

Safety & Airspace Regulation Group

Flight Operations



UK CAA Standards Document 03(H) Version 6

Guidance for Applicants taking the CPL Skill Test (Helicopters)

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FOREWORD

This document sets out the guidance for applicants taking the Skill Test for the grant of a UK Commercial Pilot's Licence (CPL) Helicopter. The information will help an applicant prepare for the flight test; however, it should be noted that the information is of a general nature only and does not give precise details of each exercise or manoeuvre.

The Civil Aviation Authority (CAA) is the competent authority of the UK for the issue of pilot licences, ratings, and certificates in accordance with the ANO 2016. Nothing in this document is intended to conflict with 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 and to correct errors and omissions or to reflect changes in national policy and best practice.

References to EU regulations are to those regulations as retained and amended in UK domestic law under the European Union (Withdrawal) Act 2018.

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 is authorised by the CAA to conduct the appropriate skill test or aeroplane inspection.
- "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.
- "Test" is used in this document to describe licensing skill tests and proficiency checks

All amendments to this document will be notified via SkyWise. This document and other CAA Standards Documents are available on the CAA web site www.caa.co.uk/standardsdocuments and can be downloaded to users without charge. The CAA Scheme of Charges and application and report forms are also available from the www.caa.co.uk

If, after reading this document, there are any queries or comments, please contact one of the CAA FOTI at:

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PART 1 PREPARATIONS, PROVISION OF HELICOPTERS AND TEST BOOKINGS

1.1 Flight Test Preparation

1.1.1 Requirements

All sections of the test must be completed within 6 months of the first attempt.

1.1.2 Ground examinations and training:

Before a skill test for the issue of a licence, rating or certificate is taken, the applicant shall have passed the required theoretical knowledge examination, except in the case of applicants undergoing a course of integrated flying training. In any case, the theoretical knowledge instruction shall always have been completed before the skill tests are taken, in accordance with FCL.030 (a).

1.1.3 Flight training:

An applicant for the CPL Skill Test shall have received instruction on the same type of helicopter to be used for the flight test. Applicants shall not be presented for the test until the syllabus requirements outlined in Part-FCL Appendix 3 for CPL training have been met in full. Successful completion of the CPL Skill Test may satisfy the requirements of a skill test for a type rating, providing that evidence is available that all the training and testing requirements (including the Technical Knowledge examination) have been completed. The appropriate type rating will be added to the applicant's licence.

1.2 Documentation

1.2.1 The following applicant's documentation will be required to be produced on the test day:

- (i) Recommendation for Test issued by the ATO
- (ii) Completed CPL application form
- (iii) Class 1 Medical certificate
- (iv) Pilots flying logbook
- (v) Training records
- (vi) Photographic ID
- (vii) Flight Radio Telephony Operator Licence or RT practical test evidence

(Note: If the medical certificate is out of date the examiner may still conduct the test, however the applicant should be aware that, regardless of the outcome, they will not be issued a licence or until the medical certificate is revalidated)

1.2.2 Applicants who have previously attempted the skill test must produce to the examiner the previous test result form, SRG 2197, and form SRG 2129 that indicates the reasons for failure, and the re-training requirement. The applicant will also have evidence of the retraining conducted and have a new Recommendation for Test from the organisation responsible for the training.

1.3 Provision of Helicopter

1.3.1 The applicant or training organisation must provide a suitably equipped helicopter for the skill test capable of conducting all the test elements of the test. The helicopter must have a valid UK certificate of airworthiness, certificate of registration, insurance, radio licence, and weight balance schedule

1.3.2 Flight tests conducted in aircraft registered outside UK or UK Dependent Territories are subject to both airworthiness and licensing restrictions. If 'valuable consideration' is to be given to the examiner, then the aircraft is subject to ANO 2016 Article 252. Prior to undertaking such a flight,

the operator of the foreign registered aircraft will be required to obtain an operating permit (permission). Further information is available at www.caa.co.uk/foreigncarrierpermits or by e-mail to foreigncarrierpermits@caa.co.uk or by telephoning 03301 383484 (office hours only). In addition, before acting as pilot-in-command of a foreign registered aircraft, the examiner will be required to meet all the licensing requirements of the state of registration in accordance with ANO 2016 Art 148. For example, in the case of EASA member state aircraft, a valid EASA pilot licence or validation is required.

- 1.3.3 The helicopter must be fitted with duplicate primary flying controls for use by the applicant and examiner. Flight, engine and associated ancillary instruments as required by ANO Schedule 4 and 5. Instruments must be readily visible to both the examiner and the applicant. Wheel brakes, undercarriage controls, engine controls, fuel controls and cabin fire extinguishers must be either duplicated or positioned so that they are accessible to both the examiner and applicant.
- 1.3.4 Helicopters must be equipped with a VHF transceiver and two-way inter-communication using headsets must be fitted for use by the examiner and applicant. Navigation equipment should be installed including at least one VOR. GNSS equipment where fitted, must have the latest software and an up to date map database for use during the skill test.
- 1.3.5 A stop-watch or other suitable timing device should be provided for use by the applicant. This may be part of the helicopter equipment or provided separately.
- 1.3.6 A means of screening from external reference must be provided to simulate flight by sole reference to instruments where required by the test. Head worn visors or goggles may be used for this purpose.

1.4 Test Bookings

- 1.4.1 Applications for test must be made to CAA Flight Test Bookings iaw the UK Examiner Designation procedures. An examiner will be designated for each test. Applicants may be allocated a CAA Staff Examiner for a test or a test may be observed by a CAA examiner/inspector as part of the CAA's oversight requirements. Once an examiner has been designated the examiner can only be changed by Flight Test Bookings. 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 test date as close as possible to the date requested, however applicants may be required to accept a delay where examiner availability is limited or where oversight activity by the CAA is required. Once designated the applicant should contact the examiner prior to the test date to confirm the test administrative details including any examiner travel related expenses.
- 1.4.2 The fee for the ST is prescribed in the CAA Scheme of Charges for Personnel Licensing which is available on the CAA website. Fees must be paid at the time of the booking. Applicants will be required to show evidence of payment for their test before the flight can proceed. Industry examiners travel related expenses should be discussed separately with the examiner.
- 1.4.3 Other than in extraordinary circumstances, examiners associated with or affiliated to the ATO conducting the training (including those employed by or working under contract to the ATO) will not normally be designated to conduct skill tests for students trained at that ATO.

PART 2 CONDUCT OF THE TEST

2.1 Preview of Events

- 2.1.1 This section will outline the elements of the skill test profile. Section 2.2 gives details of the contents of the Initial Briefing; Sections 2.3 and 2.4 describe the Main and Pre-Flight Briefing; Sections 2.5 and 2.6 the Planning and Weather considerations that are required. Sections 2.7 details Flight and 2.8 Post Flight Debrief.
- 2.1.2 The CPL Skill Test will be conducted by a Flight Examiner or Inspector authorised by the CAA. Part-FCL details the test schedule and standards required. The examiner will conduct each test to meet the required schedule and achieve a meaningful, fair, and valid assessment. They will give the applicant clear and unhurried instructions and will check that the applicant has understood what they has been asked to do.
- 2.1.3 Applicants will be assessed on all aspects of the helicopter operation. Sound handling skills are essential as well as TEM, airmanship, navigation, instrument flying, correct R/T phraseology, captaincy, spatial awareness, and overall flight management skills which should be commensurate with those of a commercial helicopter pilot. The CPL Skill Test flight tolerances are at Appendix 2 of this document. The examiner may elect to evaluate certain aspects by oral questioning.
- 2.1.4 The CPL Skill Test flight is divided into five main sections in accordance with CAA form SRG 2197 which can downloaded from www.caa.co.uk/SRG2197
:
- Section 1 Pre/Post Flight Checks and Procedures.
 - Section 2 Hover Manoeuvres, Advanced Handling and Confined Areas.
 - Section 3 Navigation En-route procedures.
 - Section 4 Flight Procedures and Manoeuvres.
 - Section 5 Abnormal and emergency procedures.
- 2.1.5 The CPL Skill Test is intended to be flown as a complete flight including navigation and general handling manoeuvres. However, as agreed between the applicant and the examiner, the Navigation En-Route Procedures may be flown as a separate flight.
- 2.1.6 If the skill test is completed in two parts, both parts shall be conducted by the same examiner on the same day. The overall result of the attempt shall not be assessed or recorded until all sections have been completed. Each part of the attempt shall be recorded on separate test report forms SRG 2197 and clearly marked with the attempt/series number.
- 2.1.7 The sequence in which the sections may vary depending on the circumstances. Briefing and planning will be completed in approximately 2 hours, the pilot's pre-flight inspection in 30 minutes. The Navigation - En Route section, including Instrument Flying and Radio Tracking, normally takes about 1 hour and the Hover Manoeuvres, Advanced Handling and Confined Areas combined about 1 hour. Section 5 may be combined, at the discretion of the examiner, with Sections 1 through 4, or, flown as a separate section. The complete skill test may last about 4 hours and 30 minutes and will be followed by a post flight debriefing by the examiner.
- 2.1.8 The CPL Skill Test is very demanding; it is appreciated that even the most competent pilots can make mistakes, however this does not necessarily mean that a failure should result.
- 2.1.9 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.

2.2 Initial Briefing

- 2.2.1 The purpose of the initial briefing is to check that the applicant has completed the necessary training and experience requirements, to establish the aim of the flight test and check that they are aware of those planning resources that they will require. This briefing will normally take about 10 minutes.

2.2.2 At the pre-arranged time the applicant will meet the Flight Examiner. A check will be made to ensure that the applicant has the necessary equipment and documentation including:

- Pilots licence with helicopter rating (if applicable).
- Personal flying logbook (including evidence of any re-training if this is not the first attempt).
- UK issued Class 1 medical certificate.
- A form of photo identity e.g. valid passport, or ID card.
- Certificate of Course Completion/Recommendation for Test and a form SRG 2129 if applicable.
- Evidence of successful completion of all theoretical knowledge examinations.
- Appropriate helicopter technical and insurance documents.
- Two headsets - Examiners may carry their own headset but a spare unit should be available for the flight.
- Two copies of the authorised helicopter check list.
- Instrument flying screens, visors or goggles.
- Current publications for the routing and airfields.
- Planning material including a blank flight log, maps, charts and navigation equipment.
- Any relevant CAA correspondence such as a letter of credit assessment or retraining requirements.
- Proof of payment for the test.

2.2.3 The examiner will outline the content of the CPL Skill Test.

2.2.4 The applicant will be given the examiner's weight for performance and mass & balance calculations.

2.3 Main Briefing

2.3.1 The applicant will receive a comprehensive briefing covering all aspects of the flight. During the briefing the applicant should ask questions at any time if they are unclear about any aspect. This briefing would normally take 30 minutes. The examiner may not brief in the sequence below but will cover all the relevant items in the briefing.

2.3.2 Briefing will include:

a. **The purpose of the flight:**

The purpose of the flight is for the applicant to demonstrate their ability to plan and conduct a simulated passenger carrying flight whilst acting as pilot-in-command operating single pilot. The flight profile shall be conducted in VMC and the flight will include simulated helicopter emergencies and general flying manoeuvres. Passenger safety, comfort and reassurance must be considered throughout the flight. The applicant is asked to assume that the examiner is a passenger, and as such can only offer basic assistance. The examiner will act as the safety pilot when flight in simulated IMC takes place.

b. **The applicant's responsibilities:**

The examiner will explain that all the duties and decisions necessary for the safe and practical conduct of the flight, in accordance with current legislation, will be the responsibility of the applicant. The applicant should liaise with ATC but if ATC instructions conflict with the briefing these will take priority; the examiner will only intervene for reasons of safety or clarification.

c. **Checklists:**

Throughout the flight the applicant will be expected to use the authorised helicopter checklist. The applicant is to assume that the test is the first flight of the day and will conduct a pilot's pre-flight inspection. Airborne checks may be completed from memory, or from alternative notes, but must be in accordance with the checklist and with each check item spoken aloud.

d. **Planning check**

The applicant's ability to check the appropriate helicopter documents before flight will be assessed. The applicant will brief the examiner as to the weather suitability for the test flight. The examiner will check the applicants flight navigation log and may take a photocopy and may question the applicant on any aspect of the planning, for example: choice of operating

altitudes, safety altitudes (heights), fuel planning, NOTAMS. The applicant's calculations of the helicopter's mass & balance and performance will be assessed.

- e. **The flight profile**
The examiner will brief the flight, item by item explaining to the applicant what is required of him. The examiner will brief on the navigation route and any other airfields to be used (to avoid repetition of the briefed items these are expanded at Para 2.7 - The Flight). The examiner will not instruct the applicant on how to fly or manage the flight. Procedures for the use of the screens, goggles or visors will be advised, including a reminder that, when simulating IMC, the examiner will be responsible for collision avoidance. During the briefing the applicant will be encouraged to ask questions as appropriate for clarification and will be asked to confirm the test requirements are fully understood.
 - f. **Helicopter control**
The helicopter must be operated in accordance with the Aircraft Flight Manual (FM) or Pilots Operating Handbook (POH) as appropriate, and the operating procedures should follow those given in the Training Organisation's Flying Order Book or Operations Manual. The examiner will require confirmation of the various speeds and configurations to be used at each phase of flight. Speeds may be adjusted to meet different conditions or circumstances and the Examiner must be advised of the new target speed at that time. The Examiner will also explain that if the applicant wishes to change any of the speeds in flight, they must inform the Examiner and nominate a new speed.
 - g. **Emergencies and abnormal conditions**
The examiner will discuss the actions necessary should any real emergency or abnormal condition occur during the flight. In general, the applicant is to control and handle any helicopter emergency but the examiner, as helicopter captain, may elect to take control at any stage.
 - h. **Simulated Emergencies**
The examiner will brief on how emergencies and abnormal situations will be simulated.
 - i. **Oral questioning**
The examiner may ask practical questions relating to the flight on subjects such as VFR procedures, helicopter performance and technical aspects, emergency handling and the helicopter documents.
- 2.3.3 When the applicant is clear about the format for the flight one hour will normally be allocated to complete the necessary planning and pre-flight preparation. The examiner will specify the time to meet for the pre-flight briefing.

2.4 Planning

- 2.4.1 Planning facilities will be available either at the Training Organisation or aerodrome flight planning facility. The examiner will check that the applicant is aware of where resources are. A quiet briefing room should be used so that the planning can be completed without interruption or distraction.
- 2.4.2 Planning shall be completed without assistance from other students or instructors.
- 2.4.3 Current ATC and Met information should be obtained from the aerodrome flight planning facility. Any booking requirements must be made in adequate time for the flight.
- 2.4.4 The applicant must prepare a flight log and the Examiner may require a copy. The log must include such items as:
 - Route (including flight to any planned alternate aerodrome).
 - Communication and navaid frequencies (note that where this information is clearly displayed on planning documents, such as the charts to be used, it is not necessary to copy that information to the log).
 - Planned levels and altitudes.
 - Timings, ETAs.
 - MSA, safety height or minimum levels/altitudes.
 - Fuel (showing contingency fuel).
 - Space for logging ATIS and clearances.

- 2.4.5 The route may require flight through airspace other than Class G airspace and consideration should be given to any special precautions during planning.
- 2.4.6 Pre-prepared flight logs, specially drawn routes, pre-prepared helicopter weight and C of G calculations, or computer programs shall not be used. Only routinely available planning information and documents are permitted.

2.5 Weather Minima

- 2.5.1 The pre-flight preparation of the CPL Skill Test requires the applicant to assess the weather conditions and make a decision whether to proceed with the flight. In arriving at this decision an applicant must consider the requirements of all the sections of the test. The flight must be conducted maintaining (VMC) throughout. For those items of the test which are required to be flown by sole reference to instruments, (IMC) will be simulated by using appropriate cockpit screening, goggles, or a visor.
- 2.5.2 Applicants shall comply with the minimum weather conditions specified in their Training Organisation's Flying Order Book, Operations Manual or other more stringent limitations if applicable (e.g. State Minima). However, when extreme conditions of 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.
- 2.5.3 Awareness of engine icing conditions must be displayed by regularly checking the outside air temperature and carburettor heat where appropriate. Training Organisations must ensure that an operating procedure is published for using helicopter icing equipment, particularly with reference to carburettor heat. The helicopter must not be flown deliberately into icing conditions if this is contrary to the helicopter flight manual.

2.6 Pre-Flight Briefing

- 2.6.1 When the applicant has completed the flight planning the applicant will present a flight log with the details at para 2.4.4 and deliver a pre-flight briefing.
- 2.6.2 The pre-flight briefing must contain at least the following items identifying the threats and mitigations (the acronym "MATED" has only been included as a suggested aide memoir):
- | | |
|-----------------|---|
| Met | Meteorology conditions, as appropriate for the area and time of the flight. |
| Aircraft | AUM, C of G, fuel load, tech log details. |
| ATC | Airfield details, NOTAMS, Royal Flights, RT services, Nav aids. |
| Exercise | How the Navex is to be conducted (produce flight log)? |
| Duties | Pax brief (normally conducted at the aircraft). |
- 2.6.3 The examiner may stop the test at any stage if they consider that the applicant's demonstration of skill and/or knowledge requires a complete retest.

2.7 The Flight

The following is a suggested sequence of the sections for the flight test; however, this sequence may be varied according to individual conditions and circumstances or may be flown as two separate flights. The applicant will be assessed through all sections on their general flight management, airmanship, observance of aircraft limitations, accuracy and flying skills.

2.7.1 Pre/Post Flight Checks and Procedures (Section 1):

The applicant's ability to check the appropriate helicopter documents and weather suitability will be assessed. The examiner will check the applicants flight navigation log and may take a photocopy.

They may question the applicant on any aspect of the planning, for example, choice of operating altitudes, safety altitudes/heights, fuel planning, NOTAMS. The applicant's calculations of the helicopter's mass & balance and performance will be assessed.

- 2.7.2 The applicant will be expected to carry out a safe and practical inspection of the helicopter prior to flight and must be aware of the servicing operations that they are entitled to carry out on the helicopter. The applicant will be expected to proceed with the checks at a practical pace and with reference to the approved checklist. Where visual checks are made these should be described to the examiner if requested. Pre-flight checks of the radio and navigation equipment should include all the equipment, which the applicant proposes to use during the flight. The examiner must be briefed, as a passenger, on the position and method of the use of emergency exits, safety belts, safety harnesses, life jackets, and all other devices/equipment required by the ANO and including the actions to be taken in event of an emergency.
- 2.7.3 The applicant will be expected to complete all pre/post take off checks, including radio calls and demonstrate compliance with ATC procedures and instructions.
- 2.7.4 On completion of the flight the applicant will be expected to carry out all the prescribed parking, shutdown, and post flight procedures in accordance with the FM/POH checklist, local procedures, and ATC instructions.

2.7.5 **The En-Route procedures (Section 3):**

Section 3 is usually flown first to ensure an efficient flow to the flight. During this section of the flight the helicopter is assumed to be on a passenger carrying flight under Visual Flight Rules (VFR). The navigation comprises of 3 pre-planned legs; a planned pure navigation leg of about 20 NM with a short map reading leg of about 5 km, a planned track crawl of about 20 NM and radio navigation tracking leg using the radial of a nominated beacon. This will be followed by an unplanned in flight diversion to alternative location.

Leg 1: The first leg should be flown in accordance with the applicant's navigation calculations, aiming to accurately maintain heading, height, and speed, using mental dead reckoning techniques. This leg will take the applicant to a simulated landing site (LS), normally a hotel, large house or a similar feature. Initially a 1:250,000 chart should be used to navigate to an initial point (IP) which should not normally be more than 5 km from the LS and then map read using the 1:50,000 map. When the helicopter has achieved cruising altitude and is on heading for the turning point, the applicant should confirm to the examiner the heading, altitude, and ETA, thereafter, advising any changes. For instance, "2 minutes late at my halfway point and 5 miles left of track - the revised heading to the IP is... and the new ETA at the landing site is now ...".

Leg 2: This leg is to be flown as a track crawl with the applicant returning to using the 1:250,000 chart and maintaining the track by map reading. The track should be 'direct' but sensible use should be made of clearly identifiable features on the track ahead. If the applicant wishes to deviate from the planned track/height, they should state the reason, and then return to the track/height as soon as possible.

Leg 3: The third leg will be a tracking leg using the VOR (or ADF) to maintain a radial which will nominated on completion of leg 2. The appropriate navaid and aircraft instrument checks should be carried out before the facility is used. Once established on the radial the applicant should correct for wind.

Diversion: The purpose of this leg is to see the applicant carry out 'in flight' planning to an alternate location. The Examiner will mark on the 1:250,000 map, the diversion location, and identify the aircraft's present location. The applicant will assess the new heading and ETA and then make any adjustments enroute using any of the techniques used in the previous legs. During this leg any aids on the aircraft (including GNSS) may be used.

Throughout the section the Examiner will assess the applicant for:

- Correct altimeter settings use.
- Awareness of minimum safety altitudes (MSA) and minimum levels.
- Compliance with regulations and liaison with ATC.
- Accuracy of flying, altitude, speed and heading control.
- In flight checks as appropriate, fuel management, carburettor icing etc.
- Navigation/Map reading and assessment and correction of errors.
- Log keeping. (The examiner may ask to see the applicant's pilot log after the flight.)

- Achievement of ETAs (+/- 3 minutes at turning points).
- Engine handling and rotor control.
- Display Airmanship, CRM and TEM.

2.7.6 Simulated IMC (Section 4):

The Examiner will simulate inadvertent entry into cloud, by means of screens, visors, or goggles. The applicant is expected to show consideration of the safety factors necessary for flight in IMC whilst accurately flying, by sole reference to instruments, the following:

- Level flight, control of heading, altitude/height, and speed.
- Rate 1 level turns onto specified headings, 180° to 360° left and right.
- Climbing and descending, including rate 1 turns onto specified headings.
- Recovery from unusual attitudes.
- Turns with 30° bank, turning up to 90° left and right.

2.7.7 Hover Manoeuvres, Advanced Handling and Confined Areas (Section 2):

This section of the skill test reflects the type rating requirements for the helicopter on which the licence will be opened. The applicant will be asked to demonstrate the following:

- Take off and landing (lift off and touchdown).
- Taxi, hover taxi.
- Stationary hover with head/cross/tail wind.
- Stationary hover turns, 360° left and right (spot turns).
- Forward, sideways, and backwards hover manoeuvring.
- Simulated engine failure from the hover.
- Quick stops into and downwind.
- Sloping ground/unprepared sites landing and take offs.
- Take offs (various profiles).
- Crosswind and downwind take off (if practicable).
- Take off at maximum take off mass (actual or simulated).
- Approaches (various profiles).
- Limited power take off and landing.
- Autorotations (FE to select two items from – Basic, constant attitude, range, max range, low speed, and 360° turns).
- Autorotative landing.
- Practise forced landing with power recovery.
- Confined area, power checks, reconnaissance technique, approach and departure technique.

2.7.8 Abnormal and Emergency Operations (Section 5):

The items of this section may be combined with Sections 1 through 4. The examiner will simulate an abnormal or emergency scenario for which the applicant is expected to carry out the appropriate actions. If the drills involve the operation of fuel cocks, fuel shut off valves, mixture controls and any critical engine control, operations should be simulated by "touch actions" only. Emergency radio calls should be made aloud but not transmitted. Applicants should not assume that the practice emergency is complete until told by the examiner.

2.8 Post Flight Action

- 2.8.1 The examiner will give the result and any reasons for failure before conducting the debriefing and discussing the applicant's performance. The examiner may ask questions in to clarify certain items or actions.
- 2.8.2 Notification of the result will be given on the test result form SRG 2197. The form 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 failure and give advice on any aspect of the test, which the applicant may find

useful during any subsequent attempt. The applicant will be required to sign the form as having understood the result and will be given a copy of the report form to retain.

- 2.8.3 Appendix 1 to this document gives a list of the test standards upon which the examiner will base their assessment. The criteria are arranged to reflect the order of items listed on the Test Report form SRG 2197
- 2.8.4 Should an applicant have cause for concern about the conduct of the flight test then such comment should be made in writing to a CAA FOTI. Details of the appeal procedure are given at Part 3.3.

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PART 3 ASSESSMENT CRITERIA AND ADMINISTRATIVE PROCEDURES

3.1 Assessment Criteria

- 3.1.1 The flight will be assessed as a passenger carrying flight. The safety and comfort, reassurance and briefing of passengers must be considered. The applicant shall demonstrate ability to:
- Operate the helicopter within its limitations.
 - Complete all manoeuvres with smoothness and accuracy.
 - Exercise good judgement and airmanship.
 - Apply aeronautical knowledge of procedures and regulations as currently apply.
 - Maintain control of the helicopter at all times in a manner that the successful outcome of a procedure or manoeuvre is never seriously in doubt.
- 3.1.2 Throughout the flight the helicopter should be flown as accurately as possible. The tolerances for operation are given as guidance to applicants but do not necessarily indicate that a 'failure' will result if any skill test limit is exceeded. Similarly, flight within the tolerances should not be achieved at the expense of smoothness and co-ordination.
- 3.1.3 The examiner will make allowance for adverse weather conditions such as turbulence and the handling qualities and performance of the helicopter used. The CPL Skill Test tolerances shown at Appendix 2 of this document are for general guidance.

3.2 Administrative Procedures

- 3.2.1 Each time an applicant undertakes a CPL Skill Test it is known as an 'Attempt'. 'Attempts' are grouped into 'Series'. There are two Attempts in each Series. There is no limit to the number of Series that may be taken.
- 3.2.2 A PASS will be awarded when all sections of the test are passed.
- 3.2.3 An applicant failing only one section at the first attempt in a Series shall have gained a PARTIAL PASS. The second attempt will always require the applicant to retake Section 1 and the section failed at the first attempt.
- 3.2.4 A FAIL will be awarded if more than one section is failed at the first attempt in a Series. A failure of any section of the second attempt will require the applicant to retake the entire test.
- 3.2.5 A FREE RETEST may be awarded only if the applicant discontinues the flight and the reasons for doing so are agreed by the examiner. The free retest will require only those sections or items not previously flown to be completed; these items must be completed before the result of the flight can be determined. If the applicant terminates the flight test for reasons considered inadequate by the examiner, they may forfeit the test fee and a further fee will be required before the next test.
- 3.2.6 The failure to pass all appropriate sections in two attempts in the first Series will conclude that Series. Before undertaking a further attempt in the next (second) Series the applicant will be required to:
- a. Complete the retraining prescribed by the examiner at the completion of the Series and indicated on the Flight Test and report form SRG 2197
 - b. Present their personal flying logbook to the examiner, containing entries, certified by the training organisation giving training, indicating that the prescribed training has been completed and that the applicant is fit to retake the CPL Skill Test.
 - c. Present a new Recommendation for Test to the examiner.
- 3.2.6 Should the applicant fail to pass the second or subsequent Series the examiner will indicate the retraining required and may seek advice from a CAA FOTI. The second attempt in Series 2 shall,

whenever possible, be conducted by a CAA FOTI or an examiner nominated by the CAA. Retraining will be based upon an assessment of the reasons for failure of all previous attempts.

3.3 Applicant's Appeal Procedure

- 3.3.1 The test result, SRG 2197, contains an extract from the Civil Aviation Authority Regulations 1991, which is reproduced below:

“Regulation 6(5) of the Civil Aviation Regulations 1991 provides, any person who has failed any test or examination which they are required to pass before they are granted or may exercise the privileges of a personnel licence may within 14 days of being notified of the failure request that the Authority determine whether the test or examination was properly conducted.”

In order to succeed with an appeal, the applicant will have to satisfy the CAA that the examination or test was not properly conducted. Mere dissatisfaction with the result is not enough. Should the applicant have concern about the conduct of the CPL Skill Test, they should notify a CAA FOTI who will provide guidance on the appeal procedure.

ANNEX 1 GLOSSARY OF ABBREVIATIONS AND TERMS

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
AoC	Assessment of Competence
ATC	Air Traffic Control
ATO	Approved Training Organisation
CPL	Commercial Pilot Licence
CRM	Crew Resource Management
CRMI	Crew Resource Management Instructor
EASA	European Aviation Safety Agency
FCS	CAA Flight Crew Standards
FEH	Flight Examiners Handbook
FE (CPL)	Flight Examiner Commercial Pilot Licence (Helicopters)
FE (PPL)	Flight Examiner Private Pilot Licence (Helicopters)
FI	Flight Instructor
FNPT	Flight Navigation Procedures Trainer
FOTI	Flight Operations Training Inspection
FS or FFS	Flight Simulator or Full Flight Simulator
FSTD	Flight Simulation Training Device
GRE	Ground Examiner
GPS	Global Positioning System
GM	Guidance Material
GNSS	Global Navigation Satellite System
L&TS	CAA Licensing & Training Standards
ME	Multi-Engine
Part FCL	UK Aircrew Regulation - Annex 1 – Part-FCL
Proficiency Check	Demonstration of skill for the revalidation or renewal of a licence or rating, including oral examinations as may be required.
RF	Registered Facility
RT or RTF	Radiotelephony
SE	Single-Engine
SEP	Single-Engine Piston
SET	Single-Engine Turbine
Skill Test	Demonstration of skill for the issue of a licence or rating
SP or SPH	Single-Pilot or Single-Pilot Helicopter
SSC	Shared Services Centre
TEM	Threat and Error Management
TRE	Type Rating Examiner
VFR	Visual Flight Rules
VMC	Visual Meteorological Conditions

APPENDIX 1 CPL SKILL TEST SCHEDULE AND STANDARD

Applicant's Notes

These notes are intended to give applicants a detailed account of the exercises that may, at the discretion of the examiner, be required in each section. The headings used relate directly to those shown on Form 2197 which can be downloaded from www.caa.co.uk/SRG2197

In the interests of openness, the standards to which they are assessed have also been included and these are shown in *italics*. It is emphasised that during the CPL Skill Test applicants should concern themselves only with flying and operating the helicopter to the best of their ability. The application of the test standards is the responsibility of the Examiner.

Section 1 – Pre/flight/post flight checks and procedures

- a. Helicopter knowledge-tech log, fuel, C of G, performance. Flt Planning. NOTAMS. Weather:**
- *Check all documents required for a passenger carrying flight are correct.*
 - *Obtain and assess all elements of the prevailing and forecast weather conditions.*
 - *Collate all relevant ATC information, NOTAMS, Royal Flights, Nav aids, RT services.*
 - *Complete an appropriate flight navigation log and chart.*
 - *Determine that the helicopter is correctly fuelled for the flight.*
 - *Complete a manual Mass & Balance schedule.*
 - *Calculate helicopter Performance criteria and limitations applicable to the forecast weather conditions and make adjustments if required for actual conditions before take off.*
 - *Identify Threats and appropriate mitigations to be put in place.*
- b. Helicopter pre-flight inspection action, location of parts and purpose:**
- *Check helicopter serviceability record and technical log.*
 - *Using an approved checklist perform all elements of the helicopter pre-flight inspections, identifying components and functions as required by the examiner.*
 - *Confirm that the helicopter is in a serviceable and safe condition for flight.*
 - *Check and complete all necessary documentation.*
 - *Complete an appropriate passenger emergency procedure briefing for the examiner.*
- c. Cockpit inspection. Starting procedures:**
- *Complete all recommended cockpit inspection, engine/rotor starting and after starting procedures using an approved checklist.*
- d. Communication and navigation equipment checks, selecting and setting frequencies:**
- *Complete all recommended communication and navigation equipment checks.*
 - *Select and set appropriate frequencies and transponder codes.*
- e. Pre take-off procedure RT procedure, ATC liaison – compliance:**
- *Complete all recommended pre take off checks using an approved checklist.*
 - *Obtain and ATC clearance and follow ATC instructions.*
 - *Complete all necessary after take off checks from memory.*
 - *Comply with airport markings.*
 - *Use charts or other published information as required.*

- *Execute a safe departure in accordance with clearance and with due regard for other air traffic.*
 - *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.*
 - *Demonstrate standard R/T procedures and phraseology.*
 - *Demonstrate compliance with ATC instructions.*
 - *Operate on the ground and in the air with particular regard for passenger safety and comfort.*
- f. Parking shutdown and post-flight procedure:**
- *Return helicopter to parking area and complete engine shutdown.*
 - *Complete all after landing checks and drills.*
 - *Secure helicopter and complete documentation.*

Section 2 – Hover Manoeuvres Advanced Handling and Confined Areas:

- a. Take-off and landing (lift off and touch down):**
- *Lift to and establish a stable hover maintaining ground position and heading.*
 - *Descend to land maintaining ground position and heading.*
 - *Complete all necessary checks and drills throughout.*
 - *Maintain lookout throughout.*
- b. Taxi, Hover Taxi:**
- *Demonstrate control of heading, height and groundspeed in hover taxi.*
 - *Complete all necessary checks and drills throughout.*
 - *Maintain lookout throughout.*
- c. Stationary hover with head/cross/ tail wind:**
- *Maintain heading, height and ground position whilst in the stationary hover into wind, crosswind and downwind.*
 - *Complete all necessary checks and drills throughout.*
 - *Maintain lookout throughout.*
- d. Stationary hover turns 360 degrees left and right:**
- *Carry out a spot (pedal) turn, maintaining the height, ground position and rate of turn throughout.*
 - *Complete all necessary checks and drills throughout.*
 - *Maintain lookout throughout.*
- e. Forward, sideways and backwards manoeuvring:**
- *Establish and maintain throughout each manoeuvre the nominated height, heading and speed.*
 - *Backwards manoeuvre to be preceded by lookout turn and increase of hover height.*
 - *Maintain directional control and balance throughout.*

- Complete all necessary checks and drills throughout.
 - Maintain lookout throughout.
- f. Simulated engine failure from the hover:**
(Normally initiated by the examiner simulating an engine failure by closing the throttle with or without verbal warning)
- Prevent the aircraft tendency to drift and roll.
 - Stop the yaw tendency.
 - Cushion the touchdown.
 - When on the ground lower the collective lever.
 - Complete all necessary checks and drills throughout.
 - Maintain lookout throughout.
- g. Quickstops - into wind and downwind:**
- Establish straight and level flight at the nominated speed, height and heading with cruise power set.
 - Into Wind - Initiate manoeuvre with verbal warning – Quickstop, Quickstop, Go- lower the collective whilst simultaneously flaring the aircraft, maintaining height and heading until aircraft comes to complete stop before descending into low hover.
 - Downwind - Initiate manoeuvre with verbal warning – Quickstop, Quickstop, Go – then either flare the aircraft and turn, or turn and flare the aircraft (or a combination of both) to bring the aircraft back into wind whilst maintaining height and not letting the speed fall below 30 kts until heading within 30 degrees of the wind. Once the aircraft has come to a complete stop descend into a low hover.
 - Complete all necessary checks and drills throughout.
 - Maintain lookout throughout.
 - Maintain directional control and balance throughout.
- h. Sloping ground/unprepared sites landing and take off:**
- Identify landing area on slope and conduct recce to consider at least the following points:
 - i. Size - Large enough to land the aircraft onto without striking the tail/blades.
 - ii. Shape - Valley, bowl, direction of slope.
 - iii. Surrounds - Blade/tail clearance, FOD, trees/shrubs, people.
 - iv. Slope - Within limits of aircraft/pilot.
 - v. Surface - Firm, slippery, muddy, rocky.
 - Move onto slope area and conduct up slope/cross slope landing.
 - Maintain heading, ground position, and prevent movement of aircraft on slope.
 - When landed centralise the flying controls.
 - Prior to take off preposition controls.
 - Lift into hover maintaining heading and ground position.
 - Move away from slope ensuring tail is not turned towards the slope.
 - Be prepared to abort the landing at any stage.
 - Complete all necessary checks and drills throughout.
 - Maintain lookout throughout.
- i. Take offs (various profiles):**
(Can be combined with items j, k & m)
- Demonstrate take-off/transition from the hover as detailed by the examiner.

- *Maintain directional control and balance throughout.*
 - *Complete all necessary checks and drills throughout.*
 - *Maintain lookout throughout.*
- j. Cross wind, down wind take-off (if practical):**
- *Demonstrate take-off cross wind/down wind transitions from the hover.*
 - *Maintain directional control and balance throughout.*
 - *Complete all necessary checks and drills throughout.*
 - *Maintain lookout throughout.*
- k. Take off at maximum take off mass (actual or simulated):**
(Can be combined with item m)
- *Demonstrate, using an appropriate technique a take off and transition from the hover ensuring the aircraft is flown within the limits set by the examiner.*
 - *Maintain directional control/balance throughout.*
 - *Complete all necessary checks and drills throughout.*
 - *Maintain lookout throughout.*
- l. Approaches (various profiles):**
(Can be combined with item m)
- *Demonstrate an approach nominated by the Examiner.*
 - *Maintain directional control/ balance throughout.*
 - *Complete all necessary checks and drills throughout.*
 - *Maintain lookout throughout.*
- m. Limited Power take-off and landing:**
(Normally simulated by the examiner giving an simulated power limitation)
- *Carry out hover power check.*
 - *Select and demonstrate a transition from the hover using an appropriate technique for the simulated power limit set by the examiner.*
 - *When instructed carry out an in flight power check, from which the examiner will set a simulated power limit to be used for the approach and landing.*
 - *Select and demonstrate an appropriate technique for the approach and landing using only the simulated power limit set by the examiner.*
 - *Maintain directional control and balance throughout.*
 - *Complete all necessary checks and drills throughout.*
 - *Maintain lookout throughout.*
- n. Auto-rotations:**
(The examiner will nominate 2, from basic, range, low speed, and 360° turns)
- *Select an area and height/altitude for the nominated autorotation.*
 - *Carry out HASEL (or other appropriate) checks.*
 - *Establish straight and level flight at the nominated speed, height and heading with cruise power set (into wind).*
 - *Initiate manoeuvre with verbal warning – Practice Autorotation Go- and establish autorotation.*
 - *Fly the appropriate parameters for the nominated technique.*

- *Close throttle to idle position (only if appropriate and briefed by the examiner).*
 - *When instructed by the examiner to 'Go Around' (or at an agreed height/altitude) open throttle and establish the aircraft in a climb using the nominated climbing speed.*
 - *Complete all necessary checks and drills throughout.*
 - *Maintain lookout throughout.*
 - *Maintain directional control and balance throughout.*
 - *Control Nr throughout.*
- o. Auto-rotative landing (simulated EOL):**
(The examiner will nominate the landing area, the entry speed, height and heading. The applicant will select entry point unless otherwise instructed)
- *Identify the nominated landing area, if appropriate conduct recce (Size, Shape, Surrounds, Slope Surface).*
 - *Carry out HASEL (or other appropriate) checks.*
 - *Establish final approach (into wind), straight and level flight at the nominated speed, height and heading with cruise power set.*
 - *Initiate manoeuvre with verbal warning – Practice Engine Failure Go- and establish autorotation using the appropriate parameters for the nominated technique.*
 - *Close throttle to idle position (only if appropriate and briefed by the examiner), if necessary the examiner will assist.*
 - *Ensure no aircraft slip or drift by 300ft AGL.*
 - *Apply appropriate flare at appropriate height for aircraft/conditions.*
 - *Cushion the aircraft onto the ground, with a running landing if appropriate, whilst maintaining heading.*
 - *Lower collective lever judiciously.*
 - *Complete all necessary checks and drills throughout.*
 - *Maintain lookout throughout.*
 - *Maintain directional control and balance throughout.*
 - *Control Nr throughout.*
- p. Practice Forced Landings with Power Recovery:**
The examiner will brief on how the PFL will be initiated during the Main briefing. The HASEL checks and carb heating selection is the responsibility of the examiner for this exercise.
- *Enter autorotation.*
 - *Select the landing site.*
 - *Adopt the appropriate autorotative technique to 'make' the selected landing site.*
 - *Carry out the appropriate radio calls (in the cockpit only).*
 - *Carry 'touch drills' to indicate emergency cockpit drills.*
 - *Close throttle to idle position (only if appropriate and briefed by the examiner).*
 - *Give appropriate warning to passenger.*
 - *When instructed by the examiner to 'Go Around' (or at an agreed height/altitude) open throttle (if closed) and establish the aircraft in a climb using the nominated climbing speed.*
 - *Complete all necessary checks and drills throughout.*
 - *Maintain lookout throughout.*
 - *Maintain directional control and balance throughout.*

- *Control Nr throughout.*
- q. Confined Area including power checks, recce technique, approach and departure techniques:**
(The examiner will nominate the confined area to be used)
- *Identify the nominated landing area and conduct appropriate recce to cover at least the following points (normally not conducted lower than 500ft AGL):*
 - i. *Size - Is the confined area large enough for pilot's ability and aircraft size and which type of approach will it require?*
 - ii. *Shape - In relation to the wind direction/final approach.*
 - iii. *Surrounds - Outer - habitation, hazards that may affect the circuit, approach, overshoot; Inner - hazards in the immediate area of the landing site.*
 - iv. *Slope & Surface - Suitability of the landing site (may require confirmation prior to landing).*
- (Other factors such as sun, shadow, wires etc may need to be considered as appropriate)*
- *Carry out power check (normally into wind, within 500ft AGL of the landing area), note power available.*
 - *Conduct circuit and approach, identifying escape routes and landing commitment point in order to carry out a landing, dummy approach or overshoot (go around) as appropriate.*
 - *Establish hover at appropriate height in the confined area (land/spot turn only if requested by examiner).*
 - *When instructed to take off by the examiner note power available and carry out the appropriate take off profile, in an appropriate direction, to depart the confined area.*
 - *Maintain directional control and balance throughout.*
 - *Control Nr throughout.*
 - *Complete all necessary checks and drills throughout.*
 - *Maintain lookout throughout.*

Section 3 – Navigation En-route Procedures

- a. Navigation and orientation at various altitudes/map reading:**
- *Complete all elements of VFR planning for the route prescribed with particular reference to planned altitudes and safe levels of operation.*
 - *Identify position visually by reference to ground features and map.*
- b. Altitude/height/level, speed, heading control, observation of airspace, altimeter settings:**
- *Control helicopter altitude speed and heading using visual attitude flying techniques.*
 - *Maintain the heading height and speed as computed in navigation log or advised to the examiner within the prescribed limits observing airspace.*
 - *Complete all necessary checks and drills.*
 - *Set altimeter to QNH, Regional Pressure setting (RPS), Standard pressure setting, or QFE as specified in checklist, Flying Order Book or as appropriate.*
- c. Monitoring of flight progress, flight log, fuel usage endurance ETA assessment of track error and re-establishment of correct track, instrument monitoring:**
- *Navigate by means of calculated headings, ground speed and time.*
 - *Make appropriate corrections to maintain track.*
 - *Achieve destinations or turning points within 3 minutes of estimated time of arrival (ETA).*
 - *If appropriate configure engine for cruise/endurance performance in accordance with Flight Manual.*

- *Adjust and monitor fuel consumption for range or endurance if appropriate.*
 - *Make regular checks for carburettor icing, if appropriate.*
- d. Observation of weather conditions, diversion planning:**
- *Calculate heading, ground speed, ETA and fuel required during any unscheduled diversion.*
 - *Calculate Minimum Safe Altitude for track to new destination.*
 - *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.*
 - *Observation of weather conditions with timely, appropriate captaincy decisions.*
- e. Tracking positioning (NDB or VOR) identification of facilities:**
- *Select and identify appropriate radio and navigation aids as required or nominated by examiner.*
 - *Carry out aircraft navigation instrument functional checks (if not previously conducted).*
 - *Locate and record the helicopter position by using radio navigation equipment when required by the examiner.*
 - *Intercept and maintain given tracks or radials using the navigation aids nominated.*
- f. ATC liaison and observation of regulations etc:**
- *Set altimeter to QNH, Regional Pressure setting (RPS), Standard pressure setting, or QFE as specified in checklist, Flying Order Book or as appropriate.*
 - *Maintain two way R/T communication 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. (Aerodrome arrival procedures)*
 - *Carry out appropriate checks and drills.*
 - *Set altimeters and cross check in accordance with check list, Flying Order Book or as required.*
 - *Comply with published arrival procedure or clearance.*
 - *Maintain adequate lookout and collision avoidance.*
 - *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 helicopter approach configuration adjusting speed and rate of descent to maintain a stabilised approach.*
 - *Select and achieve the appropriate touchdown area.*
 - *Complete all necessary checks and drills.*

Section 4 – Flight Procedures and Manoeuvres (by sole reference to instruments)

The examiner will simulate IMC by use of screens, visors or goggles and the applicant will be required to execute the following exercises by sole reference to the appropriate aircraft instrumentation. Applicants are expected to show consideration of the safety factors necessary for flight in IMC. Throughout this section the examiner will be responsible for lookout, navigation and ATC liaison.

a. Level flight, control of heading altitude/height and speed:

- *Establish straight and level flight at a nominated speed, height and heading.*
- *Demonstrate competence at controlling helicopter altitude speed and heading by sole reference to flight instruments.*
- *Use an appropriate technique of instrument scanning and cross check to maintain flight within prescribes limits.*
- *Maintain directional control and balance throughout.*
- *Complete all necessary checks and drills throughout.*

b. Rate 1 level turns onto specified headings 180° to 360° left and right:

- *Establish turns at rate 1, using the direction indicator, on to examiners nominated headings whilst maintaining altitude/height and speed.*
- *Demonstrate competence at manoeuvring the aircraft by sole reference to flight instruments.*
- *Use an appropriate technique of instrument scanning and cross check to maintain flight within prescribes limits.*
- *Maintain directional control and balance throughout.*
- *Complete all necessary checks and drills throughout.*

c. Climbing and descending, including turns at rate 1 onto specified headings:

- *Establish climb/descent and turns at rate 1, on to examiners nominated headings whilst maintaining altitude/height and speed.*
- *Demonstrate competence at manoeuvring the aircraft by sole reference to flight instruments.*
- *Use an appropriate technique of instrument scanning and cross check to maintain flight within prescribes limits.*
- *Maintain directional control and balance throughout.*
- *Complete all necessary checks and drills throughout.*

d. Recovery from unusual attitudes:

The examiner will take control of the aircraft with the applicant continuing to follow through. The applicant will close their eyes whilst the examiner places the aircraft into an 'unusual attitude'. On being given the instruction "you have control" the applicant is to return the aircraft to straight and level flight or, if in the descent, establish a climb.

- *Regain control of the aircraft.*
- *Adjust/correct aircraft attitude, speed and altitude, demonstrating an appropriate sequencing technique.*
- *Demonstrate competence at manoeuvring the aircraft by sole reference to flight instruments.*
- *Use an appropriate technique of instrument scanning and cross check to maintain flight within prescribes limits.*
- *Maintain directional control and balance throughout.*
- *Complete all necessary checks and drills throughout.*

e. Level turns with up to 30 degree angle of bank, 180 to 360 degrees left and right:

- *Establish turns at up to 30 degrees angle of bank, using the direction indicator, on to examiners nominated headings whilst maintaining altitude/height and speed.*
- *Demonstrate competence at manoeuvring the aircraft by sole reference to flight instruments.*
- *Use an appropriate technique of instrument scanning and cross check to maintain flight within prescribes limits.*

- *Maintain directional control and balance throughout.*
- *Complete all necessary checks and drills throughout.*

Section 5 - Abnormal and Emergency Procedures

The examiner shall select a minimum of 4 items from this section.

- *Engine malfunctions including governor failure, carb/engine icing, oil systems, as appropriate.*
- *Fuel system malfunction.*
- *Electrical system malfunction.*
- *Hydraulic system malfunction including approach and landing without hydraulics, as applicable*
- *Main rotor and/or tail rotor malfunction (FFS or discussion only).*
- *Fire drills including smoke control and removal, as applicable.*
- *Other abnormal and emergencies procedures as outlined in part FCL or in the appropriate flight manual.*

The applicant shall:

- *Analyse emergency or abnormal situation and formulate appropriate plan.*
- *Execute abnormal or emergency drills.*
- *Plan and execute further actions to ensure safe recovery of helicopter, passengers and crew.*
- *Use check list to confirm actions when time permits.*
- *Make suitable emergency R/T calls (given to examiner but not transmitted).*
- *Inform ATC of the practice emergency situation and assistance required (where appropriate).*

APPENDIX 2 CPL SKILL TEST TOLERANCES

The following is an extract from Part-FCL Appendix 4.

PROFILE	Tolerance
Height – normal forward flight	± 100 ft
Height - with simulated major emergency	± 150 ft
Heading/Tracking of radio aids - normal flight	± 10°
Heading - with simulated major emergency	± 15°
Speed – take-off / approach	± 5 kt
Speed - all other flight regimes	± 10 kt
Ground drift - T.O. & hover IGE	± 3 ft
Drift permissible on landing	Nil

APPENDIX 3 SKILL TEST - 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 your stress.

Make sure you eat regularly. Skipping a meal, e.g. breakfast, will make your blood sugar level unstable and this will make the symptoms of stress worse.

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 may contain high levels of caffeine and will not help.

Exercise has been proved to reduce stress. It uses up the body chemicals produced by too much stress (e.g. adrenalin) and replaces them with endorphins, feel-good body chemicals. You can test this: next time you are going to take exercise note how stressed are you 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 round the car park before going in.

Stress is increased by negative thoughts e.g. 'I am going to fail this test'. 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 the people in the room may be going to eat that evening - anything that will engage your attention. The more detailed the task you give yourself, the more distracting it will be.

If you know that you are inclined to become stressed, then plan ahead as to how you might manage your stress. Decide what exercise you are going to take, and practise 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. Don't add to the pressure; is it sensible 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 your 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 to 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 web site 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.