necessary after take-off checks.

#### d. Performance considerations & trim:

- Before flight, calculate expected aeroplane performance figures to include factors for slope, surface, contamination, wind, etc, considering current and forecast weather conditions, and ensure they are corrected for actual conditions before take-off.
- Maintain the aeroplane in trim.

#### e. Aerodrome and traffic pattern operations:

- Use of charts or other published information as required.
- Execute a safe departure in accordance with ATC clearance and with due regard for other air traffic.

#### f. Departure procedure, altimeter setting, collision avoidance (Lookout):

- Use correct lookout techniques.
- Observe the Rules of the Air and ATC Regulations.
- Maintain directional control and drift corrections throughout.
- Follow any noise routing or departure procedures and ATC instructions.
- Complete all necessary climb checks.

#### g. ATC Liaison - compliance RTF procedures, Airmanship:

- Demonstrate standard RTF procedures and phraseology.
- Demonstrate compliance with ATC instructions.
- Operate on the ground and in the air with particular regard for passenger safety and comfort.

#### Section 2 – Airwork

#### a. Control of the aeroplane by external visual reference:

- Demonstrate control by visual attitude whilst maintaining a correct lookout technique.
- Demonstrate correct techniques for visual flight manoeuvring within the specified limits.
- Maintain balance and trim.
- b. Flight at critically low airspeed including recognition of, and recovery from, incipient and full stalls:

#### Slow Flight:

- Consider all safety checks before the manoeuvres where necessary.
- Select and stabilise the aeroplane at a nominated low airspeed above the stall speed whilst maintaining balance, trim and lookout. Maintain specified altitude/level, heading and speed as specified by the examiner.
- Maintain safe bank angles, speed, and altitude (if required) during turning and complete turns onto specified headings.

#### Stalling:

- Consider safety checks before stalling.
- Establish the stall entry as appropriate from straight or turning flight and select the required aeroplane configuration.
- Maintain heading (or bank angle 10°-30° as required) to stall entry.
- Recognise the stalled condition and approach to the stall and initiate the correct recovery action as directed by the examiner.
- Recover with minimum height loss and return to a clean configuration climb at Vy.
- Complete all necessary checks and drills.
- Maintain lookout throughout.

#### c. Turns, including turns in landing configuration:

- Demonstrate the correct lookout technique before, during and after turns.
- Establish and maintain throughout the turn the nominated altitude/level and speed. Coordinate the entry to steep turns to achieve at least 45° bank and maintain the turn through at least 360 degrees.
- Co-ordinate the recovery from turns to straight and level flight on the specified heading or as appropriate without loss/gain of height.

- Whilst gliding demonstrate awareness of increased stalling speed in manoeuvre (not ME aeroplanes).
- d. Flight at critically high airspeed including recognition of, and recovery from, spiral dives:
  - Recognise the manoeuvre and initiate prompt and correct recovery action.
  - Continue recovery action without exceeding any aeroplane limitations.
  - Recover with minimum height loss.
  - Complete all necessary checks and drills.

#### e. Flight by reference solely to instruments including:

- Level flight, cruise configuration, control of heading, altitude and airspeed.
- Climbing and descending turns with 10°-30° bank.
- Recoveries from unusual attitudes, limited panel instruments, turns.
- Demonstrate competence at manoeuvring the aeroplane by sole reference to the flight instruments as specified by the examiner.
- Use an appropriate technique of instrument scanning and cross checking to maintain flight within the prescribed limits.
- Establish rate one level turns onto specified headings using limited panel instruments.
- Execute recovery on limited panel instruments from unusual attitudes with minimum height loss, applying the correct recovery techniques within aeroplane limitations, to return the aeroplane to stabilised level flight.
- Maintain the aeroplane within the prescribed limits throughout.
- Complete all necessary checks and drills and general cockpit management.

#### f. ATC liaison-compliance, RTF procedures. Airmanship:

During Section 2 the examiner will be responsible for most of the ATC liaison and navigation but this does not absolve the applicant from taking responsibility for the management of the flight. The examiner will be responsible for lookout (collision avoidance) when the IF screens, hood or goggles are in place. The applicant will be responsible for lookout (collision avoidance) and for making due allowance for weather conditions at all other times.

#### Section 3 – En-route Procedures

- a. Control of aeroplane by external visual reference including cruise configuration and consideration of range/endurance:
  - Control aeroplane using visual attitude flying techniques.
  - Configure airframe and engine(s) for cruise/endurance performance in accordance with Flight/Operations Manual.
  - Adjust and monitor fuel consumption for range or endurance as appropriate.

#### b. Orientation, map reading:

- Identify position visually by reference to ground features and map.
- c. Altitude, speed, heading control, lookout:
  - Maintain the heading height and speed as computed in navigation log or advised to the examiner within the prescribed limits.

#### d. Altimeter setting, ATC liaison - compliance, RTF procedures, Airmanship:

- Set and cross check altimeters to QNH, RPS, Standard pressure setting, or QFE as specified in checklist, Ops Manual or as appropriate.
- Maintain two-way RTF communications using correct phraseology throughout.
- Obtain ATC clearances and appropriate level of service.

- Comply with ATC clearances and instructions when required.
- Display sound airmanship and cockpit management.
- Complete all necessary checks and drills.
- e. Monitoring of flight progress, flight log, fuel usage, assessment of track error and reestablishment of correct tracking:
  - Complete all elements of VFR planning for the route prescribed with particular reference to planned altitudes and safe levels of operation.
  - Maintain a navigation log and radio log by recording all pertinent information such that the whole route may be reconstructed, if necessary, after flight.
  - Navigate by means of calculated headings, ground speed and time.
  - Make appropriate adjustment to maintain, regain or correct back to track.
  - Achieve destinations or turning points within 3 minutes of estimated time of arrival (ETA).

#### f. Observations of weather conditions, assessment of trends, diversion planning:

- Demonstrate correct understanding and application of the VFR.
- Amend plan to avoid deteriorating weather and maintain VMC or consider discontinuing navigation route if unable to maintain VMC.
- Calculate heading, ground speed, ETA and fuel required during any unscheduled diversion.
- Take prompt, appropriate action to continue the flight safely following inadvertent entry into IMC.
- Demonstrate correct understanding and application of the IFR (as applicable to flight in UK airspace) e.g. minimum altitude/level and, where appropriate, correct cruising levels.

# g. Tracking and positioning (NDB or VOR) identification of facilities (simulated instrument flight). Implementation of diversion plan (Visual flight):

- Select and identify appropriate radio and navigation aids as required or nominated by examiner.
- Intercept and maintain given tracks or radials using the navigation aids nominated (under VFR).
- Navigate by means of calculated headings, ground speed and time.
- Maintain the heading height and speed as computed in navigation log or advised to the examiner within the prescribed limits.
- Locate and record the aeroplane position by using radio navigation equipment when required by the examiner (under simulated instrument flight).

#### Section 4 - Approach and Landing

- a. Arrival procedures, altimeter setting, checks, lookout:
  - Carry out appropriate checks and drills.
  - Set altimeters and cross check in accordance with check list, Ops Manual or as required.
  - Comply with published arrival procedure or clearance.
  - Maintain adequate lookout and collision avoidance.

#### b. ATC liaison and compliance, RTF procedure, Airmanship:

- Obtain and comply with ATC clearances using correct RTF phraseology.
- Adjust circuit pattern/speed to maintain spacing with other traffic in the landing pattern.
- Maintain awareness of other traffic through RTF and lookout.

#### c. Go-around action from low height:

• Execute a timely decision to discontinue the approach either when instructed or as considered necessary.

- Apply appropriate power and control aeroplane attitude to initiate a safe climb maintaining balance and heading.
- Adjust configuration and speed to achieve a positive climb at Vy or Vx as appropriate.
- Maintain take off power until a safe manoeuvring altitude is reached and then adjust to a normal climb configuration and speed.
- Complete all necessary checks and drills.

#### d. Normal landing, crosswind (if suitable conditions):

Standard for all types of approach and landing.

- Consider weather and wind conditions, landing surface and obstructions.
- Plan and follow the circuit pattern and orientation with the landing area.
- From the circuit pattern establish the recommended aeroplane approach configuration adjusting speed and rate of descent to maintain a stabilised approach.
- Select and achieve the appropriate touchdown area at the recommended speed.
- Adjust descent and round out (flare) to achieve a safe landing with little or no float with appropriate drift and crosswind correction.
- Maintain directional control after touchdown and apply brakes for a safe roll out.
- Complete all necessary checks and drills.
- e. Short Field Landing.
- f. Approach and Landing with idle Power:

**Note:** Not required if flight test is conducted in a ME aeroplane.

- g. Landing without use of flaps.
- h. Post Flight Actions:
  - Complete all after landing checks and drills.
  - Return aeroplane to parking area and complete engine shutdown.
  - Secure aeroplane and complete documentation.

#### Section 5 - Abnormal and Emergency Procedures

Items from this section may be performed in sections 1 to 4.

#### a. Simulated engine failure after take-off (at a safe altitude), fire drill:

- Execute emergency drills as 'touch drills' without error (see section 3.6.11).
- When time permits, investigate possible cause of engine failure and take corrective action.
- Plan and execute further actions to ensure safe recovery of aeroplane, passengers and crew.

# b. Equipment malfunctions including: alternative landing gear extension; electrical failure; brake system failure:

- Execute abnormal or emergency drills with reference to abnormal/emergency check list where available.
- Demonstrate an appropriate decision-making process to manage the situation.
- Plan and execute further actions to ensure safe recovery of aeroplane, passengers and crew.

#### c. Forced landing (simulated) - SE aeroplanes only:

• Choose a suitable landing area with due regard for landing surface, surroundings and wind velocity.

- Plan descent to achieve a safe approach to chosen landing area such that a safe landing would be likely.
- Carry out checks and drills.
- d. ATC liaison: compliance, RTF procedures, Airmanship:
  - Make suitable emergency RTF calls (given to examiner but not transmitted).
  - Inform ATC of practice emergency exercise and assistance required (where appropriate).
  - Analyse emergency or abnormal situation and formulate appropriate plan.
  - Use check list to confirm actions when time permits.
- e. Oral Questions.

#### Section 6 - Simulated Asymmetric Flight and Relevant Class and Type Items

Items a. to e. of this section are only required if the flight test is conducted in a ME aeroplane (not centre line thrust). Items f to g apply to all aeroplanes. Items from this section may be performed in Sections 1 to 5.

- a. Simulated engine failure during take-off and approach (at a safe altitude unless carried out in a flight simulator or FNPT II):
  - Maintain control of aeroplane direction and speed following simulated engine failure.
  - Identify failed engine.
  - Complete checks and drills.
  - Establish safe climb at VYSE in trim.

#### b. Asymmetric approach and go-around:

- Fly a visual circuit with asymmetric power to establish a final approach.
- Maintain a stable (trimmed) approach in the correct configuration.
- Make a clear decision to land/go-around at or before appropriate asymmetric committal Altitude/height (ACA/H).
- At ACA/H or earlier if instructed, carry out a go-around to establish a safe climb in the recommended configuration at V<sub>YSE</sub>.

#### c. Asymmetric approach and full stop landing:

- Fly a visual circuit with asymmetric power to establish a final approach.
- Maintain a stable (trimmed) approach in the correct configuration.
- Make a clear decision to land at ACA/H.
- Execute a safe landing at the recommended speed/configuration in the appropriate landing area.

#### d. Engine shutdown and restart (if applicable):

- Control aircraft in heading, altitude, speed and balance during full engine shut down at safe altitudes, carry out appropriate drills and checks.
- Control aircraft heading, height and speed during re-start drills according to check list and re-establish aircraft to symmetric cruising flight.

#### e. ATC liaison: compliance, R/T procedures, Airmanship:

- Inform ATC of abnormal flight condition and any assistance required.
- Comply with ATC procedures and instructions.
- Adjust traffic pattern with due regard to weather, surface conditions, obstructions. and other air traffic.
- Adjust configuration and circuit pattern regarding aeroplane performance.
- Complete necessary checks and drills.

# f. As determined by the Flight Examiner - any relevant items of the class/type rating skill test to include, if applicable:

- Aeroplane systems including handling of autopilot.
- Operation of pressurisation system.
- Use of de-icing and anti-icing system.
- Demonstrate ability to operate aircraft systems as applicable.
- Rejected take off (at a reasonable speed).
- Safely bring the aircraft to a halt on the runway following a simulated emergency during the initial part of the take-off run without harsh use of the brakes.

#### g. Oral questions:

• Demonstrate knowledge of maintaining, operating and limitations of the aeroplane used for the flight test.

# Appendix 2 - CPL Skill Test Tolerances

The following is an extract from the Flight Examiners Manual. Tables for PPL and IR Skill Tests are included for comparison.

(Figures in Italics are National requirements where no FCL guidance is given).

PROFILE	PPL Skill Test	CPL Skill Test	IR Skill Test				
Altitude or Height							
Normal Flight	± 150 ft	± 100 ft	± 100 ft				
With simulated engine failure	± 200 ft	± 150 ft	± 100 ft				
Limited or partial panel		± 200 ft	± 200 ft				
Starting go-around at decision altitude / height			+ 50 ft / - 0 ft				
Minimum descent altitude / height			+ 50 ft / - 0 ft				
Circling minima			+ 100 ft / - 0 ft (SE +100ft/-0ft)				
Tracking							
All except 3D approach	± 10°	± 5°	± 5°				
3D approach			half scale deflection azimuth and glidepath				
Heading							
All engines operating	± 10°	± 10°	± 5°				
With simulated engine failure	± 15°	± 15°	± 10°				
Limited or Partial panel		±15°	±15°				
Speed							
Take-off / V <sub>R</sub>	+10 /- 5 kt	+ 5 kt	+ 5 kt				
Climb and approach	± 15 kt	± 5 kt	± 5 kt				
VAT / VREF	+ 15 / -5 kt	+ 5 kt	+ 5 kt				
Cruise	± 15 kt	± 10 kt	± 5 kt				
Limited or Partial Panel	N/A	± 10 kt	± 10 kt				
With simulated engine failure	+ 15 / -5 kt	+ 10 kt	+ 10 / - 5 kt				
Blue Line speed or V <sub>YSE</sub> / V <sub>2</sub>	$\pm$ 5 kt	± 10 kt	+ 10 / - 5 kt				
Maximum airspeed error at any time	± 15 kt	± 10 kt	± 10 kt				

### Appendix 3 - Skill Tests – Managing Stress

As you prepare for your test a certain amount of stress is helpful. Too much stress can be unhelpful, as it can affect your memory and concentration. Even the word **test** can induce panic and doubt. Here are some ways of managing and reducing stress.

Make sure you eat regularly. Skipping a meal, e.g. breakfast, will affect your blood sugar level and may reduce your ability to concentrate.

Do not be tempted to increase your intake of tea or coffee as caffeine will increase your stress level (a maximum of 5 cups of tea or coffee a day is recommended). Energy drinks such as **Red Bull** contain high levels of caffeine and may over stimulate and not provide the expected help.

Exercise has proved to reduce stress. You can test this: next time you are going to take some exercise note how stressed you are before you start, on a scale of 0 - 10 (where 0 = calm and 10 = stressed), then measure again when you return from the exercise. Therefore, exercise on the day before the test and on the day of the test will help to reduce your stress levels. It will also distract you and help you to sleep well the night before. If you are feeling very stressed just before the test, take some vigorous exercise e.g. power walk around the car park before going in.

Stress is increased by negative thoughts e.g. 'I am going to fail'. Having the thought will not make any difference directly to the outcome of the test but will increase your stress levels. Similarly, don't load yourself with unreasonable assumptions of your required skills - no test demands a perfect performance.

If you find that despite your best endeavours your stress is higher than is helpful to you, try some distraction. Concentrate on the things around you, refocus your mind and distract yourself from your thoughts. Try listening to other people's conversations, count the number of red things in the room, guess what people in the room may be going to eat that evening – anything that will engage your attention. The more detail the task you give yourself, the more distracting it will be.

If you know that you are inclined to become stressed, then plan how you might manage your stress. Decide what exercise you are going to take, and practice what form of distraction you are going to use. Make sure that you allow plenty of time on the day; do as much preparation in advance as is possible. Plan to arrive early and ensure that you have all the equipment that you may need. Do not add pressure; is it essential to book a flight home immediately after your test? If, say, family pressures are mounting consider a training break until things settle down. Do not be tempted to test just because money is tight – you must be ready.

During the test try to prioritise tasks; omitting or delaying a minor activity is preferable to rushing into a more important event. Listen carefully to ATC, both to your own clearances and instructions as well as other calls that may affect you. Tell ATC what you want to do and avoid unwanted communication tasks when you are going to be busy.

The best defence against stress is the confidence that comes from sound preparation and regular practice. Various Standards Documents are available to you on the CAA website which clearly set out what you are required to do. Your instructors are there to deliver the skills training necessary to meet the test standard.

Recurrent training and testing is going to be a feature of your aviation career. Coping with stress is just one more skill to learn on the way.