Safety & Airspace Regulation Group

Flight Operations

UK CAA Helicopter Flight Examiner Manual

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LIST OF AMENDMENTS

Number	Version	Date	Reason for amendment	List of affected pages
0	1	23/04/2021	Initial issue	All

FLIGHT EXAMINER MANUAL FOREWORD

The purpose of the UK CAA Helicopter Examiners Manual is to provide UK helicopter examiners (FE, IRE, FIE, TRE, SFE, SE) with a convenient reference for the conduct of their examining tasks.

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 as amended. 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.

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

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.
- 'Test' may also apply to skills tests, proficiency checks and assessments of competence.
- "Examiner" is used to indicate a person who is authorised by the CAA to conduct the appropriate test.
- "Applicant" is used to indicate a person who is seeking the issue, revalidation or renewal of a pilot's licence, certificate or rating.
- A 'test' is a demonstration of skill for the initial issue, renewal, or revalidation of a licence, rating or certificate. Such tests include oral examination and flight test as appropriate.

If, after reading this document, there are any queries or comments, please contact a CAA Flight Operations Training Inspector (FOTI) (see list below) by e mail or at the address below:

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PART 1 BASIS FOR EXAMINING

1.1 Examiner Certification

The CAA may, in accordance with Air Navigation Order 2016 as amended, authorise a person to conduct such tests as it may specify. In addition, ARA.GEN.300 requires the competent authority to verify, prior to issuing a licence, certificate or rating that the applicant complies with the applicable requirements and continues to comply with the applicable requirements whilst holding that licence, certificate or rating. This paragraph sets out the basis on which the CAA authorises examiners under the provision of the ANO and Authority requirements.

The CAA will issue examiner certificates to suitably qualified persons of integrity to conduct skill tests (ST), proficiency checks (PC) and assessments of competence (AoC). The prerequisites, standardisation, validity, privileges and limitations of examiner certificates are set out in Part-FCL Subpart K. The certificate issued to each examiner indicates the privileges and validity of the examiner authorisation. Where no suitably qualified examiner is available to conduct an ST, PC or AoC, a CAA inspector or examiner may be authorised by the CAA. A list of UK CAA approved examiners is contained in CAP 1585 which is updated quarterly.

There are six helicopter examiner certificates:

a. Flight Examiner (FE)
b. Type Rating Examiner (TRE)
c. Instrument Rating Examiner (IRE)
d. Flight Instructor Examiner (FIE)
e. Synthetic Flight Examiner (SFE)
f. Senior Examiner (SE)

Providing examiners meet the qualification, experience and certification requirements for each certificate, examiners are not restricted to the number of privileges held.

Examiners have a vital role in the regulation of flight standards and promotion of flight safety by conducting skill tests, proficiency checks, assessment of competence and/or ground examinations for licences, ratings and certificates. It is essential that examiners have the trust and respect of the CAA, of applicants for tests, of the approved training organisations and the aviation community in general. In particular applicants for examiner certification shall:

a. Demonstrate compliance with the Basic and Aircrew Regulation, the Air Navigation Order, Rules of The Air Regulations and good aviation practice in respect of their own flight operations.
b. Hold a valid licence, rating and certificate as required to exercise the privileges of the examiner certificate applied for.
c. Agree to comply with standardisation and currency requirements as determined by the CAA.
d. Agree to keep records of flight tests in accordance with current regulation and make them available for inspection when required by the CAA.
e. Be of good character, integrity and demonstrate cooperation with the CAA. The CAA operates a Fitness of Character Policy for all licence holders which can be found on the CAA Website and at Annex 8 of this document.
f. The CAA may also take into account whether the applicant has been convicted of any relevant criminal or other offences.

Once certified, Examiners shall:

a. Conduct tests impartially and without fear or favour in accordance with the current procedures and standards for testing as determined by the CAA.
b. Continue to demonstrate compliance with the Basic and Aircrew Regulation, Air Navigation Order, Rules of The Air Regulations and good aviation practice in respect of their own flight operations.
c. Continue to maintain their own licences, ratings and certificates as required in order to exercise their piloting, instructing and examining privileges.
d. Comply with standardisation requirements for examiners as determined by the CAA.

e. Only sign applications for licences, ratings or certificates, licence pages or pilot log books when they have ensured that all the requirements for experience and or test as appropriate, have been met by the applicant.
f. Keep records of flight tests and make them available for inspection when required by the CAA.
g. Continue to be of good character, have integrity, demonstrate cooperation with the CAA and continue to hold the trust and respect of the CAA, of applicants for test, of approved training organisations and the aviation community in general.

In the case of skill tests and proficiency checks provided outside the territory for which the UK is responsible under the Chicago Convention, the CAA can issue an examiner certificate (FCL.1000(c)) to applicants holding a pilot licence that is compliant with Annex 1 to the Chicago Convention, provided that those applicants:

a. Hold at least an equivalent licence, rating, or certificate to the one for which they are authorised to conduct the test, and in any case at least a CPL;
b. Are qualified to act as PIC in the aircraft during a test that is conducted in the aircraft;
c. Comply with the requirements established in Part FCL for the issue of the relevant examiner certificate; and
d. Demonstrate to the CAA an adequate level of knowledge of UK aviation safety rules to be able to exercise examiner privileges in accordance with Part FCL.

1.2 Operational Medical Limitation (OML)

Examiners holding a limited medical category may have their examiner authorisation restricted. Some examiners have an OML placed on their medical certificate restricting them to fly 'as or with a qualified co-pilot'. The scope of examining that they can undertake is specified on their medical certificate. Examiners with an OML should make clear to an applicant during the pre-flight brief that they have an OML, and how, in general terms, any incapacity might manifest itself, and what steps the applicant should take in the event of examiner incapacitation.

1.3 Examiner Designation

The CAA procedures for the designation of examiners for tests which examiners must comply with is published on the CAA website. Examiners who wish to conduct tests on applicants whose National Authority is not the UK must comply with that National Authorities' instructions. In addition, when conducting a test in another country, the examiner must also comply with any national requirements.

All CPL Skill Tests, Instrument Rating Skill Tests and Examiner AoC's are to be arranged through flighttestbookings@caa.co.uk and where prior notification is required, this should be obtained from testnotification@caa.co.uk The CAA reserves the right to allocate a CAA FOTI to conduct, or observe any test, check or AoC.

The CAA employ Flight Operations Training Inspectors who in addition to acting as CAA Inspectors as defined by Part-FCL, may be approved to act as examiners.

1.4 Examiner Impartiality

Examiners shall not conduct skill tests or assessments of competence of applicants for the issue of a licence, rating or certificate to whom they have provided more than 25 % of the required flight instruction for the licence, rating or certificate for which the skill test or assessment of competence is being taken, or where they believe they have a vested interest. For example, when the applicant is a relative or a friend of the examiner or when they are linked by economic interests or political affiliations.

1.5 Examiner Approach

Communication between the examiner and the applicant must be established without language barriers with the applicant requiring an English Language Proficiency (ELP) of at least Level 4 (see 'Annex 10 – English Language Proficiency' for further guidance on applicant ELP requirements).

An examiner should establish a professional atmosphere and do their best to relax the applicant both before and during a test or check flight. A negative or confrontational approach should not be used. During the test or check flight, the examiner should avoid negative comments or criticisms and all assessments should be reserved for the debriefing.

1.6 Examiner Responsibilities

Before conducting a test, examiners should ensure that they hold an equivalent licence, rating or certificate to the one for which they are conducting the test and hold the privilege to instruct for that licence, rating or certificate. They must also be qualified to act as pilot in command on the aircraft during a test, when conducted on the aircraft (unless granted Special Conditions under Part FCL 1000(b)). Tests undertaken by an examiner with an expired aircraft rating, instructor certificate or examiner certificate may be deemed to be invalid. Applications to vary, revalidate or renew examiner certificates shall be made to examiners@caa.co.uk.

An examiner is responsible for validating the identity of the applicant and verifying that the applicant complies with all the qualifications, training and experience requirements in Part FCL for the issue, revalidation or renewal of the licence, rating or certificate for which the test, is taken and where appropriate a Recommendation for Test has been issued. The applicant's training record's and personal flying logbook(s) must be made available to the examiner prior to the test. The examiner will be required to complete the examiner's report which includes a declaration that the examiner has received information from the applicant verifying the applicants experience and instruction complies with the applicable requirements in Part FCL.

If the examiner is satisfied that all relevant documentation is in order they may proceed with the test. If the inspection of the documentation raises any concerns as to the fitness or qualification of the applicant to take the test or to exercise the privileges, which a pass would confer, the examiner should refer the matter to the CAA. The examiner must make the applicant aware of the consequences of providing incomplete, inaccurate or false information related to their training and flight experience.

Whilst all relevant Theoretical Knowledge (TK) examinations must have been passed prior to a skill test, integrated course students may attempt a skill test prior to having passed all the examinations provided they have completed all the TK training.

Applicants for the IR who are credited in full with the TK training and examinations and flight training on the basis of holding a valid IR issued in accordance with the requirements of Annex 1 to the Chicago Convention, and who have not undertaken training at an ATO prior to test, will not be in possession of training records, a course completion certificate or a recommendation for test.

The examiner should confirm that the applicant is fit and well to take the test. It is not acceptable, post-test, for the applicant to claim that they were unwell.

1.7 Disciplinary Policy for Examiners

Instructors and examiners are often the first aviation professionals with whom a student pilot will come into contact. By the very nature of their roles, instructors and examiners will have considerable influence over a student pilot and are likely to be held in high esteem. Accordingly, the CAA expects instructors and examiners to demonstrate by their actions the values that are essential to safe flying.

Applicants for an examiner certificate issue, revalidation and renewal shall demonstrate

a. the relevant knowledge, background and appropriate experience relative to the privileges of an examiner.

b. that they have not been subject to any sanctions, including the suspension, limitation or revocation of any of their licences, ratings or certificates, for non-compliance with the Basic Regulation and its Implementing Rules during the last 3 years.

When evaluating the applicant's background, the CAA will evaluate the personality and character of the applicant, and their cooperation with the competent authority. The CAA may also consider whether the applicant has been convicted of any relevant criminal or other offences.

ARA.GEN.355 provides for raising findings against a person holding a licence, certificate or rating for non-compliance with the applicable requirements. When a finding is raised, the CAA shall carry out an investigation and if the finding is confirmed the CAA may limit, suspend or revoke the licence, certificate or rating and take any further enforcement measures necessary to prevent the continuation of the non-compliance. The CAA must be satisfied that a person is fit and qualified to conduct any specified tests before certifying that they may do so. In verifying that a person remains fit, qualified and in compliance with the applicable requirements the CAA will consider the elements set out below. If the CAA ceases to be so satisfied about the conduct or competence of an examiner that it has certified, it will take appropriate action.

Examples of the circumstances under which the CAA can limit, suspend or revoke licences, ratings or certificates are, but not limited to:

a. Competence and qualification.
b. Falsification of or failure to keep records.
c. Propensity not to abide by rules and regulations.
d. Any action that would impact on flight safety or on the safety of persons on the ground.
e. Alcohol or other psychoactive substances.
f. Drug related offences or activities.
g. Sexual offences.
h. Criminal convictions.
i. Non-compliance with the CAA Fitness of Character Policy which can be found on the CAA website and at Annex 8 of this manual.

If it becomes apparent that an examiner is failing to achieve the standards expected, is not compliant with the applicable requirements or the CAA cannot remain satisfied as to the fitness or qualification of an examiner, the CAA will take appropriate steps to rectify the situation. The following is a list of actions that may be taken, ranging from informal discussions to legal action. This list is not necessarily in order of escalation, and it should be noted that more than one action may be taken concurrently:

a. Informal discussion.
b. Observations.
c. Raise findings.
d. Formal meeting or Interview.
e. Formal Warning or put on notice.
f. Provisional suspension, limitation or variation of an examiner certificate.
g. Suspension, limitation or variation of an examiner certificate.
h. Revocation of an examiner certificate.
i. Requirement for retraining and/or reassessment of examiner skills.
j. Prosecution.

The disciplinary action taken will depend on the circumstances of the individual case. An examiner's certificate may be provisionally suspended pending investigation of an alleged offence or until remedial action such as retraining is completed.

Further details can be found in CAA 'CAP 1074 Safety and Airspace Regulation Enforcement Guide' on the CAA website.

In the event of a proposal to suspend or revoke a certificate, an examiner will be entitled to request a review of the proposal in accordance with Regulation 6 (5) of the Civil Aviation Authority Regulations 1991.

PART 2 FLIGHT TEST MISCELLANEOUS GUIDANCE

2.1 Applicants Licence and Medical Validity

It is an individual's responsibility to ensure that the licence, medical, ratings and certificates are valid before acting as a member of a flight crew. An examiner must check an applicant's licence and medical certificate to ensure that any rating or certificate renewed or revalidated as a result of a test, or by experience, will be valid.

Tests may be carried out on individuals whose licence or medical has expired, however, before the flight, the examiner must point out such discrepancies to the applicant and explain that, irrespective of the result of the flight test, the applicant will not be able to exercise the privileges of the rating until the medical certificate and/or rating has been renewed. In the case of an expired medical certificate, the Certificate of Revalidation can still be signed (if appropriate) however, the applicant can only record the flight as 'Dual' or 'PuT' and the examiner must annotate the appropriate application form with 'Current Medical Certificate not seen'.

For any test that requires the applicant's licence to be reissued, the applicant will be required to state on the application form that they have a current medical certificate or that they have a medical examination booked. The CAA will not re-issue a licence unless the applicant has a current medical certificate.

Where a check is carried out on an individual whose rating has been moved to the back of the licence, no entry should be made on the Certificate of Revalidation and an SRG 1100 can be issued if appropriate. The applicant's copy of the completed application and report form should then be annotated that no entry has been made in the applicant's licence.

If an applicant for a PC does not present a valid licence or medical and has an acceptable reason for not doing so, the check may be conducted in an approved FFS. If the test is successful, and as it will not be possible to sign the Certificate of Revalidation, the applicant must be told that they cannot exercise the privileges of that rating. In this case, the examiner cannot issue a Temporary Certificate.

2.2 Aircraft

Before undertaking a test, an examiner will verify that the aircraft to be used is airworthy, suitable and appropriately equipped for the test. CAA Standards Document 07 (H) provides guidance on helicopters to be used for CPL and IR tests. If examiners have any doubt as to the airworthiness of an aircraft offered for test, they should check the appropriate technical logs and consult a licensed engineer.

Part-21 aircraft operated by a flight training establishment performing remunerated tests and checks must meet the requirements of Commission Regulation No. 1321/2014 Annex Vb (Part-ML) ML.A.201(e) or Annex I (Part-M) M.A.201(h), as retained in UK law by the European Union (Withdrawal) Act 2018. Aircraft must hold a Certificate of Airworthiness with a valid Airworthiness Review Certificate and be maintained in an airworthy condition in accordance with the AMP. Maintenance and continuing airworthiness management must be performed by approved organisations i.e. Part-145, Part-M Subpart F, or Part-CAO (with maintenance privileges) for maintenance and Part-CAMO, Part-CAO, or Part-M Subpart G for continuing airworthiness management. Group or privately-owned Part-21 aircraft may only be used for remunerated tests and checks on the basis that the aircraft is maintained by an approved organisation (for example, contracted to a CAMO or CAO).

Flight tests and training 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. 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 licensing requirements of the state of registration must be met 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.

When manoeuvres are to be flown by sole reference to instruments, the examiner should be satisfied that suitable means are available to limit the pilot's external field of view to simulate IMC.

To be able to conduct flight tests effectively it is important that examiners are competent in the operation of the aircraft including the operating limitations, emergency procedures and content of the OSD including Training Areas of Special Emphasis. Before testing on aircraft with new or unfamiliar equipment, examiners must complete the Differences or Familiarisation training required by Part FCL and the OSD.

Examiners must comply with the recommendations and mitigations from any training organisation's training risk assessments relevant to the aircraft type or task.

Guidance is given at Annex 3 for conducting tests in helicopters equipped with EFIS, FMS and autopilots.

2.3 Flight Simulation Training Devices (FSTDs)

Guidance is given at Annex 1 on the use of FSTDs for tests.

2.4 Flight Tests on ICAO Licence Holders for Issue of an UK Licence, Rating or Certificate

Article 3 of UK (EU) Regulation 2020/723 of the Aircrew Regulation states the requirements for the issue of UK licences to ICAO licence holders. Applicants shall comply with all the requirements of Part FCL, except that the requirements of course duration, number of lessons and specific training hours may be reduced. The credit given to the applicant shall be accepted by the UK CAA based on a recommendation from a UK training organisation. In addition to the evidence of course completion and recommendation for test, such applicants for any licence (except ATPL), rating or initial FI assessment of competence must present to their examiner written agreement from the CAA to carry out an abridged course unless the CAA have published a minimum training requirement for the abridged course and this requirement has been met.

2.5 Testing of Service Pilots under the UK Military Accreditation Scheme

In accordance with Article 10 of the Aircrew Regulation, the UK has developed the Military Accreditation Scheme (MAS) MAS CAA link and this is also described in CAP 804: Flight Crew Licensing (caa.co.uk). An applicant for the licence, rating or certificate is not required under the terms of the MAS to complete training at a training organisation prior to undertaking a test. A declaration by the pilot's Commanding Officer or a training organisation's Head of Training (Section 7 of form SRG2133) is acceptable as a Recommendation for Test as required by FCL.030. However, as military commanders may not be aware of all the elements of the relevant test, any training organisation that is instrumental in presenting a military pilot for a test should ensure that the applicant is aware of the contents of the relevant Standards Document.

2.6 Airfields to be Used

In accordance with ANO 2016 Articles 207and 208 all flight instruction and testing in helicopters with a MTOW of more than 3175 kg for the purpose of becoming qualified for the grant of a pilot's licence or the inclusion of a rating must be carried out at a licensed aerodrome or at a UK Government aerodrome. A list of Government aerodromes available for civilian use appears in the UK AIP.

In accordance with ANO 2016 Article 209, training and testing in helicopters with a MTOW of 3175 kg, or less for the grant of a pilot's licence or the inclusion of a rating may take place at unlicensed aerodromes providing that both the aerodrome operator and the commander of the aircraft are satisfied that adequate facilities exist for the safe conduct of such flights. In addition, Part ORA states requirements for aerodromes to be used by ATOs. The CAA has published CAP 793 to give further guidance on this subject.

Whilst training and testing for the grant of an FI or FE certificate, Instrument Rating or the revalidation or renewal of an existing rating or certificate does not fall under the provision of these articles, commanders of such flights shall comply with ANO 2016 Articles 69 & 75 and satisfy themselves that the flight can be safely carried out.

2.7 Test Scheduling

UK CAA policy is that examiners should plan, per day, not more than:

a. 2 skills tests relating to LAPL, PPL, CPL, IR.
b. 1 assessment of competence related to the initial issue of instructor or examiner certificates.
c. 2 assessments of competence related to the revalidation of instructor or examiner certificates.
d. 4 tests or checks related to MP/SP VFR type ratings.
e. 1 skills test or check related to combined MP VFR and IFR type ratings.

The UK CAA recommends minimum flight and ground times as follows:

Test	Ground (including brief/ planning/debrief)	Flight (Helicopter) (flight time)	Total
PPL/LAPL	2 hrs	1½ hrs	3½ hrs
CPL	2 hrs	1½ hrs	3¼ hrs
IRT	2 hrs	1 hr	3 hrs
TR ST/PC	2 hr	1 hr	3 hrs
TR ST/PC inc. IR	2 hrs	2 hrs	4 hrs
Instructor/Examiner AoC	5 hrs	1 hr	6 hrs

2.8 Training During Flight Tests

With the exception of a combined PC and OPC (see Appendix 5, para 5.5), training shall not be conducted during flight tests.

2.9 Weather Conditions

Examiners are to ensure that the weather conditions are adequate for the test. Applicants must be prepared to operate within the constraints of the weather limits detailed in the operations manual of their training organisation or operator. This should not include limits declared solely for the supervision of ab-initio student pilots; the weather minima for test must be appropriate for the planned operation and the privileges of the licence or rating being sought. Recommended weather parameters for tests are included in the relevant Appendices to this manual.

Using an excuse of unsuitable weather, when the weather is within the limitations of the relevant Operations or ATO manual, should not normally be considered an appropriate reason to decline the test.

2.10 Insurance

Examiners must ensure that they are adequately insured against personal liability and personal injury while examining.

2.11 General Data Protection Regulation (GDPR)

It is important that examiners fully understand the provisions of GDPR in the safeguard and the use of personal data that is collected during testing. See Annex 9 for full details.

2.12 Carriage of Passengers

There are a number of significant risks relating to the carriage of passengers on tests. NCO.OP.180(a), CAT.OP.MPA.275, NCC.OP.200 and SPO.185 stipulate that a pilot-in-command shall, when carrying passengers or cargo, not simulate:

a. situations that require the application of abnormal or emergency procedures; or
b. flight in instrument meteorological conditions.

2.13 Test Fees

For all tests where a test or booking fee is due to the CAA, the appropriate fees shall be paid in advance.

If an examiner arrives to conduct a test and that test cannot take place because it is apparent the applicant has not met all the training requirements for the test, the examiner's fee will be forfeit even if the flight does not take place.

PART 3 FLIGHT TESTING AND ASSESSMENT

3.1 Definitions

For the purposes of this manual, the following definitions, taken from Part FCL shall apply:

a. Skill Test: the demonstration of skill for a licence or rating issue, including such oral examination as may be required.
b. Proficiency Check: the demonstration of skill to revalidate or renew ratings or privileges, and including such oral examination as may be required.
c. Assessment of Competence: the demonstration of skills, knowledge and attitude for the initial issue, revalidation or renewal of an instructor or examiner certificate.
d. Revalidation (of, e.g. a rating or certificate): the administrative action taken within the period of validity of a rating or certificate which allows the holder to continue to exercise the privileges of a rating or certificate for a further specified period consequent upon the fulfilment of specified requirements.
e. Renewal (of, e.g. a rating or certificate): the administrative action taken after a rating or certificate has lapsed for the purpose of renewing the privileges of the rating or certificate for a further specified period consequent upon the fulfilment of specified requirements.

3.2 Aim of the Flight Test

The examiner is to:

a. Determine through practical demonstration during the test or check that an applicant has acquired or maintained the required level of knowledge and skill or proficiency.
b. Improve training and flight instruction in training organisations by feedback of information about items or sections of tests or checks that are most frequently failed or poorly performed.
c. Assist in maintaining and where possible improving flight safety standards by displaying good airmanship and flight discipline during tests and checks.

3.3 Basic Principles of Flight Testing

An examiner must ensure that an applicant completes a test or check in accordance with Part-FCL requirements and is assessed against the required test or check standards. All the manoeuvres and procedures set out in the appropriate test schedule must be undertaken.

Only the manoeuvres and procedures set out in the appropriate test form shall be undertaken.

Some test schedules list mandatory (M) items which are the minimum requirements; but the remaining items remain optional for the examiner to pursue at their discretion if they are briefed prior to flight.

Each item within a test or check section should be completed and assessed separately. The test or check schedule, as briefed, should not be altered by an examiner without agreement with the applicant and a re-brief where necessary.

For some tests a failed item in a section results in that section being failed; the re-test requires the entire section to be taken again. For other tests and checks a failed item does not fail the entire section; only the failed item is taken again. Further guidance for each test can be found in the appropriate Appendix to this Manual.

Marginal or questionable performance of a test or check item should not influence an examiner's assessment of any subsequent items.

An examiner should verify the requirements and limitations of a test or check with an applicant during the pre-flight briefing.

Following a test or check, whether complete, incomplete or discontinued, an examiner must debrief the applicant. If any items or sections were failed, the reasons for failure must be clearly explained.

The examiner should then provide appropriate advice and guidance to assist the applicant in any future attempt.

Any comment on, or disagreement with, an examiner's test or check evaluation or assessment made during a debriefing will be recorded by the examiner on the test or check report, signed by the examiner and countersigned by the applicant.

The same examiner should not re-examine a failed applicant without the agreement of the applicant.

3.4 Applicant Standards

An applicant must:

a. Operate the aircraft within its limitations.
b. Complete all manoeuvres with smoothness and accuracy.
c. Exercise good judgement and airmanship.
d. Apply aeronautical knowledge of the relevant procedures and regulations.
e. Maintain control of the aircraft at all times such that the successful outcome of a procedure or manoeuvre is never seriously in doubt.
f. Understand and apply crew co-operation and incapacitation procedures (if applicable).
g. Communicate effectively with the other crew members (if applicable).

The applicant's airmanship and TEM must be assessed with each exercise and this must include lookout, normal/abnormal/emergency procedures, cockpit management, R/T, ATC liaison, fuel management, icing precautions, planning and use of airspace and decision making. Special emphasis should be placed upon areas of aircraft operation that are most critical to flight safety.

3.5 Repeat Manoeuvres

At the discretion of the examiner a manoeuvre or procedure of the test or check may be repeated once by the applicant. The option to repeat an item is not a right of the applicant. Examiners must use their discretion to ensure the applicant has had every opportunity to demonstrate the necessary skill or technique.

An item may be repeated If the applicant's performance is in doubt and the root cause is a minor, non-safety critical error which may be identified and corrected by means of a simple in-flight debrief, without any need for re-training.

An item should be repeated as soon as possible during the check, without compromising any scenario or disrupting the applicant's situational awareness. If the manoeuvre or procedure is not successfully completed during the repeat, then a 'Fail' is to be awarded and appropriate re-training recommended or mandated. Further guidance on pass/fail criteria is provided in the relevant test appendix to this manual.

Multiple use of the discretion to repeat a test item is not in the spirit of the regulations. If several items are not performed to the required standard, use of repeats is not appropriate and the items should be assessed as 'Fail'.

If the test is scheduled over more than one day with the same examiner, then a repeat may be carried over to subsequent days, but this should be avoided whenever possible. A repeat may not be handed over to another examiner. If the first examiner is not able to complete the repeat item, it must be assessed as 'Incomplete'.

Discretion to repeat an item may not be exercised at a second attempt.

3.6 Test Termination / Incomplete Test

An examiner should terminate a test or check only for safety reasons, or when the applicant has not been able to demonstrate the required level of knowledge, competency, skill or proficiency to safely operate the aircraft. In this case a full re-test will be required.

Should the test be incomplete, (e.g. due to weather or aircraft technical faults, the applicant must be assessed on another occasion but only on those sections or items outstanding to complete the test). This should be at the earliest practicable opportunity and preferably with the same examiner. Where a second examiner becomes involved with completion of a test or check, a copy of the original test/check schedule will be required. If all check items are not completed within the remaining validity period of the rating, the rating will lapse and renewal action will be required. If any items were failed on the first flight, all items not completed on the first attempt must be tested separately, before any re-test is undertaken.

If the test is terminated for reasons considered adequate by the examiner it is deemed to be 'incomplete'. Only those items/sections not completed shall be tested in a further flight. All items or sections not completed must be tested on a separate flight and before any further attempt is undertaken. Further guidance on incomplete tests is found in the appropriate Appendix to this manual.

Should an applicant choose not to continue a test for reasons considered inadequate by an examiner, the applicant will be assessed as having failed those items or sections not attempted. This situation will result in the test being assessed as a 'Fail' or a 'Partial Pass', as appropriate.

If an applicant has presented themselves for check and did not declare unfit prior to the test, it is reasonable to assume that they would have presented for a flight. It is not acceptable post- test, for the applicant to complain that they were unwell.

3.7 Assessment

The standard of performance produced by applicants varies widely and at times may be difficult to assess. Assessment relies heavily upon the experience and judgement of the examiner to determine what is acceptable. Most pilots will dislike the prospect of being tested and some applicants will become extremely nervous and not perform as normal or may react to false assumptions of what is expected. The attitude and approach of the examiner can do much to overcome these difficulties. However, the examiner must apply the standard evenly, fairly and without prejudice. In order to maintain this uniform standard, certain basic principles must be applied, and assessment should be based upon the following:

a. '**Pass**', provided that the applicant demonstrates the required level of knowledge, skill or proficiency and, where applicable, remains within the flight test tolerances for the licence or rating;

b. '**Fail**' provided that any of the following apply:

   (i) the flight test tolerances have been exceeded after the examiner has made due allowance for turbulence or ATC instructions;
   (ii) the aim of the test or check is not completed;
   (iii) the aim of the exercise is completed but at the expense of safe flight, violation of a rule or regulation, poor airmanship, poorly managed risks, significant errors that go unnoticed or uncorrected for significant amounts of time or rough handling;
   (iv) an acceptable level of knowledge is not demonstrated;
   (v) an acceptable level of flight management is not demonstrated;
   (vi) the examiner has to intervene to prevent an unsafe situation or undesirable aircraft state.

c. '**Partial Pass**' in accordance with the relevant test criteria appendix of Part-FCL.

In the event of a pass the examiner shall give a summary of any weak points suggesting, where necessary, the best way to overcome them.

If the examiner has the privilege to revalidate or renew the rating on the licence, they may do so provided that: the licence holder has complied with the requirements for the revalidation or renewal. Upon request by the CAA, submit all records and reports, and any other information, as required for oversight activities.

Examiners must maintain records for 5 years with details of all skill tests, proficiency checks performed and their results.

In the event of a 'Partial Pass' or 'Fail', the examiner shall inform the applicant that they may not exercise the privileges of the rating until a full pass has been obtained. The examiner shall detail any further recommended retraining requirement and explain the applicant's right of appeal.

In the event of a 'Fail' being recorded, examiners should:

a. Ask questions as required;
b. Give results of the test;
c. Give reasons for failure in descending order of importance;
d. Tell the applicant they may not use the privileges of the type or instrument rating;
e. State what the retest requirements may be;
f. Tell the applicant how to best prepare for the retest;
g. Complete appropriate post flight paperwork

Any comment on, or disagreement with, an examiner's test or check evaluation or assessment made during a debriefing will be recorded by the examiner on the test or check report and will be signed by the examiner and countersigned by the applicant.

3.8 Retest Requirements

Comprehensive guidance on retest requirements is given in the appropriate appendix to this manual. Examiners must ensure that the retest requirements are properly debriefed and understood by the applicant.

3.9 Further Training

Part-FCL states that, in the event of a 'Partial' 'Pass' or 'Fail', the examiner shall inform the applicant that they may not exercise the privileges of the rating or certificate until a full 'Pass' has been obtained. The examiner must complete an SRG 2129 including the detail(s) of any further training requirement, whether recommended or mandatory, and explain the applicant's right of appeal.

In cases where failure was due to a clear lack of skill/knowledge, the examiner should make it clear to the applicant that they are unlikely to be successful during a subsequent test unless they undergo further training to remedy that lack of skill/knowledge. Examiners must ensure that the training requirements are proportionate, clearly defined and understood by the applicant. It is recommended that such further training be carried out at the training organisation that trained the applicant. Examiners must also confirm before retest that further training mandated by a previous examiner has been completed.

Except for PC's and OPC's, and where an applicant has failed a second series of tests, the examiner must inform the CAA by e-mail to examiners@caa.co.uk. The CAA may nominate a Flight Operations Training Inspector (FOTI) or another examiner to conduct the third and subsequent test series.

3.10 Regulation 6 Appeals

Regulation 6(5) of the CAA Regulations 1991 states that 'Any person who has failed a 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 after being notified of the failure, request that the Authority determine whether the test or examination was properly conducted. Following the failure of any test the examiner shall explain the applicant's right of appeal. If an examiner becomes aware of an applicant's intent to submit a Regulation 6 appeal, the examiner must notify a CAA Flight Operations Training Inspector.

It is vital that all Examiners ensure that their standard of examining is impartial, consistent and beyond reproach.

The examiner must ensure that the examiners' report form and notice of failure form SRG 2129, are completed correctly and that any failed items are clearly identified without any subjective interpretation. All items should be supported by numerical examples of breached tolerances wherever possible. The written report should not include anything that has been omitted from the verbal debrief.

3.11 Tolerances

Although tests or checks may specify flight test tolerances, an applicant should not be expected to achieve these at the expense of smoothness or stable flight. An examiner should make allowances for unavoidable deviations due to turbulence, ATC instructions and the handling qualities and performance of the type of aircraft used. Applicants may be advised that, during the flight, they should concern themselves only with flying and operating the aircraft to the best of their ability and not attempt to remain within the tolerances to the detriment of smooth handling. Tolerances for the specific tests are listed in the appendix for the relevant test.

PART 4 CONDUCT OF THE FLIGHT TEST

4.1 Test Content

A flight test is comprised of:

- Oral examination on the ground
- Pre-flight briefing
- Pre-flight planning
- In-flight exercises
- Post-flight debrief
- Test administration

An examiner should plan the relevant test in accordance with the Part-FCL requirements so that all the required exercises can be performed while allowing sufficient time for each of the exercises and with due regard to the weather conditions, traffic situation, ATC requirements and local procedures. Only the manoeuvres and procedures set out in the appropriate test form shall be undertaken. As a test or check is intended to simulate a practical flight, an examiner should set practical scenarios whilst ensuring that the applicant is not confused, and flight safety is not compromised

4.1.1 Oral Examination

The oral examination should take place on the ground to establish the applicant has the appropriate theoretical knowledge in the following subjects:

a. Aircraft general knowledge and performance
b. Planning and operational procedures
c. Other relevant items or sections of the test or check

Prior to the flight, the examiner must establish that the applicant has a level of knowledge to be able to safely operate the aircraft.

For single-engine type ratings skills tests, the theoretical knowledge examination shall be conducted verbally by the examiner during the skill test to determine whether a satisfactory level of knowledge has been achieved.

For single pilot multi-engine and multi-pilot type ratings skills tests, a written theoretical knowledge examination shall be passed before the skill test is commenced.

4.1.2 Pre-Flight Briefing and planning

An example of appropriate briefings for each test can be found in the relevant appendix to this manual.

An examiner should verify the requirements and limitations of a test with the applicant during the pre-flight briefing and cover at least:

a. Test or check sequence;
b. Power setting, speeds and approach minima (if applicable);
c. Safety considerations.

An examiner should allow the applicant adequate time to prepare for a test or check, normally not more than 1 hour. An examiner should supervise all aspects of the test or check flight preparation, including, where necessary, obtaining or assuring an ATC ‘slot’ time.

4.1.3 In Flight Exercises

In-flight exercises will include the items or sections of the test or check in accordance with the relevant Part FCL Appendix and the examiner will ensure that the applicant completes a test in accordance with Part-FCL requirements and is assessed against the required test standards.

Guidance on conducting simulated emergencies and abnormal procedures in aircraft is at Annex 4. Guidance on the testing of CRM/MCC and TEM is at Annex 5.

The test or check schedule, as briefed, should not normally be altered by an examiner. However, an examiner should be flexible to the possibility of changes arising to pre-flight briefings due to ATC instructions, or other circumstances affecting the test or check. Where changes arise to a planned test or check, an examiner should be satisfied that the applicant understands and accepts the changes. Otherwise, the test or check flight should be terminated.

An examiner should maintain a flight log and assessment record during the test for reference during the post flight debriefing.

Each item within a test or check section should be completed and assessed separately. Marginal or questionable performance of a test or check item should not influence an examiner's assessment of any subsequent items. A failed item is not always a failed section, (for example type rating skill test or proficiency check where a failure of an item in a section does not fail the entire section, only the failed item is taken again).

It is advisable to avoid flying a manoeuvre that the applicant has already passed. For example, the examiner could position the helicopter while re-briefing the applicant and then give control back to them once they are happy to continue. In an FSTD, the flight could be repositioned and placed in position freeze until the applicant is ready to continue. However, if it is necessary to fly something previously passed and it is to be assessed, the applicant must be briefed accordingly.

When a test is completed or discontinued, an examiner should debrief the applicant and give reasons for items or sections failed. In case of a failed or discontinued test, the examiner should provide appropriate advice to assist the applicant in subsequent tests.

4.1.4 Post-flight debriefing

The post-flight debriefing shall include the assessment or evaluation of the applicant and completion of the documentation of the test or check with the applicant's instructor present, if relevant and possible.

4.2 Assessment Criteria

Before leaving the helicopter (or the FSTD), the examiner should consult their notes to finalise the assessment. There may be a question that needs answering prior to leaving the cockpit, but it should only be asked if it would affect the outcome of the test (e.g. to confirm an incorrectly set altimeter).

Before beginning the debrief, the examiner should decide what the assessment for each section is to be and what retest requirements, if any, may be required. In reaching this decision, the examiner may need to ask one or two questions e.g. to establish whether the applicant had a good reason for taking a particular course of action. At this point, the examiner should only ask questions necessary to verify the decision.

The examiner shall inform the applicant of the result of the test using one of the following terms for the assessment as defined in para 3.7:

a. 'Pass'
b. 'Fail'
c. 'Partial Pass'

4.3 Debrief

The examiner should conduct a fair and unbiased debriefing of the applicant based on identifiable factual items. It may be appropriate to use a facilitative style of questioning for the debrief in order for the applicant to obtain maximum benefit from it. Facilitative techniques are inappropriate when debriefing a fail result, but they may be used to discuss any follow up points. Guidance on debrief techniques can be found at Annex 7.

4.4 Submitting Examiner report forms

In order to avoid unnecessary delay in processing times, a single copy of examiner report forms must be submitted to the CAA. This can be done by post or by email (PDF copy only) to licenceapplications@caa.co.uk. Please ensure you do not submit more than one copy. If submitting via email there is no need to post the original.

ANNEX 1 USE OF FLIGHT SIMULATION TRAINING DEVICES (FSTD's) IN TESTING

AX1.1 Introduction

Simulation can be used to mitigate the inherent risks associated with testing in a real helicopter as well as allowing observation of real time decision making and Threat and Error Management in demanding high-stress high-workload situations or in situations with poor, incomplete or conflicting information. It is also possible to activate malfunctions/conditions without previous warning to induce startle effect as well as simulating compound failures. Examples include, but are not limited to:

- Total engine failure and autorotation;
- Loss of Tail Rotor in critical flight phases – for example with sling load
- Vortex Ring (Settling with power);
- Unusual Attitude (UA) following entry into Degraded Visual Environment (DVE).
- Autopilot and Display and Control failures
- Hydraulic and Electrical failures
- Engine / Airframe Fire

Therefore, it is possible to train and test "real" malfunctions in an FSTD which cannot be safely or correctly simulated in the aircraft.

AX1.2 Types of Simulators

The different types of helicopter Flight Simulation Training Devices (FSTDs) are defined in the CS FSTD (H) (Certification Specifications (CS's) and Acceptable Means of Compliance (AMCs) for FSTD (H)). To be recognised as such, an FSTD must be formally qualified by the CAA. CS-FSTD (H) defines the following FSTD qualification levels:

- Flight and Navigational Procedures Trainer - FNPT I, II, III. Fixed based generic systems generally representative of a class of helicopter (single engine, twin engine, …).
- Flight Training Device - FTD 1, 2, 3. Fixed based systems representative of a given helicopter type.
- Full Flight Simulator - FFS A, B, C, D. High fidelity motion-based systems.

It is possible for an FSTD or have a dual qualification of FFS and FTD e.g. the most common being FFS B and FTD 3.

A range of testing and checking, can also be totally or partially performed on FSTDs:

Category of testing	Type of testing
Initial Testing	Skill tests
Recurrent / Renewal Testing	Proficiency Checks Operator Proficiency Checks Recency

AX1.3 Meaning of 'Available & Accessible' in the Context of Using FSTD's

Part FCL Appendix 9 states that "FSTDs and other training devices, when available, shall be used, as established in this Part for testing". Whilst a test conducted in the helicopter may satisfy the minimum requirements, the quality and scope of the check will always be very limited compared to what can be achieved in an FSTD. In this context, Part-FCL aims to prevent the use of an aircraft for manoeuvres and exercises that may involve reduced safety margins, where use of an FSTD, where available, carries little or no risk to flight safety. In addition, there should be no significant reduction in the effectiveness of any delivered training or checking. Therefore, if an FFS or Other Training Device (OTD) is 'available', as defined below, it shall be used; if not, then an aircraft may be used but only following acceptance that an FFS is not available from the Authority in accordance with the procedure detailed.

"Available FSTD" means any Flight Simulation Training Device (FSTD) that is vacant for use of the FSTD operator or of the customer irrespective of any time considerations.

"Accessible" means that an FSTD can be used by:

- the approved training organisation (ATO) under whose approval a training course for a class or type rating is being conducted; or
- the examiner conducting the assessment of competence, skill test or proficiency check for the purpose of assessing, testing or checking.

To determine the availability of an FSTD, the following additional criteria should be considered. The FSTD should be:

(1) certified by the CAA with the approvals appropriate to the test being undertaken;
(3) representative of the operator's or applicant's aircraft class or type, and serviceable and
(4) representative of the configuration of the operator's or applicant's aircraft.

To determine the accessibility of an FSTD, the following additional criteria should be taken into account. The FSTD should be:

(1) accessible to the instructor or examiner of the applicant;
(2) accessible for use within the scope of the applicant's/operator's training and checking activities; and
(3) accessible to allow normal programming and prevent excessive scheduling disruptions within the operator's crew roster patterns.

Note: 'irrespective of any time considerations' means that the FSTD may be used at any time during day or night.

Procedure for accepting a test on an aircraft if the Operator, ATO or applicant believe an FSTD is not available in the context of these requirements.

GM5 FCL.010 states that if an FSTD is not available or accessible, mitigating measures to ensure the required level of safety should be agreed with the CAA before testing or checking the Applicant in an aircraft. An examiner conducting tests/checks or assessments of competence outside of an AOC operation who intends to use an aircraft for the purposes of Part-FCL must notify, *testnotifications@caa.co.uk* for permission to do so at least four weeks in advance of the intended check. The application must explain the following:

- Why an FSTD is not available against the criteria above;
- The proposed date of the check or test;
- The scope of the check.

A safety case relating to the intended flight and any training shortfalls as a result of not using an FSTD should be available for audit if requested. The Authority may require additional information.

Note: AOC holders and ATOs must advise the CAA of the intent to use an aircraft rather than an FSTD that they consider not to be 'available' for training, testing or checking. The AOC or ATO will be expected to prove that the FSTD is not available in accordance with the interpretation above. Clearly, the Operator's SMS should play a key element of how the decision to use an aircraft is assessed.

If the CAA determines that an Exemption from Appendix 9 is required, application to use the aircraft should have been made well in advance of the test.

AX1.4 Examiner Qualification

All examiners must have had practical training in operation of the FSTD to be used for a check, especially regarding the functionality of the Instructor Operating Station or Console (typically recorded though issue of an IOS course completion certificate).

AX1.5 FSTD Certification and Serviceability

Before the test/check the FSTD Certification must be checked for validity of its approvals and any training/testing credits must be confirmed as being appropriate for the test being undertaken. You must also ensure that the FSTD is included in the training/testing approvals for the ATO (and Operator for OPC). The technical log must be checked for defects, training limitations, the initial entry (signing for the FSTD) and a visual safety inspection made of the area in the vicinity of the simulator.

AX1.6 Briefing considerations

In addition to the normal briefing to be found in the appropriate test profile appendix, all applicants must be given an FSTD safety briefing prior to boarding, which must include:

- FSTD and building fire alarm system
- Emergency exit maps, escape routes, & rendezvous points
- FSTD in operation warnings
- Safety interlocks
- Control loading, motion and emergency stops
- Cockpit access and egress
- FSTD safety equipment – flashlight, first aid kit and fire extinguisher
- Emergency lighting
- Emergency escape panels and ladders
- Emergency communications
- Cleaning of headsets and microphones
- Motion sickness
- Requirements for all persons including the IOS Operator, to have their harness secured before and whenever motion is selected on
- Actions in event of an Emergency
- Differences between the FSTD and the aircraft/variant they normally operate prior to the test.

Examiners must emphasise the importance of RT standards and compliance with valid ATC instructions. This aids realism. In an FSTD, you as the examiner, are responsible for acting as ATC, operations, cabin crew and ground staff.

AX1.7 Conduct of the Test

The test should be flown in “real time” as far as practicable. However, judicious use of freeze is acceptable, provided the overall test contains an appropriate scenario-based assessment. Repositioning and a snapshot recall can also be very useful to save time when a manoeuvre needs to be repeated. If repositions are used, the applicant/crew shall be briefed about their new situation and position and the examiner must ensure that the Situational Awareness of the applicant/crew is maintained by appropriate pre-emptive briefing.

The fidelity, or realism of the sortie should be ensured, to replicate the real aircraft as far as possible. Examples of this include insertion of failures without pre warning, using the simulator function, and or simulated ATC to facilitate a requirement.

The level of turbulence for the test/check should reflect the weather conditions considered normal for the area of operation and the specific weather briefing being provided to the applicants. If benign weather conditions were provided in the simulator scenario, to simulate a high-pressure influence for example, then a minimum level of turbulence might be appropriate. If the specific weather briefing reflected turbulence, then such turbulence should be reflected in the simulator. If the exercise is to cover high wind scenarios whether for crosswind handling or wind shear etc. then an appropriate level of turbulence should be reflected. The selection of zero turbulence during a test/check would not be considered acceptable. If the examiner is conducting a training exercise which requires precise flying limits to be demonstrated during a particular event, e.g. Low Visibility Operations (LVO) training, the examiner may wish to have no external

influences that may alter the aircraft's position in respect of the runway (i.e. no wind and no turbulence). In this case it would be quite acceptable not to have any turbulence selected.

The background noise level should be representative of that in the helicopter, anything less than normal is artificially reducing the natural stress levels found in the cockpit which would be inappropriate.

AX1.8 Pre-flight Inspection

When an FSTD is used, an alternative means may be established such as the use of posters, models or video material. Alternatively, this could be completed in the helicopter prior to or immediately after the FSTD session, in which case the date of the pre-flight inspection tested must be included in the report form.

AX1.9 Taxiing

The FSTD should be positioned such that the pilot has to ground or air taxi to the take-off holding point. If necessary, this may be completed in minimum visibility conditions to ensure that the pilot is aware of the company procedure for LVO.

Take-off and landing at maximum take-off mass .

In an FSTD, the device may be set to MAUM for the conditions/profile being tested.

AX1.10 Emergencies

In an FSTD, remember that the examiner is acting as ATC and therefore you would not know that the crew have suffered an engine failure unless they give out a PAN/MAYDAY. When simulating autorotation, use realistic scenarios such as running out of fuel, icing, bird strike, etc.

AX1.11 Unusual attitude recovery

Safe and effective recovery from an UA is vital. Setting up the exercise without prior notice is difficult however and needs thought. Consideration must be given to the type of operation conducted by the applicant and likely situations that may lead to a UA. For offshore Operators, a low-level UA may be considered, either on rig approach in the FSTD or by higher level entry in the aircraft but using a ‘hard deck’ for the simulated surface.

AX1.12 Weather minima

Care must be taken to set the correct weather minima (visibility/RVR/cloud level) appropriate to the test being conducted. If possible, this should be set before the crew enter the cockpit to aid realism.

AX1.13 Post Flight

Following the test, examiners must ensure any defects or unserviceabilities and lost time are recorded in the operator’s technical log system. Simulator operators have a requirement to monitor defects as part of their quality system and reliability forms an essential part of the qualification and approval process. Therefore, should a simulator engineer rectify a defect during the detail it is still important that the fault be recorded in the technical log. Where these have caused significant disruption or persisted for more than one check, the examiner should inform the Head of FSTD Standards at the Civil Aviation Authority at the next opportunity. Additionally, the qualifications, condition, and efficacy of the FSTD should be reported back to the ATO/AOC in line with their FSTD compliance monitoring system along with confirmation of the FSTD usage.

AX1.14 Motion sickness

FSTD sickness is slightly different from the usual airsickness. The most often reported symptoms are sweating, fatigue, dizziness, and vomiting. Some pilots, even those who never have any problems during flight, can suffer following a FSTD session.

It is recommended for those who do not have FSTD previous experience, to not fly, or even operate a vehicle, for a period of time after an extended session in an FSTD.

Motion sickness can occur in both fixed and motion based FSTD's. To minimise FSTD motion sickness, the crew should be advised to avoid being fatigued or having an upset stomach. They should be advised to take light refreshments only, maintain hydration, ensure adequate ventilation and temperature control. Maintaining balanced flight, avoiding abrupt attitude changes and minimising head movement also helps.

AX1.15 Further Reading

EHEST Leaflet 6 Advantages of Simulators (FSTDs) in Helicopter Flight Training
https://www.easa.europa.eu/sites/default/files/dfu/HE-6-Advantages-of-simulators-in-Helicopter-Flight-Training-final.pdf

EHEST Leaflet 10 Teaching and Testing in Flight Simulation Training Devices (FSTD)
https://www.easa.europa.eu/sites/default/files/dfu/206904_EASA_EHEST_HE_10.pdf

ANNEX 2 TESTING MULTI-PILOT OPERATIONS IN HELICOPTERS CERTIFIED FOR SINGLE-PILOT OPERATIONS

AX2.1 Introduction

Where a helicopter is certified as a SPH and can also be operated as an MPH in accordance with UK Aviation Law, Part-Ops, NCC or SPO, an appropriately qualified examiner may conduct a test or check for either SP, MP or both SP and MP.

If the rating is to be for SP operation only, the applicant is to take the test or check in accordance with Part FCL Appendix 9 and Appendix 4 of this document, operating as SP.

If the rating is for MP operation of a type certified as SPH, the test or check shall still follow the relevant test or check schedule in Part FCL Appendix 9 and Appendix 4 of this document however it shall be conducted in accordance with MPH operations.

If both SP and MP privileges are required, for example MP operation for Public Transport/Commercial Air Transport and SP operation for positioning flights, the test or check should be conducted as MP with additional SP items. The test or check should cover the MP operating privileges with a MP crew with the SP privilege tested separately.

The relevant SP/MP operation is to is to be recorded on the SRG 2138 and where appropriate on the applicant's Certificate of Revalidation as indicated in Annex 11 of this document. It must be made clear to the applicant which SP/MP privileges they are allowed to exercise the on the helicopter type.

AX2.2 Testing

Examiners should ensure that a MP test /check is performed in accordance with agreed relevant MP Standard Operating Procedures (SOP), these could be those of the applicants AOC or those of the ATO.

The Examiner should ensure that they are fully conversant with the agreed SOP in both the role as an Examiner and as PF/PM as appropriate.

If the test/check is carried out in an FSTD, then the relevant Sections should be carried out MP as a complete evolution, the relevant SP items should then be conducted. The Examiner may choose to carry these items out as a separate event or integrate the SP items by way of total pilot incapacitation of the other crew member.

If a helicopter is used for the test/check, the examiner must be qualified to fly the helicopter in the capacity as PIC but will also act as the PF/PM occupying a crew seat for MP operations.

NOTE: Part FCL Appendix 9 states:

> 10. *Applicants shall be required to fly the aircraft from a position where the PIC or co-pilot functions, as relevant, can be performed. Under single-pilot conditions, the test shall be performed as if there was no other crew member present.*

In accordance with the above requirement for SP operations the applicant should occupy the RHS, unless otherwise permitted by the RFM for SP operations.

When the test is conducted in the helicopter, the Examiners Brief, in accordance with Appendix 4 to this document, should include the following additional briefing points covering the relevant aspects of Threat and Error Management:

- The Examiners Role as Examiner in both the MP and SP Scenarios
- The Examiners role as PM/PF in the MP Scenario
- A clear brief as to the role the Examiner will be playing and how the applicant will know what that role is to include:
    - Handover of control
    - The Examiner taking control, if required
    - Notification of Examiner requirements for manoeuvres as part of the test/check
    - Injection of Simulated Emergencies by the Examiner
    - Notification as to when a simulated emergency is complete
    - When the test is being conducted MP and relevant roles
    - When the test is being conducted SP and relevant roles

In a MP operation, the Pilot Flying (PF) and Pilot Monitoring (PM) roles are required to be established and the examiner needs to verify that appropriate responsibilities briefed for the following:

- the management of equipment and systems.
- adherence to ATC instructions/liaison.
- identification of radio navigation aids prior to their use.
- management of checklists – who calls for what.

The examiner should ensure that the applicant operates both as PF and PM as part of the test check, this should include both handling exercises from Section 2 and abnormal and emergency procedures from Section 3 and 4.

The Examiner shall ensure that all [M] items from the test/check schedule are completed as either MP or SP.

The examiner should consider the equipment fit of the aircraft and its optimum use – EFB, TAWS, Radar, GNSS, rad-alt etc and incorporate its use in the MP scenario. The crew needs to know/carry out the pre-flight checks, under the SOPs/POH/AFM check list for all procedures and cross refer serviceability actions. A simple scenario could be introduced that would trigger an indication from optional equipment to observe the applicant crew's response.

Below is an example of the conduct of combined MP/SP test/check conducted in the helicopter:

VF Items (test sections 1 to 4 and 6)

The test/check is mainly conducted as MP with the candidate as PF in the appropriate seat, if it is both MP and SP it should be the RHS as stated above.

The candidate should start the aircraft and carry out post start checks as SP, at the point of starting Pre-Take off checks the check is then MP.

Because the Examiner does most of the work re EFRC drills in his role as PM, the candidate should also perform a selection of tasks/manoeuvres as PM including Abnormal and Emergency Procedures. An example of how this could be conducted is a CAT A Clear Area Departure Circuit with an Engine Failure after TDP, (this achieves an assessment of the candidate carrying out SOP calls and Emergency procedures as PM).

The Examiner should include use of AP Upper-Level Modes including climbs / descents/use of ALT A (or ALT select/ALT PRE etc)) as appropriate is checked in accordance with MP SOPs.

To make efficient use of time, the Examiner may only want to see 1 complete PF / Commanders Departure Brief and 1 Complete PF / Commanders Arrival brief, after that the briefs can be abbreviated with regard to the Profile and Circuit to be flown, Abnormal and Emergency procedures should require an Emergency Brief to the PM.

The SP elements that are tested should include "handling" exercises from Section 2 such as the Autorotation and Powered Recovery / Helipad (VTOL) reject / AP out operations and landings etc. These should be checked at the end of the MP phase, when a clear statement that the check is now SP can be made, all of these could be done in the circuit at the airfield.

If the test is VFR only, the Examiner may introduce pilot incapacitation away from the circuit, once the drill is complete the candidate can proceed SP as above.

If the check is VF and IF, the Examiner may introduce the pilot incapacitation during the Instrument phase (see IF items paragraph below).

IF Items: (test section 5)

The check is flown MP, the Examiner should introduce the pilot total incapacitation prior to the 3D approach so that is flown SP.

After completion of the 3D Approach and GA the Examiner should revert to MP.

AX2.3 Crew Resource Management (CRM) Concept

CRM is the effective utilisation of all available resources (e.g. crewmembers, aircraft systems, supporting facilities and persons) to achieve a safe and efficient operation. The objective of CRM is to enhance the communication, human factors and management skills of the crewmembers concerned. The emphasis is placed on the non-technical aspects of the crew performance. The assessment of CRM and the use of NOTECH behavioural markers are detailed in Annex 5.

AX2.4 Threat and Error Management (TEM) Concept

The basic concept for TEM is simply to timely detect the threat, error or undesired aircraft state; and promptly respond to these. Although this sounds uncomplicated, examiners must obtain evidence to ensure that TEM is being practiced. Since observation is the sole means available to the examiner to obtain this evidence, it is important that the examiner actively questions the crew before and post flight to gain insight into the reasons why specific actions pertaining to TEM were taken. It must be highlighted that if questioning takes place during a flight this does not distract the crew to the extent that the safety of flight is compromised. Examiners cannot assume that just because a crew completed a technically faultless flight, that competent TEM was used. The assessment of TEM is detailed in Annex 5.

AX2.5 Multi-Crew Cooperation (MCC) Concept

MCC is the functioning of the flight crew as a team of cooperating members led by the pilot-in-command. The objectives of MCC training and testing is to develop the technical and non-technical components of the knowledge, skills and attitudes (competencies) required to operate a multi-crew aircraft.

The testing of non-technical skills is an integral part of initial licensing and the demonstration of continued proficiency under Part-FCL and Part-ORO. Currently, there are three events during which CRM/MCC competence is specifically assessed by the MPH examiner: ST; PC & OPC. An individual should not normally fail a skill test or proficiency check for poor non-technical skills in isolation; the failure should normally be linked to a technical failure.

Table: MCC competency and knowledge requirements

MCC Competency Requirements	MCC Knowledge Requirements
Communication	Human Factors
Leadership and teamwork	Threat and Error Management
Situation Awareness	Crew Resource Management
Workload Management	Application of TEM and CRM principles
Problem Solving and Decision Making	SOPs
Monitoring and Crosschecking	Aircraft systems
Task Sharing	Undesired aircraft states
Briefing	PF and PM roles
Flight Management	Emergency and abnormal procedures

Table: Example MCC Competency Assessment Criteria

MCC Competency	Elements	Example Behaviour
Communication	Operational plans and decisions were communicated and acknowledged Environment for open communication was established and maintained	Shared understanding about plans. “Everybody on the same page” Good cross talk – flow of information was fluid, clear, and direct
Leadership and teamwork	Captain showed leadership and co- ordinated flight deck activities Crew members asked questions to investigate and/or clarify current plans of action	In command, decisive, and encouraged crew participation Not afraid to express a lack of knowledge. “Nothing taken for granted” attitude
Situation Awareness	Crew members remained alert of the environment and position of the aircraft	Crew members maintained situational awareness
Workload Management	Roles and responsibilities were defined for normal and abnormal situations Existing plans were reviewed and modified when necessary	Workload assignments were communicated and acknowledged Crew decisions and actions openly analysed to ensure existing plan was best
Problem Solving and Decision Making	Crew members developed effective strategies to manage threats to safety Crew members stated critical information and/ or solutions with appropriate persistence	Threats and consequences anticipated. Used all available resources to manage threats Crew members spoke up without hesitation
Monitoring and Crosschecking	Crew members actively monitored and crosschecked systems and other crew members	Aircraft position, settings, and crew actions were verified
Task Sharing	Operational tasks prioritised and properly managed to handle primary flight duties	Avoided task fixation. Did not allow work overload
Briefing	The required briefing was interactive and operationally thorough	Concise, not rushed, and met SOP requirements. Bottom lines were established
Flight Management	Automation was properly managed to balance situational and/or workload requirements	Automation setup briefed to other members. Effective recovery techniques from automation anomalies

Table: Example MCC Competencies Behavioural Markers Rating Scale

1 = poor	2 = marginal	3 = good	4 = outstanding
Observed performance had safety implications	Observed performance was barely adequate	Observed performance was effective	Observed performance was effective and exemplary

AX2.6 Potential Risk Areas

Multi pilot helicopter examiners should be aware of the following training risks/hazards.

Situational Awareness

- Attention, Vigilance and Comprehension.
- Clear idea of who does what and when and what ”hat” is being worn.
- BOTH pilots maintain clear responsibility for safety of the aircraft.
- Self-monitoring.

Multi-Crew functions

- Crew Monitoring.
- Examiner acting as PM and introduces intentional or unintentional errors.
- Incorrect terminology and/poor communication.
- PM responsibility to intervene with appropriate calls at all times and if necessary, take control.

Task Management

- Avoidance of error producing conditions.
- Active dependence on SOP’s.
- Planning and preparation.
- Deliberate and systematic Decision-Making.
- Clear differential split between the MPH test/check and the SPH test/check.

Attitudinal Factors

- Conservatism.
- Diligence.

Real Time

- Real incapacitation of Examiner or applicant.

ANNEX 3 USE OF FLIGHT DIRECTORS, FLIGHT MANAGEMENT SYSTEMS (FMS), ELECTRONIC FLIGHT INSTRUMENATION SYSTEMS (EFIS) AND AUTOPILOTS IN TESTING.

AX3.1 Introduction

Some helicopters being flown today have sophisticated EFIS, Flight Directors and automated cockpits. The examiner must be prepared to recognise the benefits and pitfalls that such sophistication brings and orientate the test and their assessment accordingly.

The examiner must be aware that the pilot is still required to demonstrate manual flying skills to effectively monitor the automation and FMS flight progress and intervene where unexpected flight path deviations occur. The automation system is not aware of its own environment for example and will do exactly as it is programmed, therefore efficient monitoring and cross checking is required to prevent additional threats to the aircraft.

During multi crew operations, the Pilot Flying (PF) and Pilot Monitoring (PM) duties should be delineated in detail, including selection and disengagement of Autopilot modes and parameters. This will enable efficient and safe use of any automation.

During single pilot operations, verbalisation of flight director and AP selection and indication should be made, in order to cross-check the automation selection that would normally be made in a multi crew operation.

The examiner must be satisfied that the applicant knows how to use the helicopter systems to be able to programme any aircraft management system to achieve the safe outcome of the procedure to be flown. Correct programming of any procedure should be paramount in any assessment of aircrew. Any deviations from the published chart or approach plate should be identified at an early stage, and preferably prior to commencing any procedure. This is best achieved by cross checking any FMS derived procedure with the chart/approach plate, prior to getting airborne. For example, if an FMS waypoint display is available on an MFD display or equivalent, this can be used to cross check track and distance accuracy with a published SID or STAR.

The examiner should ensure that the crew are able to keep at least one step ahead of the automation, therefore anticipating the next event. Screen configuration should be set up appropriately, so that FMS and any ground based navigational aids can be monitored.

AX3.2 Automation

Examiners will permit the use of automation on a test as the equipment is an integral part of the operational fit of the helicopter. The use of automation should reduce fatigue and permit applicants to demonstrate a high standard of systems/flight management and log-keeping.

If the applicant intends to use the automation at any stage during the flight, it must be checked for correct operation prior to flight in accordance with the Flight Manual and the operator's checklist. If an FCOM is available, it should be used. The applicant should be familiar with operating the automation in both HDG and NAV modes. En-route climbs, descents and turns may be made with the assistance of the automation.

A thorough understanding of the automation in all phases of flight, including normal and abnormal conditions is required of all crews. Examiners should be cognisant of how crews perform while using any or all the automation in a particular type.

The crew should be able to verbalise, or demonstrate, how they would convert to manual flying if there was a flight path deviation caused by the automation for whatever reason. This could entail coupling from FMS to HDG for example or disengaging the automation completely. This is particularly pertinent when reacting to a TCAS RA, or an EGPWS caution/warning.

Crews should understand the concept of levels of automation, Reducing the level of automation can in some cases benefit the safe operation of the flight, in the event of a degradation of the AP for example.

Mixed mode flying (when one or more axis is controlled manually while coupled to the automation) should generally be avoided, as this has been demonstrated as a causal factor in a number of incidents over recent years. It should not be entirely discounted though, providing that crews are trained appropriately, and company SOP's are delineated and adhered to.

Overriding automation by manual control inputs should be avoided, Overriding may lead to saturation of the autopilot channel resulting in an untrimmed aircraft state leading to possible undesirable aircraft attitudes.

Engaging an automated mode should be done in a trimmed aircraft state, this will avoid large variances in AP input, possibly leading to disorientation, particularly at night.

AX3.3 Electronic Flight Instrumentation System (EFIS)

EFIS displays have an advantage over conventional mechanical display systems in that generally more information can be presented in a smaller focussed area. They generally do retain the classic 'T' pattern though. A thorough knowledge of the display system is paramount, particularly in a degraded system scenario (partial panel in mechanical display systems)

Manual instrument flying skills should be routinely assessed during all tests. This is to ensure that skill fade does not occur, due to constant use of automation.

The examiner needs to be aware of subtle differences in scan technique, which may be required when flying manually in an EFIS equipped aircraft. The selective radial scan is generally the recommended method, which emanates from the ADI to other primary and secondary instruments, with the focus varying depending on the phase of flight. The scan should also include the autopilot annunciator strip where this is displayed on the PFD.

Crews should be aware of approximate pitch attitudes for various combinations of flight phase and power/speed combinations. A lack of awareness of typical pitch/power/speed attitudes has been a causal factor in accidents and incidents in the past. As an example, an examiner could ask "what is the pitch attitude/power setting in general for Vtoss/Vy/Vbroc/". Examiners should assess crew's knowledge in this area.

In multi crew operation the role of the PM is crucial in recognising deviations from the intended flight path. The examiner should include this in their assessment, for example, the PF may be flying the approach, but how good is the feedback and the monitoring from the PM?

AX3.4 Flight Management Systems and FMS Instrument Checks

Pilots are expected to check the operation of all radio communication (VHF R/T) and radio navigation aids (ILS/VOR/DME/ADF) prior to flight wherever possible. For displays where the VOR/LOC signal is monitored electronically and a name identifier displayed beside the corresponding NAV frequency (for example the NAV frequency window on the Garmin 1000 display), the pilot may indicate such to the examiner in lieu of aural identification of the Morse coding. The pilot must identify facilities in the conventional manner where they are not automatically coded by the equipment.

For digitally generated flight displays pilots will not be expected to rotate the ILS/VOR track bar to check for correct sensing of a LLZ or VOR display. It is sufficient to indicate that the display correctly interprets the selected frequency as either "VOR" or "LOC" and indicates appropriately (for example full scale fly left/right for an ILS display). However, if the Flight Manual Supplement for the nav kit fitted includes specific test criteria then this will take precedence.

The applicant should verbalise all the checks they are completing. Where automatic test facilities are incorporated in equipment, their use should be fully demonstrated and explained by the applicant. Equipment with no auto-test facility should be checked against a local nav aid. The absence of navigation aids at certain locations may mean that the equipment cannot be tested on the ground. The absence of a navigation aid signal does not absolve applicants from demonstrating knowledge of equipment checks so examiners should consider asking questions of applicants in order to ascertain this level of knowledge.

Pilots intending to supplement “conventional” navigation information with GNSS derived information will be expected to check the validity of the GNSS aviation database and the integrity of the received GNSS signal prior to flight. Whenever it is intended to use GNSS derived navigation information, it must either be crosschecked against another source of navigation information prior to use or used with discretion. Pilots will be responsible for any navigation errors resulting from incorrect use of GNSS derived information.

In the simulator, the examiner should ask the pilot to demonstrate their normal method of checking instruments and nav aids by selecting a departure location that has all the facilities required. The instrument element of an PC/ST requires the pilot to manually fly the 3D approach using raw data, uncoupled from the automation or flight management system, and, where possible, without the use of a flight director. It is recognised that on some types this facility cannot be disabled so such types are alleviated from this requirement. At all other times tests/checks should be oriented to line flying operations with appropriate use of automated holds.

Further instrument approaches on the skill test or proficiency check and all instrument approaches on an OPC may be flown using the full suite of avionics available to the pilot. The go-around with one engine inoperative may be flown after either approach. The company training programme should be written to cover all major abnormal and emergency procedures over a three year period to ensure that pilots are checked during flight with any system of the helicopter not functioning correctly in accordance with the MEL. Examiners may examine abnormal and emergency procedures during the instrument phase of any test. It is also entirely reasonable for an examiner to disable or fail a particular facility/function of an autopilot (e.g. the height hold) during any approach.

For FMS equipped helicopters, the examiner must be satisfied that the applicant is able to demonstrate an appropriate level of understanding of the helicopter system and is able to enter and execute routes, procedures and holds as necessary. Although not a mandatory test item, if a hold is required it may be sufficient for the applicant merely to demonstrate their ability to correctly programme the FMS to achieve the exercise.

AX3.5 Optional Equipment

The Optional Equipment section of a test is often under utilised. The examiner should consider the equipment fit of the aircraft and its optimum use – FMS, TAWS, Radar, GNSS, radalt etc and incorporate its use. A simple example is if a radalt is fitted to the aircraft, does the pilot know and carry out the pre-flight checks, the company SOPs/POH/FM list for the ‘bug setting’ procedures and what are the actions if the warning is triggered. The examiner could introduce a simulated scenario that would trigger an indication from optional equipment to observe the applicants’ response.

AX3.6 Further reading

Further guidance can be found in ‘EHEST Leaflet HE9 Helicopter Automation Management’.

ANNEX 4 CONDUCTING SIMULATED EMERGENCY AND ABNORMAL PROCEDURES (EAPs) IN HELICOPTERS.

AX4.1 Introduction

Several helicopter accidents have occurred during the testing of simulated emergency and abnormal procedures (EAPs) in an aircraft where the examiner has allowed the student to exceed the aircraft limitations or the examiners ability to recover the aircraft. Whilst it is acknowledged it is preferable to test EAPs in an FSTD this may not always be possible, therefore the testing EAPs in an aircraft is a skill that the examiner must manage safely and effectively.

AX4.2 Planning

In the planning stage, the examiner must decide which EAPs they want to see practically demonstrated in the flight, as opposed to those to be discussed in the classroom. 'Tell me what you would do' should be reserved for the classroom and 'show me what you would do' used in flight.

EAP safety briefings before a flight test should include: PIC responsibilities, actions in event of a real emergency, throttle/FCL/engine manipulation, touch drills definition, how malfunctions will be simulated, de-selection and re-selection of warning systems and any non-standard drills.

Before practical flight testing of EAPs can take place, the examiner must be familiar with:

1. Aircraft Systems

   A sound knowledge and understanding of the normal and abnormal operation of the helicopter systems including the management of any EAP.

2. Pilots Operating Handbook (POH)/Flight Manual FM

   Before emergencies and malfunctions can be tested safely the examiner (and hopefully the applicant): must be familiar with the following elements of the FM/POH:

   (a) The Limitation Section: the required operating limitations, instrument markings and placards for the safe operation of the aircraft.

   (b) The Normal and Emergencies Procedures Section: the relevant information of the handling aspects and flight profiles when training EAPs.

   (c) The Performance Section: the relevant performance data for Group A performance and WAT charts for OEI operations.

   (d) Supplements which can contain specific guidance on training procedures to be used.

   (e) Safety Tips & Notices on how to operate the aircraft safely.

   (f) The Emergency Procedures Section: the crew actions for system failures and the definitions of: Land Immediately, Land as soon as possible, Land as soon as practical, etc.

   (Note: It is recommended to have a copy of the POH/FM and Emergency and Abnormal procedures Checklist (EAC) available for the brief and debrief).

3. Aircraft Emergency or Abnormal procedures Checklist (EAC)

Compliance with the EAC is the basis for testing the applicant's knowledge and actions. This ensures that actions are out carried fully, in the correct sequence and ensure cooperation and cross-checking between crewmembers. In practice, immediate actions in response to certain emergency or abnormal situations (fire, engine failure, etc) are carried out from memory; the actions taken should be confirmed by reference to the EAC. Applicants who make a concerted effort to follow EAC procedures in the correct sequence reduce the risk of forgetting items.

4. Operational Safety Data (OSD)

The aircraft OSD will identify Training Areas of Special Emphasis (TASE) which are specific to the aircraft type and will give direction on how they are to be flown safely in the aircraft.

5. Accident and Occurrence Reports

Accident and occurrence reports can give examples of malfunctions and abnormalities experienced by pilots flying similar aircraft types which can be used for realistic scenarios.

AX4.3 Scenario Based Testing

AMC 2 FCL.1015 states that a test or check is intended to simulate a practical flight. A competent pilot is unlikely to get into an undesired aircraft state or would quickly correct it. Therefore, an examiner should create practical realistic scenarios for an applicant enabling assessment of the applicants TEM and EAPs during a flight.

AX4.4 Airborne Decision Making (ADM)

To ensure the maximum benefit is gained from this element of the check, the applicant must be permitted to demonstrate all their skills including diagnostic, problem solving, ADM, TEM, CRM and knowledge of POH and SOP's etc and not just demonstrate the physical handling skills

The 'Three P' model is a commonly used ADM process to perceive hazards, systematically, assess the risk associated with a hazard and determine the best course of action. This can be used to simulate an emergency/malfunction and assess the applicant's EAP capabilities.

Perceive – as a malfunction can be detected using many of the human senses e.g. hear a warning horn, unusual noises, see a gauge/light indication, the smell of burning or feeling a vibration, these can be simulated or indicated by the examiner in the flight to assess the applicants TEM skills.

Process - once the malfunction is detected then the applicant must be observed to use ADM and CRM skills to gain all relevant information by cross checking for other aircraft indications, using crew members,

passengers, ground observers, ATC, etc to gain as much information as possible before continuing onto the next stage.

Perform - once all the information is collated then the applicant should decide on the appropriate course of action, which should be conducted in accordance with the relevant EACs. Once any action is taken this should be reviewed by and if appropriate then the actions adapted accordingly.

Whilst demonstrating the above skills, the applicant should simultaneously demonstrate an ability to prioritise workload according to 'Aviate, Navigate, Communicate':

(a) Aviate – establish an appropriate safe flight condition which could be: straight and level flight, autorotation, orbit, precautionary landing etc.

(b) Navigate – turning away from high ground, avoiding/leaving controlled airspace, avoiding DVE, selecting a landing site to conduct a precautionary landing, diverting to an airfield etc.

(c) Communicate – an appropriate full radio call to an appropriate agency should be simulated (it is insufficient to say 'I would do a mayday call'). Crew and passengers should be notified of actions are being taken e.g. diverting or conducting a precautionary landing, in the case of an emergency landing, a simulated 'brace position' call would be appropriate.

Once the applicant has conducted the above actions the EAP should be completed, as much as is safely possible, to its conclusion. Where a malfunction requires that the pilot conducts a forced or precautionary landing, the examiner should ensure that the applicant can fly the aircraft safely to that site, whilst carrying out all necessary actions, 'in cockpit' radio calls and landing site assessment whilst avoiding CFIT.

AX4.5 Non-Technical Assessments (NOTECH's)

The assessment of the HF elements, including the interaction with the crew and aircraft during a malfunction/emergency are regarded as fundamental to the test or check. CRM and TEM should be assessed throughout by observing, recording, interpreting and questioning crews and then assessing using an appropriate NOTECHS system. (see Annex 5 For Assessing DM, HF, CRM and TEM

AX4.6 Specific Hazards in Simulating Systems Failures and Malfunctions during Flight

It should be the aim of all examiners to return an aircraft back to the dispersal in the same state that they found it in! In order to do this, examiners should employ the principles of TEM. In the case of testing EAP's, the applicant and their actions (or inaction) could be considered as a source of threat and appropriate mitigations should be considered.

Part FCL *'Specific hazards involved in simulating systems failures and malfunctions in aircraft during* flight', lists: *Importance of Touch Drills, Situational Awareness and Adherence to Correct Procedures*.

1. Importance of Touch Drills

'Touch Drills' are used when an aircraft system is identified by touching (or being pointed to) without further action being taken. It is used to ensure that a pilot can correctly identify and reach a relevant system control, in a timely manner, without manipulating it and therefore preventing inadvertent de-selection (or selection) of the system. Prior to any flight where simulated EAPs are to be performed it is essential that the examiner establishes the applicants understanding of how, and when, touch drills are to be performed in the flight.

For some simulated EAP testing there may be a requirement for the applicant to deselect system controls. In these cases, it is important that a thorough briefing taking takes place before the flight to include: the identification of the control, when and by how much the control is manipulated, the

process for resetting the control and any appropriate verbal commands. This may be re-briefed in flight as appropriate. The applicant should identify the appropriate control to be operated and should only manipulate the control when they receives a confirmation and a verbal command from the examiner to do so.

2. Situational Awareness

An applicant will be concentrating on dealing with the emergency and consequently may have limited capacity for situational awareness. The examiner is ultimately responsible for the safety of the aircraft to ensure that it is not placed in a dangerous situation and should undertake risk analysis of the operating environment to identify possible threats including:

(a) the proximity of obstacles (including the ground),
(b) other traffic (as may not be able to take avoiding action), escape routes,
(c) the terrain over which is being operated (in case a landing is required)
(d) the weather (in particular the cloud base, wind, visibility temperature)

3. Adherence to Correct Procedures

The FM will often state the conditions or techniques to be used for training which should be adhered to for example:

(a) WAT charts
(b) MAUM to be used
(c) max speeds to be used
(d) training limitations
(e) minimum heights
(f) crew composition
(g) areas/ground to be used

AX4.7 Startle Effect

When facing a real emergency or abnormal situation (especially if operating SP) it can be a frightening and traumatic experience. A natural reaction can be one of shock (surprise) or disbelief, which is called the startle effect. This is a completely normal and instantaneous phenomenon as the brain can absorb information about an emotionally significant event (such as fear) before we are consciously aware of it. This initial startle effect can provoke a desire to try to resolve the situation quickly and a certain degree of mental (cognitive and emotional) confusion as well - perhaps leading to incorrect actions being taken. Therefore, a pilot should try to stay calm and above all continue to fly the aircraft. There are some situations which require immediate actions, but the majority will tolerate a short delay while gathering thoughts and assessing the situation.

Examiners may be able to replicate startle effect in a test by surreptitious deselection of an aircraft system however the consequences of an applicant's actions or inaction should be considered first.

AX4.8 Safety Tips for Examiners

1. Multi Engine Helicopter One Engine Inoperative (OEI)

(a) Operations for those aircraft without engine failure/training switches and/or limited performance should consider using torque sharing rather than retarding an engine for the test For example, if the OEI maximum torque limit is 140% TQ, the applicant should be limited to using no more than 70% on both engines.
(b) When flying close to ground or obstacles the controls need to be closely monitored by the examiner. When clear of the ground and below 500ft agl consideration should be given to one

crew members hand being on the retarded engine control so it can be re-engaged if the other engine fails, or a limit is going to be exceeded.

(c) Use the correct standard terminology for the aircraft type i.e. TDP, LDP, CDP etc, and number 1 or 2 engine or system.

(d) Wheel brakes which are normally applied for helipad OEI landings should not be applied in training if sufficient space exists for a run on landing. By allowing a run on landing, damage to the aircraft can be prevented if the normal landing technique is mishandled.

2. Conducting Autorotation's and Simulated Engine Off Landings (SEOL/EOL)

(a) Always complete a full risk analysis including HASEL, wind, weight, checks.
(b) Avoid 'no notice throttle chops' as they have little value and they can cause accidents.
(c) Nominate a decision height at which the aircraft must be stable in terms of speed, drift, skid, ROD, Nr and complete appropriate prebriefed actions to be taken if not stable.
(d) In deciding a safe height for an engine re-engagement during a power recovery, consideration should be given to the delay in the response time for the engine to 'spool up'.
(e) Do not conduct more autorotations or EOLs than are required as it can lead to complacency.
(f) Consider completing a 'power recovery' prior to an EOL to gauge the conditions.
(g) Consider completing an exercise such as a limited power running landing prior to an EOL to ensure the applicant can gauge the landing attitude, keep the aircraft straight and lower the lever judicially.
(h) Always follow through on the controls.

3. Cockpit Gradient

A Steep Cockpit Gradient can exist where an examiner is testing a more senior or experienced instructor/pilot. As 'perceived ability' is often tied to status and experience this can lead to an examiner believing that a more experienced applicant has more ability than they actually have. This in turn can lead to an attitude of 'they know what they are doing' and a relaxation on the behalf of the examiner during an EAP, this combined with a reluctance 'to take control' can result in an undesired aircraft state.

A Shallow Cockpit Gradient can exist where an examiner is testing a pilot of comparative ability, in particular, a work colleague or friend. This again can lead to a relaxation in SOPs and some cases an inadvertent element of competitiveness (e.g. who can do the best EOL, running landing etc). This again combined with a reluctance to correct or take control can lead to an undesired aircraft state.

4. Disengaging audio warnings

It may be necessary during an EAP or when following the EAC to disengage an audio warning to complete the drills and/or enable communication with crew members. To ensure reselection of the warning system on completion of the training, the procedure of de-selection and re-selection of warning systems should be part of the pre-flight briefing. It should be stressed that whilst the disengagement of audio/visual warning may be carried out in a test, it is not normally an acceptable practice in a real EAP.

5. Modern Technology Helicopters (Glass Cockpit/Automation)

It can be difficult to realistically replicate abnormal indications in an aircraft equipped with a glass cockpit. It is possible with some prior preparation on the part of the instructor to have picture cards/ photographs of the engine/system displays (taken from a POH or a simulator) of the relevant screen indicating an abnormal indication, which can be held up in front of the live display. The examiner can verbalise the associated audio warnings in order that the pilot can then diagnose and react to the event they have been shown.

It is a valuable exercise to practice flight using a multi-functional display in composite/reversionary mode. If this is conducted, then the aircraft must be VMC throughout in case the displays do not revert

back to the standard format. The correct terminology must be used when referring to the autopilot modes and displays. Unless the manufacture's terminology for the type and variant is used then the associated drills and EAC become difficult to use.

Discreet signals feed the Caution/Warning systems on complex aircraft. They are often prioritised by the manufacturer's philosophy and could sometimes lead to a misdiagnosis. It is strongly recommended that students are taught to spend time on the 'Perceive' stage of ADM process to ensure they have the 'complete picture' of the situation displayed before selecting and following the appropriate drills.

6. Upset/Unusual Attitude Training

The training and testing for the recovery from inadvertent upset/unusual attitude (UA) should normally be conducted in VMC conditions with the applicant's visibility limited by screens or goggles. The following are safety considerations to be considered by the Examiner as part of the TEM process;

(a) The simulated UA should be realistic and not too benign or too excessive.
(b) The recovery heading, speed and altitude to be achieved (including any safety attitude) should be briefed prior to the exercise.
(c) A full set of aircraft/lookout checks should be completed by the instructor/examiner prior to manoeuvring and situational awareness of the aircraft position should be maintained at all times.
(d) The flight controls should be monitored closely during the handover back to the applicant for the recovery phase to prevent excessive attitude changes or engine/rotor exceedance (especially pertinent in a teetering rotor with the dangers of mast bumping, tail striking or low G hazards).
(e) Recovery should be monitored to prevent the simulated UA developing into a real UA and to ensure it is undertaken in the correct sequence to prevent Vortex Ring developing (e.g. power not being applied before a safe airspeed is achieved).

7. Resetting the Aircraft State

When an EAP is complete it is important that the examiner verifies that all systems that were deselected to simulate the EAP are reset before continuing with the flight. The examiner should also inform the applicant that the 'emergency is complete' before continuing with the flight or subsequent EAPs.

AX4.9 Further reading

Further guidance on the testing of EAP's can be found in EHEST leaflet HE11 'Training and Testing of Emergency and Abnormal Procedures in Helicopters'.

ANNEX 5 ASSESSING CREW RESOURCE MANAGEMENT (CRM), MULTI CREW CO-OPERATION (MCC) AND THREAT AND ERROR MANAGEMENT (TEM)

AX5.1 CRM and MCC Assessment

CRM is the effective utilisation of all available resources (e.g. crewmembers, aircraft systems, supporting facilities and persons) to achieve a safe and efficient operation. The objective of CRM is to enhance the communication, human factors and management skills of the crewmembers concerned. The emphasis is placed on the non-technical aspects of the crew performance.'

MCC is the functioning of the flight crew as a team of cooperating members led by the pilot-in-command. The objectives of MCC training are to develop the technical and non- technical components of the knowledge, skills and attitudes (competencies) required to operate a multi-crew aircraft.'

The concepts of MCC and CRM as defined in Part-FCL and Part-ORO may appear at first glance to be somewhat different, however, closer comparison shows that they are in fact the same. The CRM training and checking requirements in Part-ORO apply to both multi and single pilot operators; the MCC requirements in Part-FCL emphasise the competencies required in the multi-crew environment. Comparison demonstrates that, Part-FCL and Part-ORO require the same competencies to be trained and then tested.

The assessment of the HF elements of CRM/MCC are regarded as fundamental to a test. There are five events during which CRM/MCC competence is specifically assessed the: ST, PC, OPC, Line Check and Line Orientated Evaluation (LOE). CRM/MCC can be assessed throughout the test from the planning stage to the debriefing by observing, recording, interpreting and questioning crews and then assessing using an appropriate NOTECHS system. Whilst an individual should not normally fail a skill test or proficiency check for poor non-technical skills in isolation; the failure should normally be linked to a technical failure.

The role of the examiner is to assess (and therefore develop the pilot/crew in their ability) to both fly and operate the aircraft safely by developing knowledge, skills and abilities and dealing strategies for threats and errors during both normal operations and emergency handling. The examiner will therefore need to gather intelligence from a non-technical perspective during the test including, the briefing the and the debriefing. As is always the case, the examiner will need to take adequate notes covering technical issues and more importantly any non-technical issues observed. It needs to be emphasised that both positive and negative issues should be recorded.

AMC1 ORO.FC.115&215 (h) Assessment of CRM Skills requires that NOTECHS (non-technical skills evaluation) or other acceptable methods of assessment should be used. The operator's stated 'behavioural marker system' must be used by the examiner to assist in both assessing (and training the applicant) in acceptable dealing strategies. This is not only pertinent to an operator; the examiner is required to assist any applicant regardless of the role undertaken (operating on commercial air transport or not).

The NOTECHS system was developed to fulfil a need for a generic method of non-technical skills evaluation. It is composed of four categories: Cooperation, Leadership and Managerial skills, Situational Awareness and Decision Making. Key elements and example behaviours are identified for each category. Each observed behaviour can then be assessed from 'very poor' to 'very good' according to the tables below:

Table: NOTECH behaviours

Categories	Elements	Example behaviours (positive)
Co-operation	Team building and maintaining.	Establishes an atmosphere for open communication and participation.
	Considering others.	Takes condition of other crew members into account.
	Supporting others.	Helps other crew members in demanding situations.
	Conflict solving.	Concentrates on what is right rather than who is right.
Leadership and managerial skills	Use of authority and assertiveness.	Takes initiative to ensure involvement and task completion.
	Maintaining standards.	Intervenes if task completion deviates from standards.
	Planning and co-ordinating.	Clearly states intentions and goals.
	Workload management.	Allocates enough time to complete tasks.
Situational awareness	System awareness.	Monitors and reports changes in system's states.
	Environmental awareness.	Collects information about the environment.
	Anticipation.	Identifies possible future problems (TEM).
Decision making	Problem definition and diagnosis.	Reviews causal factors with other crew members.
	Option generations.	States alternative courses of action. Asks crew members for options.
	Risk assessment and option choice	Considers and shares risks of alternative courses of action.

Table: Observed Behaviour Assessment

Very poor	Poor	Acceptable	Good	Very good
Observed behaviour directly endangers flight safety.	Observed behaviour in other situations could endanger flight safety.	Observed behaviour does not endanger flight safety but needs improvement.	Observed behaviour enhances flight safety.	Observed behaviour optimally enhances flight safety and could serve as an example to other pilots.

Further Guidance on the training and testing of CRM can be found in CAP 737 Flight-Crew Human Factors Handbook.

AX5.2 TEM assessment

The basic concept for TEM is simply to timely detect the threat, error or undesired aircraft state; and promptly respond to these. Although this sounds uncomplicated, examiners must obtain evidence to ensure that TEM is being practiced. Since observation is the sole means available to the examiner to obtain this evidence, it is important that the examiner actively questions the pilot before, in and post flight to gain insight into the reasons why specific actions pertaining to TEM were taken. It must be highlighted that questioning during flight does not distract the pilot to the extent that the safety of flight is compromised. Examiners cannot assume that just because a pilot completed a technically faultless trip, competent TEM was used.

On a flight test it is likely that scenarios will need to be created to allow proper assessment of TEM before and during flight. A competent pilot is unlikely to get into an undesired aircraft state or would quickly correct an undesired aircraft state (e.g. low approach speed) and it could be necessary for the flight examiner to artificially create such a circumstance. For example:

1. create a TEM scenario that will be analysed during the pre-flight briefing;
2. when approaching a destination aerodrome simulate a thunderstorm over the airfield;
3. simulate a radio failure approaching a reporting point or entering a control zone;
4. simulate precautionary or forced landing;
5. simulation of instrument or display failure.

To assess TEM, a matrix such as below could be used:

Table: TEM assessment matrix

Objective	Not Yet Competent	Competent	Very competent
Can recognise, assess and manage potential threats in the performance of the various task elements, iaw with TEM techniques.	Is ignorant of potential threats in the performance of the various task elements	Recognises, verbalises and assesses potential threats in the performance of the various task elements	Immediately recognises, verbalises and assesses all potential threats in the performance of the various task elements
Can avoid or trap errors which may occur in the performing of the various task elements, iaw with TEM techniques.	Takes no significant action to reduce or manage the potential impact of threats in the performance of the various task elements	Takes reasonable action to reduce and manage the potential impact of threats in the performance of the various task elements	Effectively manages potential threats and/or implements strategies to minimise the impact of potential threats in the performance of the various task elements
Follows SOP's with evident situational awareness to avoid and trap errors which may occur in the performance of the various task elements.	Limited adherence to SOP's and procedures, poor situational awareness and/or no review of flight progress. Is ignorant of errors which occur in the performance of the various task elements	SOP's and procedures are followed, and good situational awareness evident to avoid and trap errors which may occur in the performance of the various task elements	Strict adherence to SOP's and procedures. Applies effective strategies to avoid and trap errors which may occur in the performance of the various task elements
Applies strategies which will mitigate the effects of any errors which may occur, iaw with TEM techniques.	Is ignorant of or deficient in the application of strategies which could mitigate the effects of any errors which occur	Adequately mitigates the effects of any errors which occur	Applies strategies which effectively mitigate the effects of any errors which occur

SOP's include company SOP's, aircraft checklists, aerodrome procedures, etc.

AX5.3 TEM assessment

Guidance on the testing of TEM can be found in Chapters 3 of EHEST leaflet HE8, The Principles of Threat and Error Management (TEM) for Helicopter Pilots, Instructors and Training Organisations.

ANNEX 6 EXAMINER COMMON ERRORS

Examiner common errors are classified into 3 categories. Test Errors lists those that can affect an examiner during the flight element of a test. Assessment Errors are those that can affect an examiners assessment of an applicant and General Errors are other errors reported by Senior Examiners.

AX6.1 Test Errors

(a) Instructing vs examining

All examiners are experienced instructors and it is therefore common for an examiner to inappropriately revert to instruction during a flight test when they notice applicant errors or poor performance. This can be confusing for the applicant when an examiner intervenes because the applicant has been briefed that they are acting as the PIC. Examiners should assume applicant has the required skills, knowledge and attitude for the test and therefore should: *observe, listen, gather information and not prompt; allow errors to continue (safely)to a conclusion; ensure standards; assess skills, knowledge and attitude and finally delivers the result.*

(b) Poor terminology used by examiners

The use of exacting terminology by the examiner when requesting a test item will assist the applicant to understand exactly what is required and will the lessen the likelihood of misinterpretation. For example, an instruction: '*carry out a 360 degree turn*' would be more exacting as *'carry out a 360 degree turn to the right, from North back onto North, at rate 1 whilst maintaining 100kts and 1500'*.

(c) Inefficient use of time/airspace (wasting time)

Prior to getting airborne, the examiner should consider the sequencing of the test items to ensure the effective use of time and airspace. Flight time spent transiting, repositioning, holding, climbing descending can often be used to incorporate other test items therefore enhancing the efficiency (and reducing the cost) of the flight.

(d) Poor use of scenario-based testing

Scenario based testing allows the examiner to assess the applicant's decision-making skills as well as the physical flying skills. For example, an instruction to: *'carry out a cushion creep take off*' as a scenario-based instruction would be *'we have just picked up x passengers and have x amount of fuel on board, carry out an appropriate take-off profile'*

(e) Emergency and abnormal procedures (EAP) not scenario based and not allowing the completion of drills.

Detailed information on the testing of EAP can be found at Annex 4.

(f) Inclusion of non-test items in tests

Part FCL 1015 states '*an examiner will plan a test or check in accordance with Part-FCL requirements. Only the manoeuvres and procedures set out in the appropriate test or check form will be undertaken'.* Whilst an examiner may use a practical scenario to introduce a test item, extra items cannot be included by the examiner, especially as if the extra item was failed it could lead to Regulation 6 appeal.

(g) Not assessing pre-flight planning

All test flights require an element of pre-flight planning on behalf of the applicant (which may include oral questioning where appropriate). A review of this planning will enable the examiner to establish the applicant's level of aviation knowledge, compliance with the FM/SOPs/regulations, and the ability to apply mitigations to those anticipated threats identified whilst planning the flight.

(h) Not assessing CRM/TEM

The assessment of CRM/TEM is covered in detail in Annex 5.

(i) Inappropriate use of second attempt/repeat manoeuvre

A second attempt is conducted where it has been identified that the applicant has failed to achieve the required standard of the test item(s) at the first attempt (and subsequently recorded as a fail). The definition and use of a repeat manoeuvre is explained in depth at section 3, paragraph 3.5.

AX6.2 Assessment Errors

(a) Personal Bias Error

Personal bias is indicated by a tendency of an examiner to rate applicants or a particular group of applicants the same.

(a) Central Tendency Errors

Central tendency errors are indicated by a tendency to rate all or most applicants as average. The examiner feels that the performance of most applicants is not as good as it should be and therefore underscores an applicant's good performance. On the other hand, the examiner is reluctant to cope with the possible emotional response of an applicant. It results in padded or inflated assessments of poor performance. This error may also occur because an examiner does not want to put effort into making a decision. An average mark is easier to make.

(b) Generosity Errors

Generosity errors are indicated by a tendency to rate all individuals at the high end of the scale and are probably the most common type of personal bias. This could be caused by an examiner's desire to be known as a nice person.

(c) Severity Errors

In this case, all or most applicants are graded at the low end of the marking scale. The examiner may feel that the published standards are too low and score the test against their own set of standards. This type of examiner feels that few people can do as well as they can.

(d) Halo Effect

This occurs when an examiner's impression of an applicant is allowed to influence the assessment of performance. Halo error can result in rating an applicant too high or too low. One form of halo error is the error of leniency. Leniency has its source in an examiner's likes, dislikes, opinions, prejudices, moods and political or community influence of people. For example, when testing a friend, acquaintance, or high-profile individual, an examiner may give undeservedly high marks or, conversely the error of stereotype.

(e) Stereotype

As with the error of leniency, the error of stereotype has its source in likes, dislikes, opinions, prejudices, etc. In this case however, an examiner may allow personal opinion or prejudice to influence the assessment of the applicant and award undeservedly low marks.

(f) Logical Error

Logical error occurs when an examiner assumes that a high degree of ability in one area means a similar degree of competence in another. This is especially true if more than one item being assessed is similar or related. A good mark on one or two items does not mean the applicant is also qualified on all. The full competency check must be completed and marked.

(g) Error of Narrow Criterion

This may occur when an examiner has more than one applicant to evaluate. The examiner may, under this condition, rate each applicant against the others within the group instead of against the standards. If the group to be tested is above average, an applicant who is of average ability may be awarded an undeservedly low mark. If the group of applicants to be tested is below average, then an applicant who performs the best within this group may be awarded a higher assessment than actually deserved.

(h) Error of Delayed Grading

Should a delay occur in awarding the assessment for an item, there might be a tendency to award average marks due to the lack of information and/or poor recall. By not making an assessment immediately after the event, the examiner may award assessments based upon an overall impression of the competency check. This results in an erroneous assessment and an examiners Report that is of little value to the training system.

(i) Standards Error

All the errors we have discussed result in a standards error. However, if an examiner is not thoroughly familiar with established performance criteria, as outlined in this manual, it is virtually impossible to conduct an evaluation to that standard. While these errors are presented here on paper in a clear and obvious way, under the actual conduct of a test, this is not always so. Normally it is a combination of two or more of the errors and clear and obvious is not an apparent trait. Therefore, the examiner must be aware of these errors and consciously prevent such errors from entering, in any degree, into the assessment of competency checks they conduct to ensure the validity of the marks they award.

AX6.3 General Errors

(a) Lack of familiarity with the Part FCL requirements and a tendency to conduct tests and checks “the way I’ve always done them” - even though the requirements may have changed.

(b) Failure to physically check, that the personal licence, type/class rating and medical certificate is accurate, current and valid and that the associated restrictions and/or limitations (where applicable) are being complied with.

(c) Disregard or ignorance of limitations in the POH/AFM/OM.

(d) Failure to present a professional approach in timing, appearance and manner: The examiner must endeavour to be prompt, polite and respectful. Unprofessional behaviour, aggression,

sarcasm and rudeness are never acceptable. Be accurate, concise and meaningful in all instructions and briefings and deliver them with clarity, accuracy and empathy.

(e) Failure to invite the applicant's instructor to the debriefing when a test has been failed to provide an opportunity to clarify the reasons for failure and head off/deflect any misunderstanding by the applicant. Examiners should also endeavour to discuss with the HoT any concerns over non-standard practices or poor standards within the training organisation.

(f) Lack of clarity when debriefing any points of failure and/or recording them. Not keeping to the facts in the description of fail points (avoid opinion, personal preference, subjective remarks or exaggeration)

(g) Inappropriate observations or comments: It is better to remain silent than to make a remark or observation that is not necessary to maintain the test profile. Do not do or say anything beyond or outside the briefed flight profile (e.g. interrupting the flight to look at or comment on something).

(h) Offers of assistance in technique or knowledge in an effort to clarify the requirements or to "help" the applicant: This can be misconstrued as an unwelcome interruption or implied criticism of the training. Do not attempt to influence the applicant in any way unless the test or check is already failed, or safety is jeopardised.

(i) Trying to be amusing, too familiar or too 'laid back': This frequently backfires as 'inappropriate' or unprofessional and is seldom, received well. With the applicant under the inevitable stress of the test, this is often entirely misunderstood. Equally, an austere or overly formal approach or behavioural manner can also be counter productive. A concise, professional and facilitative approach is ideal but a difficult balance to attain.

ANNEX 7 DEBRIEFING TECHNIQUES

AX7.1 Planning the Debrief

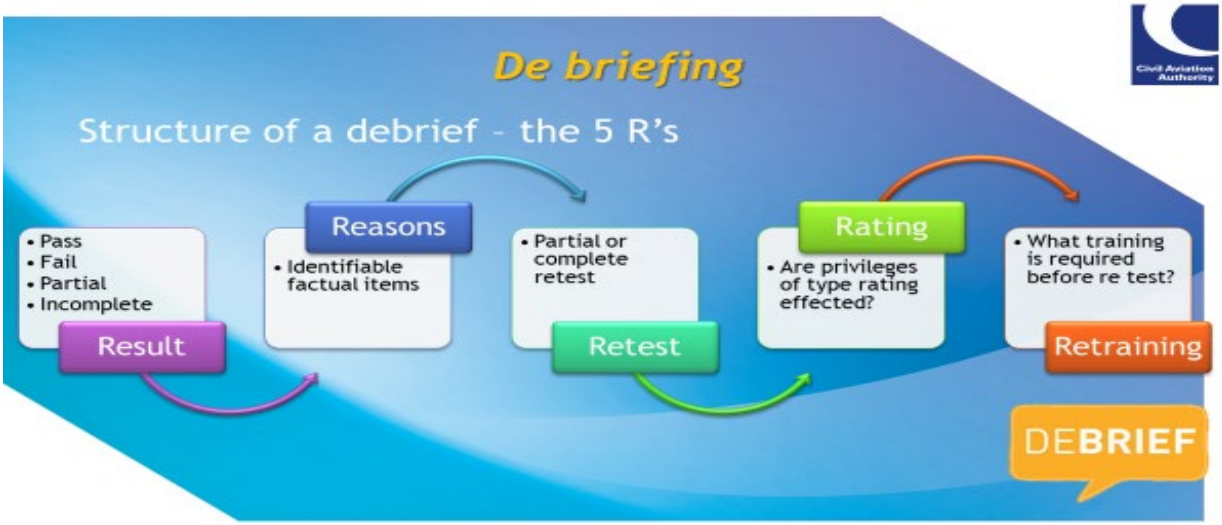
Prior to debriefing the applicant, the examiner should take the time to prepare the debrief. Where appropriate, the examiner should confirm the applicant's performance against the test schedule and any relevant reference material such as POH/FM/SOPs etc. If required, the examiner should discuss any standardisation points with the applicant's instructor and if necessary, bring the appropriate reference material and the applicant's instructor to the debrief.

The examiner should analyse their debriefing notes in order to plan an agenda for the debrief. Ideally, the examiner should identify 2-3 key root cause issues with appropriate open questions to get the applicant thinking and talking. Only then should the examiner plan to debrief any minor issues before summarising the debrief points at the end.

AX7.2 The Do's

The debrief should be structured using the 5 Rs principle with the examiner controlling the agenda, starting with the introduction and clear statement of the result. The debrief should be unambiguous, fair, unbiased and based on identifiable factual items. There should be a clear prioritisation of the faults drawing together common faults and the underlying root causes to identify the learning points and any appropriate preventive measures. The debrief should consider and include relevant NOTECHs, RT, CRM, TEM and HF factors. Facilitation should be used where appropriate by asking open questions and using pauses and silences to encourage applicants to discuss their views. Examiners should encourage a climate conducive to learning with the appropriate use of body language, eye contact and a balance between praise and criticism.

AX7.3 5 R Process



Note: A sixth R could be a Reg 6 Appeal process in the case of a 'Partial Pass' or 'Fail'.

AX7.4 The Dont's

Examiners should avoid delivering a chronological debrief concentrating on minor errors, omitting major errors and only debriefing those items poorly performed. Examiners should not be emotive (e.g. aggressive, irritability, sarcastic), interrupt, personalise, impose own SOPs or exaggerate, nitpick or ramble on(!) Whilst being prepared to concede (graciously) if required, they should avoid being apologetic. Examiners should not ask applicants to assess themselves and should be careful not to undermine company SOPs. Where crews are being debriefed together the examiner should not concentrate on one individual.

AX7.5 Use of Facilitation

Facilitation Technique: An active training method which uses effective questioning, listening and a non-judgemental approach and is particularly effective in developing skills and attitudes, assisting trainees to develop insight and their own solutions and resulting in a better understanding, retention and commitment. (ICAO doc 995)

'Facilitation is the art of leading someone to an inevitable conclusion!' (Budenberg,2002)

AX7.6 Facilitator Skills

A facilitator is required to have the following skills:

(a) Have a thorough knowledge of topic.
(b) Be familiar with the applicant's organisation and role.
(c) Able to relate to the applicant.
(d) Able to ask questions and wait for an answers.
(e) Be an attentive listener.
(f) Able to stimulate discussion.
(g) Able to get the applicant to be comfortable with vulnerability.

A facilitative style of questioning will encourage pilots to analysis their own performance and can enhance learning through their involvement in the debrief. Self-analysis is considered as 'deep learning' and can be more effective than anything the examiner may say to the applicant. Facilitation allows the applicant the opportunity to discover what they are doing and the effect it has on others and the task. They can then make the decision to alter their behaviour or reinforce any positive behaviours.

AX7.7 Role of the Facilitator

The role of a facilitator in a debrief is to help develop the applicant's knowledge, skills and attitudes (KSA) so that they are able carry out their role better. The facilitation technique is not just used for the poor performer it can be used to reinforce effective behaviours and encourage their continued development.

AX7.8 The Debrief Agenda

The debrief should be in three parts, an introduction with the result of the test always stated first by the examiner (this will not be facilitated), followed by the debrief items in the main body and then finishing with a summary.

In the case of a pass, the examiner could can move straight into facilitation of the debrief items to build upon any learning that arose during the test especially covering the observable behaviours established prior to and during the test. This will assist the pilot/crew in consolidating learning points and developing strategies to resolve key issues.

If the result of the test is a 'Partial Pass' or a 'Fail', then facilitation at this stage is inappropriate. The examiner shall continue the debriefing, giving the reasons for failure supported by factual statements and stating the re-test requirements, the effects on the applicant's privileges and the retraining requirements. Only then may the examiner adopt a facilitative style.

AX7.9 The Introduction

The introduction is used to set the scene and allow the applicant to process what you want. For example, a sample introduction for a multi pilot crew might be:

'Rather than me just sitting here and reading the list of things on my kneeboard to you, it would be better to have a discussion – by that I mean you can talk to each other and to me, instead of simply listening to me. The benefit of this type of debrief is that it is more interesting to be involved in and more importantly, that we will all learn more by thinking through things for ourselves. Please take a minute each and think about any topics/issues that were interesting – and I do not just mean anything that you think did not go well. Let's include in our lists of topics/issues some thoughts about why some segments of the flight went so well.'

AX7.10 The Main Body

A chronological debrief should be avoided by asking the pilots to consider what they would like to discuss first. If the examiner does not put their agenda first, the pilots will discuss what they are interested in most and may raise issues not previously noticed.

Two open questions per issue should be asked (open questions require a longer answer and begin with words like why, when, what, how, where, etc). If a closed question is used (closed questions are those that can be answered with a single word – such as 'Did you get distracted?), – then a building question can be added 'Why didn't the diversion go well? ….. What would you do next time?'

Additionally, a building question can be an effective method to lead pilots to new topics. Typical building questions are:

'Why did that happen?', 'What do you mean?', 'Tell me more about that' 'Why do you say that?', 'Why is that important?', What other issues are there to discuss in the way you handled the emergency?'

Open questions not only mean the pilots will do more talking, they will have to think deeper about the issues and pilots that are thinking are generally analysing and learning! Whilst a pilot is talking it also allows the examiner to listen to the answer and to decide where to direct the debrief agenda.

Notwithstanding the discussion, it is the examiners role to control the agenda and ensure that all the topics/issues that have been raised. It is perfectly acceptable for the examiner to add agenda topics/issues to the discussion. For example, 'What was the confusion with the approach about?'

AX7.11 The Summary

The examiner will be able to assist the applicants learning by summarising the debrief. Pilots can then add their own conclusions and gain a better understanding. Summaries can either be a summation of a specific training topic/issue or at the end of the debrief in total.

Examiners should try not to summarise with only their words and understanding as learning best comes from those elements a crew thought and articulated themselves.

An example of a summary is:

'It sounds to me like you've come to a few conclusions. John, you said that your workload during the approach was a distraction. You also seemed to think that next time, completing the checklist before starting the approach would have helped to reduce the workload and given you more time to think. Terry, you mentioned that telling the Captain when you are getting behind would help and that you wanted to revise the SOPs around the reject/evacuation drills. Did I summarise your comments correctly?'

Table: Instruction and Facilitation techniques (ICAO Doc 9995)

	Instruction Technique	Facilitation technique
What do the words instructing/facilitating imply?	Telling, showing	Enabling the trainee to find the answer by themselves
What is the aim?	Transfer knowledge and develop skills	Gain insight/self-analysis to enable an attitude change
Who knows the subject?	Instructor	Both instructor and trainee
Who has the experience?	Instructor	Both instructor and trainee
What is the relationship?	Authoritarian	Equal
Who sets the agenda?	Instructor	Both instructor and trainee
Who talks the most?	Instructor	Trainee
What is the timescale?	Finite	Infinite
Where is the focus?	Instructor – task	Trainee — performance and behaviour
What is the workload?	Moderate	High
What are instructors' thoughts?	Judgemental	Non-judgemental
How is progress evaluated?	Observation	Guided self-assessment

ANNEX 8 CAA FITNESS OF CHARACTER POLICY

AX8.1 Rationale for Policy Framework

The CAA is under an obligation to be satisfied, on a continuing basis, of the fitness of character of individuals and post holders which it licenses or approves in accordance with applicable legislation. Legislation does not specify how an individual or post holder will be expected to satisfy the CAA. Therefore, the CAA has discretion in relation to how fitness of character is assessed.

The CAA must consider options for any regulatory intervention when available information indicates that a person may no longer have the fitness of character appropriate to the privileges of their licence or authorisation.

The powers to intervene in these sorts of cases are discretionary, and therefore the CAA cannot set out the specific action to be taken in every circumstance. Instead, each case will be judged on its own merits. As a public body, the CAA must act clearly and consistently as and when it reviews individual behaviours with the information available to us at the time. Accordingly, it is appropriate to have a policy framework and guidance in place to set out how the CAA will approach the assessment of such cases.

AX8.2 Policy Framework

The CAA must be satisfied that all individuals and post holders who are licensed by us demonstrate the following behaviours:

(a) Trustworthiness – the ability to be relied on as honest and truthful
(b) Propensity to obey rules – demonstrably being consistent in applying the rules, in spirit and letter.

When considering these behaviours, the CAA will take into account the overriding need to:

(a) Protect the general public;
(b) Maintain public confidence in the individual and post holder privileges that we licence;
(c) Maintain public confidence in the CAA's own decision-making process.

Specific information that may call into question fitness of character includes, but is not limited to, the following:

(a) Criminal convictions or civil sanctions. Anyone convicted of an aviation related offence or dishonesty offence is unlikely to be regarded as having fitness of character. Convictions for unrelated offences may be relevant when considering propensity to obey rules.
(b) Falsification of records.
(c) Providing false information.
(d) Previous licensing or enforcement action has been undertaken.
(e) Dishonest behaviour.

This fitness of character policy sits alongside any competence or skills and medical fitness requirements that must be demonstrated by individuals and post holders in order to be licensed by the CAA.

In dealing with a fitness of character decision, the CAA will clearly and consistently review individual behaviours using the information available to us.

In reaching a decision we will consider all potential outcomes ranging from taking no action to proposing to revoke a privilege or licence. Taking no action is as critical a decision as taking formal action. We will record and be able to explain subsequently our reasons for making, or not making, a decision.

ANNEX 9 THE UK GENERAL DATA PROTECTION REGULATION FOR EXAMINERS

AX9.1 Responsibilities of Examiners

The UK General Data Protection Regulation (UKGDPR) replaces the General Data Protection Regulation (EU) 2016/679

As an examiner carrying out skill tests, proficiency checks or assessments of competence on behalf of the CAA it is important that you understand the provisions of the Regulation and safeguard personal data that you collect during testing accordingly. Central to the Regulation are the 6 principles of data protection:

AX9.2 Personal Data

Personal data shall be:

a. processed lawfully, fairly and in a transparent manner in relation to individuals;

b. collected for specified, explicit and legitimate purposes and not further processed in a manner that is incompatible with those purposes; further processing for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes shall not be considered to be incompatible with the initial purposes;

c. adequate, relevant and limited to what is necessary in relation to the purposes for which they are processed;

d. accurate and, where necessary, kept up to date; every reasonable step must be taken to ensure that personal data that are inaccurate, having regard to the purposes for which they are processed, are erased or rectified without delay;

e. kept in a form which permits identification of data subjects for no longer than is necessary for the purposes for which the personal data are processed; personal data may be stored for longer periods insofar as the personal data will be processed solely for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes subject to implementation of the appropriate technical and organisational measures required by the GDPR in order to safeguard the rights and freedoms of individuals; and

f. processed in a manner that ensures appropriate security of the personal data, including protection against unauthorised or unlawful processing and against accidental loss, destruction or damage, using appropriate technical or organisational measures.

g. Not be transferred to a country or territory outside the European Economic Area (EEA), unless that country or territory ensures an adequate level of protection for the rights and freedoms of data subjects.

h. Applying these principles to the official records that you keep after flight events, i.e. the appropriate CAA forms or examiner records, these records must be:

(i) Not used for any other purpose than as test records.
(ii) Kept for only as long as necessary. You should keep records for 5 years and then destroy them.
(iii) Not disclosed to any unauthorised person. Disclosure should be limited to the test subject, CFI, HT, new examiner and appropriately authorised members of the CAA.
(iv) Kept securely – i.e. in a locked cabinet or drawer.
(v) Not transferred outside the EEA (e.g. to the USA, New Zealand or South Africa) without the permission in writing of the data subject. If you are examining outside the EEA then you should maintain normal personal records but should not allow these records (apart from flight details and the test result itself) to form any part of the official records of the organisations for which you are working or at which the applicant is a student.

AX9.3 Data Breaches

Any loss of information or equipment containing personal data handled and/or processed on behalf of the CAA, including by CAA employees, agency staff and contractors, no matter how small, must be reported to the External Response Team immediately so that any potential risk can be mitigated. Unauthorised access to personal data is also considered as a data breach. Anyone discovering or suspecting a breach (loss of personal data, theft, wrongful disclosure or unauthorised access) in relation to personal information handled by or on behalf of the CAA must report the incident to the ERT immediately by emailing FOI.Requests@caa.co.uk

AX9.4 Records

It should be noted that examiners might have to produce any of their records under the Freedom of Information Act 2000.

Note: a full description of the Regulation can be found here Home | ICO

ANNEX 10 ENGLISH LANGUAGE PROFICIENCY

All pilots, flight navigators and air traffic controllers need to hold a valid English Language Proficiency endorsement for radio communication. The Authority can only endorse language proficiency levels on licences issued by the Authority.

ICAO has published a Standard that requires flight crew of aircraft using radiotelephony to be proficient in the language used for communication. For domestic flights, the language may be that of the State concerned, but for international flights the language shall be English.

Language skills are rated on a scale of 1 to 6 (as defined by ICAO) and a pilot must achieve a minimum of level 4. If a pilot is graded at level 4 or 5, they will need to be retested regularly. Language proficiency at level 6 does not require periodic re-evaluation.

The pilot's licence has a language proficiency endorsement at section XIII - Remarks of their licence, and a validity date.

In the UK, a pilot will need to do the retest as follows:

- Level 4 – every 4 years from the date of assessment
- Level 5 – every 6 years from the date of assessment

Examiners holding FE, TRE, SFE, CRE, IRE, FIE or FRTOL Examiner privileges granted by the UK CAA, who themselves hold Level 6 English Language Proficiency, can currently conduct assessments for first language speakers with native or native-like proficiency, as well as second or foreign language speakers with a high level of proficiency and, where appropriate, award level 6 proficiency. A UK-approved examiner can assess a pilot during a practical test for a licence, rating or the UK FRTOL. In these circumstances, an examiner cannot upgrade an existing language endorsement from 4 to 5 but can award a Level 6, although this would be exceptional.

Examiners should treat speakers who use English as their first language as 'probable expert users'. However, examiners should be aware that ' first language English speaker' does not necessarily mean 'Expert Level 6' user.

Speakers who use English as their first language may lack the vocabulary to discuss certain themes or may speak with a regional accent that is an impediment to intelligibility for those from outside that region. They may fail to use appropriate language or may not interact effectively; consequently, they should not be assessed as Expert Level 6.

Speakers who use English as their first language but who fail to demonstrate proficiency in all aspects of the Level 6 descriptors in the ICAO Rating Scale should not be assessed as Expert Level 6.

If an applicant cannot converse at Level 6 then the examiner is to advise the applicant to be formally assessed at a language school approved by the Authority or an ATO specially approved by the Authority to conduct language assessments (details of such organisations are published in Standards Document 31).

Attainment of Level 6 should be considered as being beyond the realistic expectations of most second or foreign language learners (ICAO Doc 9835). Level 6 proficiency is not an essential requirement for successful aeronautical communication. It has a very wide coverage since it is intended to account for most first language speakers with native or native like proficiency as well as second or foreign language speakers with a high level of proficiency.

If an applicant is potentially considered to be a Level 6 speaker and is to be evaluated through an informal assessment, this must be supported by evidence* of an individual's linguistic history which must be retained by the examiner as required by FCL.1030 (c).

The Examiner must submit the examiner report form, or the SRG 1199 in the case of a stand-alone language assessment, to the CAA.

*Records of supporting evidence to be retained by the examiner must include relevant details of: place of birth and early residence; the language(s) used during childhood in the family, in the community and in

education; any long periods of residence (with proven participation) in communities where English is used socially, professionally or in education; extended periods of English language study or higher education diplomas.

Informal assessment may proceed only if the examiner's initial evaluation indicates that the supporting evidence is sufficient to support a subsequent application.

Persons holding a Level 4 or 5 endorsement issued by the UK must attend a UK CAA Approved Language Assessment centre (see CAA Standards Document No. 31) or an examiner who has completed specialist language assessor training to renew or upgrade their assessment.

Note that an invalid language proficiency assessment invalidates a FRTOL and will delay any subsequent licence request.

Examiners must familiarise themselves with the descriptors at Expert Level 6 of the ICAO Rating Scale. Examiners must also familiarise themselves with the speech samples rated at levels 5 and 6 so that they understand the threshold between 'Extended' and 'Expert' users of English.

To get the endorsement at Level 6, a pilot will need to demonstrate to the examiner that they are able to do the following:

- Communicate effectively voice-only and face-to-face;
- Communicate on common and work-related topics with accuracy and clarity;
- Use appropriate communicative strategies to exchange messages and to recognise and resolve misunderstandings in a general or work-related context;
- Be able to use language effectively in a difficult or emergency work-related situation or communication task, that you have not encountered before
- Speak in an accent or dialect that can be understood

If a pilot holds an instrument rating (IR) they must be able to demonstrate English language proficiency to a level that will allow them to:

- Understand all the relevant information for all phases of flight, including preparation;
- Use radiotelephony in all phases of flight, including emergencies;
- Communicate with crew members during all phases of flight, including preparation

Table: Guidance on the ICAO Rating Scale

Criteria	Notes on criteria	Level 6 Descriptors	Explanatory notes
Pronunciation	The six levels of pronunciation descriptors are applicable at all levels to native and non-native speakers. This implies that native English speakers may demonstrate Elementary Level 2 proficiency if their regional dialect is so localised that it is not readily understood by those outside of that particular region. On the other hand, speakers whose speech patterns clearly identify them as non-native speakers (having a so-called "accent") may demonstrate Expert Level 6 proficiency, as long as this meets the criterion of "almost never" interfering with ease of understanding.	Pronunciation, stress, rhythm and intonation, though possibly influenced by the first language or regional variation, almost never interfere with ease of understanding.	An Expert Level 6 speaker may be a speaker of English as a first language with a widely understood dialect or may be a very proficient second-language speaker, again with a widely used or understood accent and/or dialect. The speaker's accent or dialect may or may not identify them as second language users, but the pronunciation patterns or any difficulties or "mistakes" almost never interfere with the ease with which they are understood. Expert speakers are always clear and understandable
Structure	Relevant grammatical structures and sentence patterns are determined by language functions appropriate to the task. Language teaching specialists generally categorise grammatical errors into two classes: "global" and "local". Global errors are those which interfere with meaning; local errors are those which do not interfere with meaning.	Both basic and complex grammatical structures and sentence patterns are consistently well controlled.	Expert Level 6 speakers do not demonstrate consistent global structural or grammatical errors but may exhibit some local errors.
Vocabulary	Vocabulary includes individual words and fixed expressions. While memorising phraseologies is neither an acceptable means of demonstrating language proficiency nor an effective or recommended language learning strategy, it is undeniable that context is a relevant factor in language proficiency. Therefore, learning or testing that focuses on, or is designed to elicit vocabulary related to, aeronautical radiotelephony communications is preferable.	Vocabulary range and accuracy are sufficient to communicate effectively on a wide variety of familiar and unfamiliar topics. Vocabulary is idiomatic, nuanced and sensitive to register.	Level 6 speakers demonstrate a strong sensitivity to register. Another marker of strong proficiency seems to be the acquisition of, and facility with, idiomatic expressions and the ability to communicate nuanced ideas. As such, use of idioms may be taken into account in assessment procedures designed to identify Level 6 users in a non-radiotelephony context. This is not, however, intended to imply that idiomatic usages are a desirable feature of aeronautical radiotelephony communications. On the contrary, the use of idioms is an obstacle to intelligibility and mutual understanding between non-expert users and should therefore be

			avoided by all users in this environment.
Fluency	Fluency is intended to refer to the naturalness of the flow of speech production, the degree to which comprehension is hindered by any unnatural or unusual hesitancy, distracting starts and stops, distracting fillers (em … huh … er …) or inappropriate silence. Levels of fluency will be most apparent during longer utterances in an interaction. They will also be affected by the degree of expectedness of the preceding input	Able to speak at length with a natural, effortless flow. Varies speech flow for stylistic effect, e.g. to emphasise a point. Uses appropriate discourse markers and connectors spontaneously.	Fluency at this level is native like or near native-like. It is notably characterised by a high degree of flexibility in producing language and in adapting the speech rate to the context of communication and the purposes of the speaker.
Comprehension	This skill refers to the ability to listen and understand. In air traffic control communications, pilots rely on the clear and accurate information provided to them by controllers for safety. It is not sufficient for air traffic controllers to be able to handle most pilot communications; they must be ready for the unexpected. Similarly, pilots must be able to understand air traffic controller instructions, especially when these differ from what a pilot expects to hear. It is during complications in aviation that communications become most crucial, with a greater reliance upon plain language. While comprehension is only one out of six skills in the Rating Scale, it represents half of the linguistic workload in spoken communications.	Comprehension is consistently accurate in nearly all contexts and includes comprehension of linguistic and cultural subtleties.	Level 6 users achieve a high degree of detailed accuracy and flexibility in their understanding of aeronautical radiotelephony communications regardless of the situation or dialect used. They further have the ability to discern a meaning which is not made obvious or explicit (“read between the lines”), using tones of voice, choice of register, etc., as clues to unexpressed meanings. Because radiotelephony communications take place in a busy environment, the communications of air traffic controllers and pilots must not only be clear, concise and unambiguous, but appropriate responses must be delivered efficiently and a rapid response time is expected
Interactions	The interactions skill refers to this ability, as well as to the ability to initiate exchanges and to identify and clear up misunderstandings. Because radiotelephony communications take place in a busy environment, the communications of air traffic controllers and pilots must not only be clear, concise and unambiguous, but appropriate responses must be delivered efficiently and a rapid response time is expected.	Interacts with ease in nearly all situations. Is sensitive to verbal and nonverbal cues and responds to them appropriately.	Expert speakers display no difficulties in reacting or initiating interaction. They are additionally able to recognise and to use non-verbal signs of mental and emotional states (for example, intonations or unusual stress patterns). They display authority in the conduct of the conversation.

ANNEX 11 LICENCE COMPLETION

AX11.1 Introduction

Ratings and certificates shall be entered in the **Rating Certificate Endorsement** column of Section **XII - Certificates of Revalidation** of the licence. Type rating entries will comply with the type designation in the Helicopter Type Rating List on the EASA website. Limitations and extensions related to individual ratings and certificates be entered against those ratings and 'endorsements' in the **Remarks and Restrictions** Column of Section XII.

AX11.2 Licence Completion Instructions

The Certificate of Revalidation information can be entered in the pilot's licence following a test, provided that:

a. the applicant's licence already has the rating or certificate in the **Rating Certificate Endorsement** column of Section **XII Certificates of Revalidation**.
b. The applicant's licence **Section XII Ratings Certificates and Privileges** already contains the rating or certificate.

The examiner must also confirm that the applicant has the appropriate remarks and restrictions for the qualification being sought as indicated in the table below:

XII	Ratings, certificates and privileges
Class/Type/IR	Remarks and Restrictions
Type Rating	'SP', 'MP', 'SP/MP' (as applicable) – see note below*
Instructor ratings	FCL.905 applies (categories listed as applicable)
Instrument	Nil
Night	Nil

*Note: Type ratings are annotated as follows:

'SP' - for a single pilot Type in which the pilot has qualified to fly the Type in the single pilot role.
'MP' - for a single pilot Type in which the pilot has qualified to fly the Type in the multi pilot role only.
'SP/MP' - for a single pilot Type in which the pilot has qualified to fly the Type in both single and multi-pilot roles.

An examiner cannot make an entry on the licence and the applicant must apply to the authority where:

1. an applicant has completed a test for the initial issue of a rating or certificate, or
2. the renewal of a rating or certificate that is annotated on the rear of the licence.

Information should be entered onto the Certificate of Revalidation page in the licence as follows:

1. **Rating Certificate Endorsement:** For type rating, enter the Type Rating designator as it appears in Part XII – 'Ratings, certificates and privileges' section of the licence followed by '/' and either SP, MP, IR as appropriate. For instructors, enter the instructor category followed by the helicopter type designator if applicable (for example: 'FI(H)', 'IRI(H)', 'TRI MD900/902')
2. **Date of Rating Test:** For a type rating, enter the date of the test, or 'EXP' when revalidating by experience. Where an Instructor Assessment of Competence was conducted, the examiner must enter the date of the AoC flight. However, when the revalidation was completed by experience and refresher seminar, the examiner must enter 'N/A'.
3. **Date of IR Test:** Enter the date of IR flight test.
4. **Valid Until**: For type ratings and IR's, the new 'Valid Until' date will be 12 months, to the end of the month from the date of the test. However, for a test conducted within 3 months of the current expiry date this should be extended to 12 months from that date. For instructors, the new 'Valid Until' date will be 36 months, to the end of the month from the date of the AoC. However, for an AoC conducted within 12 months of the current expiry date this should be extended to 36 months from that date.

5. **Examiner's Certificate Number:** Enter the examiners' CAA licence reference number
6. **Examiner's Signature**: Examiner to sign

Entries for Helicopter Rating Statements of Validity ('Certificates of Revalidation') the following variations for SP/MP/IR are to be used;

XII Rating - CERTIFICATE OF REVALIDATION					
Rating Certificate Endorsement	Date of Rating Test	Date of IR Test	Valid Until	Examiner's Certificate Number	Examiner's Signature
For single pilot helicopters					
Type/SP					
Type/MP					
Type/SP/MP					
Type/SP/IR					
Type/MP/IR					
Type/SP/MP/IR					
For multi pilot helicopters					
Type/MP					
Type/MP/IR					

AX11.3 Instrument Ratings

An Instrument Rating (IR) can be included in all Part-FCL helicopter licences. When included in a licence, the Instrument Rating is a standalone rating. Appendix 8, Section B of Part FCL introduces instrument rating cross crediting for revalidation purposes. All Multi Pilot Helicopter Type Ratings are Type specific but may support any single pilot multi engine Type in the same validity period if recent in that SP Type. See Appendix 8 for further guidance

Where a pilot is able to take advantage of the cross-crediting arrangements in Appendix 8 to Part-FCL, a separate entry will be made for each Type. This will be specific to the use of IR privileges in that Type, the text of which is:

- 'Type/IR only'

The validity of a Type/IR entry based on cross-crediting will be the same as the validity of the Type specific IR based on the IR proficiency check referred to in the left-hand column of Appendix 8 to Part-FCL.

XII Rating - CERTIFICATE OF REVALIDATION					
Rating Certificate Endorsement	Date of Rating Test	Date of IR Test	Valid Until	Examiner's Certificate Number	Examiner's Signature
AS332/EC225/IR	29/01/2019	29/01/2016	31/01/2017	AT123456L	signature
EC135/IR only	---	29/01/2016	31/01/2017	AT123456L	signature

ANNEX 12 COMPETENCY BASED ASSESSMENT

To be competent, a pilot requires competency across a range of Knowledge, Skills and Attitudes (KSA)'. ICAO Doc 9995 (EBT) provides a useful matrix for competency-based assessments which is provided below for guidance. Many Operators and ATOs create their own technical and non-technical competency matrix and this may be used to grade pilots for overall competency. Indeed, Operators and ATO's are encouraged to develop their own methodologies. However, whilst the table below may provide guidance, it is aligned with the nine competency requirements in Part FCL Appendix 9 plus an additional competency of Monitoring (MON) considered by some operators to be separate while others include this across all other competencies. A pilot, therefore, may be failed for an unacceptable reduction in safety margin or performance indicated by an inability to demonstrate safe competence in any of these items below. Any Operator or ATO creating their own matrix should ensure it at least covers the minimum 9 aspects of competency as detailed in the Competencies and Behavioural Indicators table below.

Competency Based Assessment is not new. Part FCL Appendix 9 **Flight Test Tolerance** section requires examiners to assess the applicant's ability to:

a. Operate the aircraft within its limitations (KNW, APK, MON, SAW)
b. Complete all manoeuvres with smoothness and accuracy (FPM)
c. Exercise good judgement and airmanship (SAW, PSD, LTW, WLM, COM)
d. Apply aeronautical knowledge (APK)
e. Maintain control at all times in such a manner that successful outcome is not in doubt (TEM)
f. Understand and apply crew co-ordination procedures (LTW, WMT, COM)
g. Communicate effectively with other crew members (COM)
h. Control the flight path within the stated list of tolerances (FPA)

Training scenarios should additionally consider startle effect, resilience development and Threat and Error Management.

Operators should ensure examiners are trained in the assessment of the competencies; including standardization and inter-rater reliability assurance.

The training programmes should focus on development of competence in the following specific areas:

a. the competencies contained in Appendix 1 to Part II, in particular the measuring of behaviours observed according to the defined grading system used by the operator or ATO;
b. in accordance with the assessment and grading system of the operator or training organization,
c. making assessments by observing behaviours; gathering objective evidence regarding the behavioural indicators in Appendix 1 to Part II;
d. correlating between observed behaviour and potential outcome in training situations;
e. recognizing and highlighting good performance;
f. determining root causes for deviations below the standards of performance; and
g. identifying situations that could result in unacceptable reductions in safety margins.

Prior to conducting CBA all examiners/instructors should successfully complete a formal competency assessment. The competency assessment should be made during a practical training session supervised by a person nominated by the operator or the ATO.

All examiners/instructors should receive annual refresher training and be re-assessed in the competencies specified above every three years.

Table: Competencies and Behavioural Indicators

Competency	Competency Description	Behavioural Indicator
Application of Procedures (APK)	Identifies and applies Procedures in accordance with published operating instructions and applicable regulations, using the appropriate knowledge.	• Identifies the source of operating instructions • Follows SOPs unless a higher degree of safety dictates an appropriate deviation • Identifies and follows all operating instructions in a timely manner • Correctly operates aircraft systems and associated equipment • Complies with applicable regulations. • Applies relevant procedural knowledge
Communication (COM)	Demonstrates effective oral, non-verbal and written communications, in normal and abnormal situations.	• Ensures the recipient is ready and able to receive the information • Selects appropriately what, when, how and with whom to communicate • Conveys messages clearly, accurately and concisely • Confirms that the recipient correctly understands important information • Listens actively and demonstrates understanding when receiving information • Asks relevant and effective questions • Adheres to standard radiotelephone phraseology and procedures • Accurately reads and interprets required company and flight documentation • Accurately reads, interprets, constructs and responds to datalink message in English • Completes accurate reports as required by operating procedures • Correctly interprets non-verbal communication • Uses eye contact, body movement and gestures that are consistent with and support verbal messages
Aircraft Flight Path Management, Automation (FPA)	Controls the aircraft flight path through automation, including appropriate use of flight management system(s) and guidance.	• Controls the aircraft using automation with accuracy and smoothness as appropriate to the situation. • Detects deviations from the desired aircraft trajectory and takes appropriate action. • Contains the aircraft within the normal flight envelope. • Manages the flight path to achieve optimum operational performance. • Maintains the desired flight path during flight using automation whilst managing other tasks and distractions. • Selects appropriate level and mode of automation in a timely manner considering phase of flight and workload. • Effectively monitors automation, including engagement and automatic mode transitions

Competency	Competency Description	Behavioural Indicator
Aircraft Flight Path Management, Manual Control (FPM)	Controls the aircraft flight path through manual flight, including appropriate use of flight management system(s) and flight guidance systems.	• Controls the aircraft manually with accuracy and smoothness as appropriate to the situation. • Detects deviations from the desired aircraft trajectory and takes appropriate action. • Contains the aircraft within the normal flight envelope. • Controls the aircraft safely using only the relationship between aircraft attitude, speed and thrust. • Manages the flight path to achieve optimum operational performance • Maintains the desired flight path during manual flight whilst managing other tasks and distractions. • Selects appropriate level and mode of flight guidance systems in a timely manner considering phase of flight and workload. • Effectively monitors flight guidance systems including engagement and automatic mode transitions.
Leadership and Teamwork (LTW)	Demonstrates effective leadership and team working.	• Understands and agrees with the crew's roles and objectives. • Creates an atmosphere of open communication and encourages team participation. • Uses initiative and gives directions when required • Admits mistakes and takes responsibility. • Anticipates and responds appropriately to other crew members' needs. • Carries out instructions when directed. • Communicates relevant concerns and intentions • Gives and receives feedback constructively. • Confidently intervenes when important for safety. • Demonstrates empathy and shows respect and tolerance for other people. • Engages others in planning and allocates activities fairly and appropriately according to abilities. • Addresses and resolves conflicts and disagreements in a constructive manner. • Projects self-control in all situations.
Problem Solving and Decision Making (PSD)	Accurately identifies risks and resolves problems. Uses the appropriate decision-making processes.	• Seeks accurate and adequate information from appropriate sources. • Identifies and verifies what and why things have gone wrong. • Employ(s) proper problem-solving strategies • Perseveres in working through problems without reducing safety. • Uses appropriate and timely decision-making processes. • Sets priorities appropriately. • Identifies and considers options effectively. • Monitors, reviews, and adapts decisions as required. • Identifies and manages risks effectively. • Improvises when faced with unforeseeable circumstances to achieve the safest outcome

Competency	Competency Description	Behavioural Indicator
Situation Awareness (SAW)	Perceives and comprehends all of the relevant information available and anticipates what could happen that may affect the operation.	• Identifies and assesses accurately the state of the aircraft and its systems. • Identifies and assesses accurately the aircraft's vertical and lateral position, and its anticipated flight path. • Identifies and assesses accurately the general environment as it may affect the operation. • Keeps track of time and fuel. • Maintains awareness of the people involved in or affected by the operation and their capacity to perform as expected. • Anticipates accurately what could happen, plans and stays ahead of the situation. • Develops effective contingency plans based upon potential threats. • Identifies and manages threats to the safety of the aircraft and people. • Recognizes and effectively responds to indications of reduced situation awareness.
Workload Management (WLM)	Manages available resources efficiently to prioritize and perform tasks in a timely manner under all circumstances.	• Maintains self-control in all situations. • Plans, prioritizes and schedules tasks effectively. • Manages time efficiently when carrying out tasks. • Offers and accepts assistance, delegates when necessary and asks for help early. • Reviews, monitors and cross-checks actions conscientiously. • Verifies that tasks are completed to the expected outcome. • Manages and recovers from interruptions, distractions, variations and failures effectively.
Knowledge (KNO)	Demonstrates knowledge and understanding of relevant information, operating instructions, aircraft systems and the operating environment	• Demonstrates practical and applicable knowledge of limitations and systems and their interaction. • Demonstrates required knowledge of published operating instructions. • Demonstrates knowledge of the physical environment, the air traffic environment including routings, weather, airports and the operational infrastructure. • Demonstrates appropriate knowledge of applicable legislation. • Knows where to source required information. • Demonstrates a positive interest in acquiring knowledge. • Is able to apply knowledge effectively

The scope for operators to identify and include additional competencies is provided for in ICAO Doc 9995 (EBT). For example, Monitoring (MON):

Competency	Competency Description	Behavioural Indicator
Monitoring (MON)	Maintains 'big picture' by cross checking each other's actions and diligent observation of the flight path, aircraft system and automation modes.	• Mentally flies the aircraft, monitors systems and PF to maintain SAW • Detects flight path deviation and system changes through efficient scanning "inside and outside" • Communicates/challenges effectively using standard calls/actions • Prioritises monitoring during critical flight phases and changes to automation modes • Manages PM tasks effectively to stay in the monitoring loop • Monitors PF and flight path consistently, makes timely and appropriate interventions and takes control when necessary to ensure flight safety

Competency Based Training Definitions

Assessment: The determination as to whether an applicant meets the requirements of the competency standard.

Behaviour: The way a person responds, either overtly or covertly, to a specific set of conditions, and which is capable of being measured.

***Behavioural indicator*:** An overt action performed, or statement made by any flight crew member that indicates how the crew is handling the event.

Competency: A combination of knowledge, skills and attitudes required to perform a task to the prescribed standard (ICAO 9995 EBT Manual).

Competency Based Training: Training and assessment that are characterised by a performance orientation, emphasis on standards and their measurement and the development of training to the specified performance standards (ICAO 9995 EBT Manual)**.**

Evidence Based Training (EBT): Training and assessment based on operational data that is characterised by developing and assessing the overall capability of a trainee across a range of core competencies rather than by measuring the performance in individual events or manoeuvres (ICAO 9995 EBT Manual). However, ICAO 9995 then produces a complex competency map showing applicable competencies for each individual item and manoeuvre.

Competency-based training. Training and assessment that are characterized by a performance orientation, emphasis on standards of performance and their measurement and the development of training to the specified performance standards.

Evidence-based training (EBT). Training and assessment based on operational data that is characterized by developing and assessing the overall capability of a trainee across a range of core competencies rather than by measuring the performance in individual events or manoeuvres.

Facilitation technique. An active training method, which uses effective questioning, listening and a non-judgemental approach and is particularly effective in developing skills and attitudes, assisting trainees to develop insight and their own solutions and resulting in better understanding, retention and commitment.

Further information

https://www.iata.org/contentassets/c0f61fc821dc4f62bb6441d7abedb076/ebt-implementation-guide.pdf

ANNEX 13 GLOSSERY OF TERMS

Abbreviation	Meaning
AC or A/C	Aircraft
ADF	Automatic Direction Finding
ADM	Airborne Decision Making
AFM/AOM	Aircraft Flight/Operating Manual
AIC	Aeronautical Information Circular
AIP	Aeronautical Information Package
AMC	Acceptable Means of Compliance
AP	Auto-Pilot
AOB	Angle of Bank
AoC	Assessment of Competence
ARA	Authority Regulations Aircrew
ATC	Air Traffic Control
ATO	Approved Training Organisation
ATPL	Airline Transport Pilots Licence
C of R	Certificate of Revalidation
CAP	Civil Aviation Publication
CDP	Critical Decision Point
CFI	Chief Flight Instructor
CFIT	Controlled Flight Into Terrain
CPL	Commercial Pilots Licence
CRM	Cockpit/Crew Resources Management
DA/H	Decision Altitude/Height
DM	Decision Making
DME	Distance Measuring Equipment
EAC	Emergency and Abnormal Procedure Checklist
EAoC	Examiner Assessment of Competence
EAP	Emergency and Abnormal Procedure
EFATO	Engine Failure after take-off
EFIS	Electronic Flight Instrumentation System
EGPWS	Early Ground Proximity Warning System
FADEC	Full Authority Digital Engine Control
FCL	Flight Crew Licensing
FCOM	Flight Crew Operators Manual
FE	Flight Examiner
FEM	Flight Examiner Manual
FE(CPL)	Flight Examiner for CPL skill test
FE(PPL)	Flight Examiner for PPL skill test
FFS	Full Flight Simulator
FI	Flight Instructor
FIC	Flight Instructor Course (Instructor)
FIE	Flight Instructor Examiner
FMS	Flight Management System
FNPT I / II	Flight Navigation Procedure Trainer
FOI	Flight Operations Inspector
FOTI	Flight Operations Training Inspector
FRTO	Flight Radio Telephony Operator
FSTD	Flight Simulation Training Device
FTD	Flight Training Device
GDPR	General Data Protection Regulations
GM	Guidance Material
GNSS	Global Navigation Satellite System
GPS	Global Positioning System

HT/HoT	Head of Training
IF	Instrument Flight
IFR	Instrument Flight Rules
ILS	Instrument Landing System
IMC	Instrument Meteorological Conditions
IN	CAA Information Notice
INC	Incomplete
IR	Instrument Rating
IRE	Instrument Rating Examiner
IRI	Instrument Rating Instructor
IRR	IR Revalidation/Renewal
KSA	Knowledge, Skills and Attitudes
LAPL	Light Aircraft Pilots Licence
LNAV	Lateral Navigation
LOC/LLZ	Localiser
LSI	Licensing Standards Inspector
LVO	Low Visibility Operations
MAP	Manifold Pressure
MAS	Military Accreditation Scheme
MCC	Multi Crew Cooperation
MCCI	Multi Crew Cooperation Instructor
MDA/H	Minimum Descent Altitude/Height
MEH	Multi Engine Helicopter
MPH	Multi Pilot Helicopter
MSA	Minimum Sector Altitude
N/F	Not Flown
NAV	Navigation
NDB	Non-Directional Beacon
NOTAM	Notice to Airmen
NPA	Notice of Proposed Amendment
NPPL	National Private Pilots Licence
OEI	One Engine Inoperative
OPC	Operational Proficiency Check
ORA	Organisation Requirements Aircrew
OSD	Operational Suitability Data
P1	Pilot in Command
Part NCO	Non-Commercial Operations
Part-FCL	Implementing Rules – Flight Crew Licensing
Part-MED	Implementing Rules – Medical
PBN	Performance Based Navigation
PC	Proficiency Check
PF	Pilot flying
PFD	Primary Flight Display
PIC	Pilot in Command
PICUS	Pilot in Command under Supervision
PLOG	Pilot Navigation Log
PM	Pilot monitoring
PPL	Private Pilot Licence
Pu/t	Pilot under training
QMP	Qualified Military Pilot
QTG	Qualification Test Guide
R/T	Radiotelephony
RA	Resolution Advisory
RNAV	Area Navigation
RTF	Radiotelephony
S&L	Straight & Level

SD	Safety Directive
SE	Senior Examiner
SEH	Single Engine Helicopter
SEP	Single Engine Piston
SET	Single Engine Turbine
SFE(H)	Synthetic Flight Examiner (Helicopter)
SFI	Synthetic Flight Instructor
SID	Standard Instrument Departure
SN	Safety Notice
SPH	Single Pilot Helicopter
SPIC	Student Pilot in Command
SSC	Shared Services Centre
ST	Skill Test
STAR	Standard Instrument Arrival
STD	Synthetic Training Device
STI	Synthetic Training Instructor
T/O	Take Off
TASE	Training Areas of Special Emphasis
TCAS	Traffic Collision Avoidance System
Tech log	Technical Log
TEM	Threat and Error Management
TRE	Type Rating Examiner
TRI	Type Rating Instructor
UA	Unusual Altitudes
UAS	Undesired Aircraft State
VFR	Visual Flight Rules
VMC	Visual Meteorological Conditions
VOR	VHF Omni Ranging
Vtoss	Take Off Safety Speed
Vy/Vbroc	Best Rate Of Climb Speed
Wx	Weather

ANNEX 14 EXAMINER CALLSIGN ALLOCATION

The EXAM callsign (trigraph EXM) is to be used only when conducting initial CPL and IR skills tests on behalf of the CAA.

EXAM	Name
02	Captain I MacGregor (H)
03	Captain F Cross (H)
04	Captain R Craske (H)
07	Captain R Newson (H)
08	Captain P Connelly (H)
10	Spare (H)
19	Captain S Judd (H)
31	Captain R Poppe (H)
34	Captain D Arkell (H)
36	Captain L Smith (H)
38	Spare (H)
43	Captain R Gibson (H)
47	Captain S. Wiles (H)
60	Captain M Forsyth (H)
63	Captain M Kent (H)
64	Spare (H)
65	Captain P Quick (H)
68	Captain S Byam (H)
69	Captain J Skinner (H)
74	Spare (H)
76	Captain R Fox (H)
78	Captain R Downey(H)
98	Spare (H)
99	Spare (H)
100	Spare (H)
106	Spare (H)
107	Spare (H)
109	Captain J Daly (H)
110	Spare (H)
111-120	Reserved for future use (H)

APPENDIX 1 LAPL/PPL (H) SKILL TEST

A1.1 LAPL/PPL(H) Skill Test Administration

	LAPL/PPL (H) SKILL TEST
UK FCL Reference:	Part FCL Subpart A & AMC.FCL.125 (LAPL) Subpart B & AMC.FCL.110 (PPL)
Standards Doc:	Standards Documents 19 (H)
Who can test:	FE with FCL.1005.FE (a)(1) privileges for PPL and (a)(3) for LAPL
SRG Form used:	LAPL/PPL(H) SRG1105, Examiners Record SRG1172, Failure Form SRG2129
Test format:	Skill Test as per Part FCL AMC 125/110 and Standards Document 19(H).
Test Parameters:	Height – normal flight ± 150 ft/ simulated major emergency ± 200 ft Heading/Tracking of radio aids - normal flight ± 10°/ sim major emergency ± 15° Speed – take-off / approach ± 5 kt - all other flight regimes ± 10 kt Ground drift - T.O. & hover IGE ± 3 ft Drift permissible on landing Nil Navigation ETA - +/- 3 minutes
Pass/Partial/Fail criteria:	An applicant shall pass all the relevant sections of the skill test. 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. An applicant failing only in one section shall only repeat the failed section. 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. 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.
Form guidance:	As indicated on form SRG 1105, 1172, 2129 and Standards Document 19(H).
Notes:	1. Applicants must have completed their full training course including valid TK examinations and must be in possession of a recommendation for test iaw FCL.030. 2. Applicants holding a LAPL applying for a PPL must have completed requirements of Part FCL 210.H 3. If the PPL test is to be conducted on a MEH, applicant must comply with the type rating requirements for MEH aircraft at Part FCL 720H

A1.2 LAPL/PPL(H) Skill Test Briefing

RECOMMENDED WEATHER MINIMA

Visibility: Generally greater than 5km, but not less than 3km.
Cloud: Navigation: generally greater than 1500'agl but not less than 1100'. GH not less than 1500' agl.
Wind: Within limits.

INITIAL BRIEFING

Meet, greet and establish ID; Confirm the test requirement; Weather general picture: Does it look good enough for you to fly the Skill Test? Do we have a serviceable aircraft?

Document and equipment check:

- ✓ Evidence of completion of course of training.
- ✓ Evidence of successful completion of theoretical examinations.
- ✓ For each test series, a signed certificate of recommendation for test.
- ✓ If second or subsequent test, previous SRG1172 and SRG2129.
- ✓ Second or subsequent series, evidence of retraining certified by CFI.
- ✓ Licence if applicable; Valid Class 2 Medical Certificate or LAPL Medical Declaration
- ✓ FRTOL (or test completed).
- ✓ Aircraft documents; Tech Log; Fight authorisation sheet.
- ✓ IF visor/goggles (PPL only), approved checklist, 2 compatible headsets (consider spare).
- ✓ Maps & Charts (current editions), nav planning equipment.

Note: *the examiner must review planning facilities and appropriate access to NOTAMS, Royal Flight information, Weather UK AIP, etc.*

Time Check. I will meet you here again for your Main Briefing at _____.

MAIN BRIEF

Note: The brief below is given as an example only and examiners are encouraged to use it as an aide-memoir to ensure that all the appropriate points are covered.

Introduction

I shall now brief you on the conduct of the LAPL/PPL(H) Skill Test. There is no need to take notes, however, ask any questions you may have as we brief. I will give you the Nav details for your planning at the end of the brief.

You will be aware that the Skill Test comprises 5 Sections which may be covered in 2 flights, the first a Nav Flight, to which can be added some GH, with the IF Section (PPL only) and the second a GH Flight, each lasting approximately 1 hour. I will brief you on each Section separately in due course but for the moment I will brief you on general matters.

We will normally start by flying the Nav Section because that is the Section you will be planning in detail. Once completed you will have the option to come back for a refuel and rest or to continue with further elements. I will explain how we can continue during the brief.

The Purpose of the Flight(s)

Is for you to demonstrate, as if already a LAPL/PPL(H) holder, your ability to conduct a flight (or series of flights) to a safe level of competence as required of a Pilot in Command.

Responsibilities

You are to assume command and act as Captain of the aircraft in accordance with the Flight Manual, approved checklist and procedures for Single (multi) Pilot Operations.

You are responsible for all planning of the flight(s), observing all Rules of the Air, checking the aircraft Tech Log and making all necessary bookings with ATC, however, I will have overall command of the helicopter and will sign the Tech Log.

You will be expected to carry out all given exercises, manoeuvres and procedures unassisted, and to a safe and satisfactory standard. This means that I should be in no doubt as to the success or outcome of any particular exercise and should not need to take control at any time.

Throughout the test you are expected to display Captaincy, TEM and Airmanship by verbalising these points to me as they arise.

You will be responsible for cockpit administration and for the correct use of all aircraft equipment and controls (including Carb Heat if necessary), radio calls, frequency changes and transponder and altimeter settings as required.

I am not acting in the capacity of an instructor and you should consider me, for the test, as a passenger. I will be acting purely as an observer and will not offer any comment on any aspect of the flight. I will not initiate any conversation as this might distract you, but I will respond to any conversation initiated by you.

ATC instructions are always to be followed, even if contrary to my instructions. If necessary, I will interject on the radio to establish an alternative clearance.

Your callsign throughout the test will be……

Checks

You are to use the approved checklist. During your pre-flight walk-round you should tell me what you are checking and why. I may ask questions about the checks. Before we board the aircraft, you should brief me, as a passenger, on safety matters.

Complete the full internal checks using the checklist but thereafter you may complete the checks from memory. I want you to call out your check-list items as you do them. Please ensure the aircraft has an approved checklist.

Handling Tolerances

The handling tolerances for the test are prescribed in Part-FCL. *(Examiner should confirm the tolerances to be used*). They are there for guidance only and so you should not get overly anxious about the limits. Should the aircraft deviate from these limits I will be looking for you to make smooth corrections without undue delay.

In a similar way, if you think you have made a mistake then correct it and don't dwell on it. Everyone makes mistakes, so carry on with your flight, and concentrate on what you are doing.

During your flight I shall be an interested passenger, open to conversation and some basic assistance if you ask, but I won't be able to give advice or help you fly the aircraft. Please do not worry if I am being quiet. I will be trying not to interrupt your concentration.

Aircraft Control

At the end of the brief, when I give you the Nav details, I will ask you for the various parameters such as speeds and heights, that you plan to use. Once they are agreed you should use them but if you wish to change the height and/or speed you should notify me first.

Should we need to pass control of the aircraft between us at any time, the standard procedure is to be used, i.e., “Follow me through”, “You have control”, “I have control”.

Emergencies

As handling pilot, you should take the immediate action in response to any malfunction or emergency whether simulated or real. If the emergency is real, you will be informed as such and the test will be suspended. You are to continue as the handling pilot and achieve a safe flight configuration. I will give you all the assistance you require but as Captain, I reserve the right to take control if necessary. There will be no simulated emergencies during the Navigation Section. I will talk about how we deal with simulated emergencies later.

Do you have any questions on the general brief before I move on to the detailed Section briefs?

Navigation (Section 3)

Note: the examiner should use a pre-prepared diagram or white board to illustrate the flow of the test and the navigation details.

The Navigation Section (Section 3) comprises a route of a planned pure navigation leg, a short map reading leg, a planned track crawl, for the PPL a planned radio navigation tracking or GNSS leg and then a diversion. I will give you grid references/locations of the turning points at the end of this brief and you will then have 1 hour to plan the flight. The flight should be planned using a current 1:250,000 aeronautical chart although a 1:50,000 Ordnance Survey map shall be used for the short map reading leg. Radio navigation aids for the PPL may not be used until leg 4. When your planning is completed you will give me a detailed MATED brief prior to walking out to the aircraft.

Leg 1: The first leg should be flown, using the 1:250,000 chart, in accordance with your navigation calculations, aiming to accurately maintain heading, height and speed. At the start of the leg I will ask you for your ETA at the first turning point. Should it become apparent that the aircraft is not maintaining the planned track, you should re-assess your required heading and ETA make the necessary adjustments and let me know. I will accept your revised figures. If you wish to adjust your height please tell me you are doing so and why.

Leg 2: When you have identified the first turning point to my satisfaction, I will ask you to change to the 1:50,000 OS map to map read for approximately 5 to 8 km to the next point. Please remember you are map reading so use the features you are identifying on the ground to help you. When you have identified the point, I will ask you to go on to the next leg.

Leg 3: This leg is to be flown as a track crawl. You should return to using the 1:250,000 chart and maintain your track by map reading. The track should be ‘direct’ but sensible use may be made of clearly identifiable features on the track ahead. If you wish to deviate from your planned track, you should give me your reason before doing so and return to the track as soon as possible after the deviation. Likewise, if you wish to adjust your height you should give me the reason before doing so.

Leg 4: (PPL only): The fourth leg will be a tracking leg using navigational aids, either VOR (or ADF) to maintain a radial, (which you will have been given at the end of the brief) or if using the GNSS you will be asked to demonstrate one of the functions e.g. map, direct to, VOR etc. I will expect appropriate checks to be carried out before you use the aid. Note that for the GNSS to be used it must have the latest version of the mapping database installed.

The Diversion: As soon as I have seen enough on the previous leg, I will introduce the practise diversion. The purpose of this leg is for me to see that you can carry out ‘in-flight’ planning to go to an alternate location. I want you to assume that you are unable to proceed to your planned destination and must go elsewhere. I will take your chart for a moment whilst you are concentrating on the radio nav and mark the new destination on for you. When I pass the chart back, I will ensure you are aware of our current location and point out the new destination. You must assess the track and distance for the new destination and mentally calculate your new heading and ETA for that location. You may use any of the techniques you

have used previously, including the GNSS. Tell me your heading altitude, speed and ETA which, as before, you may adjust but must keep me informed of any intended changes.

If you intend to use GNSS, it must have the latest software and mapping database installed.

That completes the Navigation Section of the test. I will give you the nav details at the end of the briefing. Do you have any questions on the navigation section of the test?

Flight Procedures and Manoeuvres (Section 4)

When the navigation has been completed, I will ask you if you wish to continue and if you agree, we will go on to complete the Flight Procedure and Manoeuvre exercises required by Section 4. I will ask you to accurately fly straight and level, to climb and descend whilst turning onto specified headings and to complete level turns with up to 30 degrees of bank to the left and right. For the PPL only you have to complete a level rate 1 turn through 180 degrees by sole reference to instruments. For this exercise please ensure you have the foggles available and to hand in the cockpit. I will take control whilst you are putting them on and then pass control back to you when you are ready. The reverse procedure will apply when you have completed the exercise. During the instrument section, I will take responsibility for location and lookout.

Off airfield Advanced Handling and confined areas (Section 2).

Having completed the previous section, I will ask if you wish to continue with further test items and if you agree to continue, we can conduct the exercises that can be completed away from the airfield, namely auto-rotations, PFL and the Confined Area. I will ask you to demonstrate to me the entry to two autorotations. You should complete any required checks before entry and then I just want you to complete a safe entry and stabilise the aircraft at the appropriate speed and RRPM. I will tell you when to go around. We may then reposition for the PFL. When ready I will introduce a simulated emergency that will require you to complete a PFL, during which you should compete all of the required drills. Once again, I will tell you when to go-around. For the autorotations and PFL, we will discuss the use of throttle and touch drills shortly when we go through the Abnormal and Emergency Procedures section of the test. I may then identify a confined area and ask you to conduct the recce and checks before coming to the hover in the nominated area.

Emergencies and Abnormal Situations (Section 5).

We may complete this section wholly or in part on the way back to the airfield. I will, using scenario-based techniques, introduce simulated emergencies or abnormal situations for which I will expect you to show me what action you would take. For example, I may point to a warning light and tell you that it has illuminated, point to a gauge and inform you of its reading, or suggest that the cockpit is filling with smoke, etc. You must then take the immediate action required by the aircraft flight manual, such as entering autorotation or landing immediately but all subsequent action must be touch drill only.

Note: *The Examiner must confirm the applicants' understanding of any immediate actions required by the specific aircraft type, the applicants' understanding of 'touch drills', describe how any throttle/FCL/engine training switches are to be manipulated during simulated malfunctions, and confirm that any required RT calls must be 'in cockpit' only*).

That will conclude the exercises required off the airfield and I will now ask you to return to the airfield for the hover manoeuvres and advanced handling exercises required by section 2.

Are there any questions on the emergencies and abnormal procedures section of the test?

On Airfield Hover Manoeuvres and Advanced Handling (Section 2).

The General Handling section (Section 2) of the Skill Test reflects the type rating requirements of the test for the helicopter type on which your licence will be opened. On return to the airfield I will ask you if you wish to continue as before and we may need to consider the fuel state. During this part, you will be asked to carry out a variety of manoeuvres as required by the test schedule. Although the manoeuvres may not

be in the order I am about to discuss, I will endeavour to give them to you in a logical sequence to avoid unnecessary positioning delays. This is not a memory exercise, so I will tell you which manoeuvre I wish to see next whilst in the air. For completeness, the exercises I am about to go through is a complete list, including those items that you will have already completed off airfield. You will be asked to demonstrate the following:

- Spot turns (in the hover) left and right.
- Lift-off and touch down crosswind and downwind.
- Sideways and backwards hover manoeuvring.
- Sloping ground landings.
- Quickstops into and downwind.
- A standard, accurate training circuit.
- A take-off at max weight (simulated) - which may be combined with -
- A take-off and landing in a designated area using limited power techniques, to include the appropriate power checks.
- An arrival to and departure from a confined area using the full checks and recce technique.
- A simulated engine failure from the hover. Usually this exercise will be pre-emptied by the warning “practice engine failure” followed by a countdown of “three, two, one” - I will then roll off the throttle).
- A standard autorotative landing into wind to an agreed position on the airfield. You are to enter autorotation and be wings level, with no slip or drift, at the given autorotation speed, by 300 ft AGL. I will ask you to confirm that we will reach the designated touch-down area and will assist you to close the throttle if necessary. Should I call “I have control” you are to release control to me immediately.
- Two autorotations.
- A simulated emergency which will necessitate a PFL. Remember that you should respond accordingly and manoeuvre the aircraft in autorotation towards a suitable landing area. The appropriate simulated drills and radio calls should be completed (in the cockpit only) but not to the detriment of flying. Once again, I will call for the go-around.

Parameters

Note: The examiner should establish and note down, for reference during the debrief, the flight parameters to be used during the skills test to include climb, descend, autorotations (including RPM), instrument flight, etc. Those used during the navigation exercise can be noted during the MATED brief.

Summary

That concludes the brief. If you do not have any questions, please sign the top half of the SRG 1172.
You now have 1 hour to complete the planning. I shall then return for a pre-flight brief covering at least the following and incorporating the relevant TEM elements:

Note: the MATED brief is only included as a suggested aide memoir.

Met: Appropriate to the area and time of the flight
Aircraft: AUM, C of G calculation, fuel load, tech log details
a**T**c: Airfield details, NOTAMS, Royal Flights, RT services etc.
Exercise: How the Navex is to be conducted.
Duties: Pax Brief, normally conducted at the aircraft.

Any questions?

A1.3 Completion of Report Forms SRG 1172, SRG 1105H and SRG 2129

Examiners must ensure that they are using the most up to date version of the report forms downloaded from the CAA website.

Before flight – SRG 1172

1. **Section 1. Applicant Details**

   Completed and signed by the applicant at the end of the main brief.

2. **Section 2. Flight Test**

   (a) Sections to be taken:

   Annotate the test section(s) to be taken with a '✓'.

   When conducting the re-take of a 'Partial pass' or completing an incomplete test, strike through any section(s) or item(s) that are not required with a diagonal line and annotate as N/A.

3. **Section 3. Flight training organisation**

   Complete in full.

After flight

1. **SRG 1172, Section 2. Flight Test**

   (a) Route: Enter the route flown including the start point, turning points, diversion destination, VOR used and end point.

   (b) Helicopter Type and Reg: Enter the helicopter type using standard licence type designation including the variant (if applicable) and the helicopter registration.

   (c) Take off, Land: Enter the take-off and landing times (local). Where the test was conducted in more than one flight on the same day, the time of the first take off an of the last landing must be entered.

   (d) Total Flight Time: Enter the total rotors running time for the flight(s).

   (e) Result: Annotate according to the following:

   'P' or 'PASS' must be used to annotate items or sections that have been passed.

   'F' or 'FAIL' must be used to annotate items or sections that have been failed.

   'N/F' or 'NOT FLOWN' must be used to annotate items or sections that were not flown by applicant when the test was terminated or to identify items not flown in an incomplete section.

   'INC' or 'INCOMPLETE' must be used to annotate section(s) that were not completed due to unforeseen circumstances. For example, illness, un-forecast weather, aircraft technical problems, etc.

   (f) Re-test Items: Indicate the section(s)that will need to be retested by entering 'YES'. Only those sections failed should be annotated. Whilst the test section 1 will invariably have to

be completed on a re-test of a 'Partial pass', it should not be annotated as 'YES' unless it was a failed section.

(g) Test Sections incomplete due: Include a brief description of why the section was not completed. For example, 'Test terminated by the examiner (or applicant) due to un-forecast weather'.

(h) Items not completed: List the incomplete item(s) by letter, for example (a) or 'ALL' for a complete section.

(i) Re-training required/recommended *: At the examiners' discretion, further training may be specified as 'required' or 'recommended'. 'Required' or 'Recommended' must be deleted as appropriate and the number of flight hours of training entered. Further training must not be awarded as a punitive measure. Specific training details must be provided in the entries in the associated SRG 2129 form (see below).

* 'Recommended' indicates that re-training is not mandatory. 'Required' indicates that the training is mandatory and will require a course completion certificate appropriate to the training received and a further Recommendation for Test from the training organisation.

(j) Confirmation of applicants' instruction, experience and required exercises and manoeuvres completed: Examiner are required to validate the applicants training and experience complies with Part FCL, prior to conducting the test. Upon completion of the test annotate the form with a '✓' to confirm the above and that all the required manoeuvres and exercises have been completed.

(k) English Language Proficiency: Complete using the guidance at Annex 10.

(l) Examiner's details: Enter all examiner details as annotated.

(m) Authorising competent authority and Date of briefing: If the test was completed by a UK licenced examiner – enter 'UK CAA' as the competent authority and 'N/A' for the briefing date. Any other licenced examiner must enter the name of their competent authority and the date that they completed the UK requirements for examiner briefing.

(n) Received (Applicant) signature: After informing the applicant of the result, the applicant must sign the form at the bottom of section 2.

2. SRG 1105H, Section 10. Confirmation of Skills Test

If the Skills Test was successful, complete this section of the form.

3. SRG 2129

If the applicant has failed any items, an SRG 2129 must be completed to include a description of the failed item(s). These comments must be concise and factual using actual heading, height or airspeed deviations whenever appropriate. Personal opinion is NOT fact and must be avoided. The following are examples of expressions that should not be used without quantification: 'Poor circuit', 'Outside limits' ''Off track', 'PFL failed'.

Examiner will either recommend or mandate the amount and type of training required to be undertaken. 'Recommended' indicates that re-training is not mandatory. Mandatory training will require a course completion certificate appropriate to the training received and a further Recommendation for Test from the training organisation.

A1.4 LAPL/PPL Skill Test Schedule and Standards

SECTION 1 – PRE/FLIGHT OR POST-FLIGHT CHECKS AND PROCEDURES

(a) Helicopter knowledge- i.e. tech log, fuel, mass and balance, performance flight planning, NOTAM and weather briefing:

1. *Check all documents required for a private, passenger carrying flight are correct*
2. *Obtain and assess all elements of the prevailing and forecast weather conditions*
3. *Collate all relevant ATC information, NOTAMS, Royal Flights, Navaids, RT services*
4. *Complete an appropriate flight navigation log and chart*
5. *Determine that the helicopter is correctly fuelled for the flight*
6. *Complete a manual Mass & Balance schedule*
7. *Calculate helicopter Performance criteria and limitations applicable to the forecast weather conditions and make adjustments if required for actual conditions before take off*
8. *Identify any threats associated with the flight.*

(b) Pre-flight inspection or action, location of parts and purpose:

1. *Check helicopter serviceability record and technical log*
2. *Using an approved checklist perform all elements of the helicopter pre-flight inspections, identifying components and functions as required by the examiner*
3. *Confirm that the helicopter is in a serviceable and safe condition for the flight*
4. *Check and complete all necessary documentation*
5. *Complete an appropriate passenger emergency procedure briefing for the Examiner*

(c) Cockpit inspection and Starting procedures:

1. *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:

1. *Complete all recommended communication and navigation equipment checks*
2. *Select and set appropriate frequencies and transponder codes*

(e) Pre take-off procedure, RT procedure and ATC compliance:

1. *Complete all recommended pre take off checks using an approved checklist*
2. *Obtain ATC clearance and follow ATC instructions*
3. *Complete all necessary after take-off checks from memory*
4. *Comply with airport markings*
5. *Use charts or other published information as required*
6. *Execute a safe departure in accordance with clearance and with due regard for other air traffic*
7. *Use correct lookout techniques*
8. *Observe the Rules of the Air and ATC Regulations*
9. *Maintain directional control and drift corrections throughout*
10. *Follow any noise routing or departure procedures and ATC instructions*
11. *Complete all necessary climb checks*
12. *Demonstrate standard R/T procedures and phraseology*
13. *Demonstrate compliance with ATC instructions*
14. *Operate on the ground and in the air with particular regard for passenger safety and comfort*

(f) Parking, shutdown and post flight procedure:

1. *Return helicopter to parking area and complete engine shutdown*

2. *Complete all after landing checks and drills*
3. *Secure helicopter and complete documentation*

SECTION 2 – HOVER MANOEUVRES, ADVANCED HANDLING AND CONFINED AREAS

(a) Take-off and landing (lift off and touch down):

1. *Lift to and establish a stable hover maintaining ground position and heading*
2. *Descend to land maintaining ground position and heading*
3. *Complete all necessary checks and drills throughout*
4. *Maintain lookout throughout*

(b) Taxi, Hover Taxi:

1. *Demonstrate control of heading, height and groundspeed in hover taxi*
2. *Complete all necessary checks and drills throughout*
3. *Maintain lookout throughout*

(c) Stationary hover with head, cross or tail wind:

1. *Maintain heading, height and ground position whilst in the stationary hover into wind, crosswind and downwind*
2. *Complete all necessary checks and drills throughout*
3. *Maintain lookout throughout*

(d) Stationary hover turns, 360 degrees left and right (spot turns):

1. *Carry out a spot (pedal) turn, maintaining the height, ground position and rate of turn throughout*
2. *Complete all necessary checks and drills throughout*
3. *Maintain lookout throughout*

(e) Forward, sideways and backwards hover manoeuvring:

1. *Establish and maintain throughout each manoeuvre the nominated height, heading and speed*
2. *Backwards manoeuvre to be preceded by lookout turn and increase of hover height*
3. *Maintain directional control and balance throughout*
4. *Complete all necessary checks and drills throughout*
5. *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)*

1. *Stop the aircraft tendency to drift and roll*
2. *Stop the yaw tendency*
3. *Cushion the touchdown*
4. *When on the ground lower the collective lever*
5. *Complete all necessary checks and drills throughout*
6. *Maintain lookout throughout*

(g) Quick stops into wind and downwind:

1. *Establish straight and level flight at the nominated speed, height and heading with cruise power set.*
2. *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.

3. *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.*
4. *Complete all necessary checks and drills throughout*
5. *Maintain lookout throughout*
6. *Maintain directional control and balance throughout*

(h) Sloping ground or unprepared sites landing and take off:

1. *Identify landing area on slope and conduct recce to consider at least the following points:*

    - *Size: Large enough to land the aircraft onto without striking the tail/blades*
    - *Shape: Valley, bowl, direction of slope*
    - *Surrounds: Blade/tail clearance, FOD, trees/shrubs, people*
    - *Slope: Within limits of aircraft and pilot*
    - *Surface: Firm, slippery, muddy, rocky*

2. *Move onto slope area and conduct up slope/cross slope landing*
3. *Maintain heading, ground position, and prevent movement of aircraft on slope*
4. *When landed centralise the flying controls*
5. *Prior to take off preposition controls*
6. *Lift into hover maintaining heading and ground position*
7. *Move away from slope ensuring tail is not turned towards the slope*
8. *Be prepared to abort the landing at any stage*
9. *Complete all necessary checks and drills throughout*
10. *Maintain lookout throughout*

(i) Take offs (various profiles):

1. *Demonstrate take-off/transition from the hover as detailed by the Examiner*
2. *Maintain directional control and balance throughout*
3. *Complete all necessary checks and drills throughout*
4. *Maintain lookout throughout*

(j) Cross wind and downwind take-off (if practicable):

1. *Demonstrate take-off cross/ down wind from the hover as detailed by the Examiner*
2. *Maintain directional control and balance throughout*
3. *Complete all necessary checks and drills throughout*
4. *Maintain lookout throughout*

(k) Take off at maximum take off mass (actual or simulated):

1. *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*
2. *Maintain directional control/balance throughout*
3. *Complete all necessary checks and drills throughout*
4. *Maintain lookout throughout*

(l) Approaches (various profiles):

1. *Demonstrate an approach nominated by the Examiner*
2. *Maintain directional control/ balance throughout*
3. *Complete all necessary checks and drills throughout*

4. *Maintain lookout throughout*

(m) Limited Power take-off and landing:

(Normally simulated by the examiner giving a simulated power limitation)

1. *Carry out hover power check*
2. *Select and demonstrate a transition from the hover using an appropriate technique for the simulated power limit set by the Examiner*
3. *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*
4. *Select and demonstrate an appropriate technique for the approach and landing using only the simulated power limit set by the examiner*
5. *Maintain directional control and balance throughout*
6. *Complete all necessary checks and drills throughout*
7. *Maintain lookout throughout*

(n) Auto-rotations:

(The examiner will select two items, from basic, range, low speed, and 360 degree turns)

1. *Select an area and height/altitude for the nominated autorotation*
2. *Carry out HASEL (or other appropriate) checks*
3. *Establish straight and level flight at the nominated speed, height and heading with cruise power set (into wind)*
4. *Initiate manoeuvre with verbal warning – Practice Autorotation Go- and establish autorotation*
5. *Fly the appropriate parameters for the nominated technique*
6. *Close throttle to idle position (only if appropriate and briefed by the examiner)*
7. *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*
8. *Complete all necessary checks and drills throughout*
9. *Maintain lookout throughout*
10. *Maintain directional control and balance throughout*
11. *Control Nr throughout*

(o) Auto-rotative landing:

(The Examiner will nominate the landing area, the entry speed, height and heading. The applicant will select entry point unless otherwise instructed)

1. *Identify the nominated landing area, if appropriate conduct recce (Size, Shape, Surrounds, Slope Surface)*
2. *Carry out HASEL (or other appropriate) checks*
3. *Establish final approach (into wind), straight and level flight at the nominated speed, height and heading with cruise power set*
4. *Initiate manoeuvre with verbal warning – Practice Engine Failure Go- and establish auto-rotation using the appropriate parameters for the nominated technique*
5. *Close throttle to idle position (only if appropriate and briefed by the examiner), if necessary the Examiner will assist*
6. *Ensure no aircraft skid or drift by 300ft agl*
7. *Apply appropriate flare at appropriate height for aircraft/conditions*
8. *Cushion the aircraft onto the ground, with a running landing if appropriate, whilst maintaining heading*
9. *Lower collective lever judiciously*
10. *Complete all necessary checks and drills throughout*
11. *Maintain lookout throughout*
12. *Maintain directional control and balance throughout*
13. *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 are the responsibilities of the Examiner for this exercise.

1. *Enter autorotation*
2. *Select the landing site*
3. *Adopt the appropriate autorotative technique to 'make' the selected landing site*
4. *Carry out the appropriate radio calls (in the cockpit only)*
5. *Carry 'touch drills' to indicate emergency cockpit drills*
6. *Close throttle to idle position (only if appropriate and briefed by the examiner)*
7. *Give appropriate warning to passenger*
8. *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*
9. *Complete all necessary checks and drills throughout*
10. *Maintain lookout throughout*
11. *Maintain directional control and balance throughout*
12. *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):

1. *Identify the nominated landing area and conduct appropriate recce to cover at least the following points (normally not conducted lower than 500ft agl):*
    - *Size: Is the confined area large enough for pilots' ability and aircraft size*
    - *Shape: In relation to the wind direction/final approach*
    - *Surrounds: Outer - habitation, hazards that may affect the circuit, approach, overshoot. Inner - hazards in the immediate area of the landing site*
    - *Slope: Within limits of aircraft and pilot*
    - *Surface: Suitability of the landing site (may require confirmation prior to landing)*
    - *It may be appropriate to include other considerations such as sun, shadow, wires, etc*
    - *Approach type selection based on the above points*
2. *Carry out power check (normally into wind, at a safe height not below 500ft agl of the landing area), note power available*
3. *Conduct circuit and approach, identifying escape routes and landing committal point in order to carry out a landing, dummy approach or go around as appropriate*
4. *Establish hover at appropriate height in the confined area (land/spot turn only if requested by Examiner)*
5. *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*
6. *Maintain directional control and balance throughout*
7. *Control Nr throughout*
8. *Complete all necessary checks and drills throughout*
9. *Maintain lookout throughout*

SECTION 3 – NAVIGATION EN-ROUTE PROCEDURES

(a) Navigation and orientation at various altitudes or heights and map reading:

1. *Complete all elements of VFR planning for the route prescribed with particular reference to planned altitudes and safe levels of operation*
2. *Identify position visually by reference to ground features and map*

(b) Altitude or height, speed, heading control, observation of airspace and altimeter settings:

1. *Control helicopter altitude speed and heading using visual attitude flying techniques*
2. *Maintain the heading height and speed as computed in navigation log or advised to the Examiner within the prescribed limits observing airspace*
3. *Complete all necessary checks and drills*
4. *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 and instrument monitoring:

1. *Navigate by means of calculated headings, ground speed and time*
2. *Make appropriate corrections to maintain track*
3. *Achieve destinations or turning points within 3 minutes of estimated time of arrival (ETA)*
4. *If appropriate configure engine for cruise/endurance performance in accordance with Flight Manual*
5. *Adjust and monitor fuel consumption for range or endurance if appropriate*
6. *Make regular checks for carburettor icing, if appropriate*

(d) Observation of weather conditions and diversion planning:

1. *Calculate heading, ground speed, ETA and fuel required during any unscheduled diversion*
2. *Calculate Minimum Safe Altitude for track to new destination*
3. *Navigate by means of calculated headings, ground speed and time*
4. *Maintain the heading height and speed as computed in navigation log or advised to the Examiner within the prescribed limits*
5. *Observation of weather conditions with timely, appropriate captaincy decisions*

(e) Collision avoidance and use of navigational aids:

LAPL only - Collision avoidance:

Understand fully, and comply with, rules of the air (right of way etc).

1. *Maintain robust and regular look out*

PPL only - Use of navigational aids (where applicable):

1. *Select and identify appropriate radio/ navigation aids as required or nominated by examiner*
2. *Carry out aircraft navigation instrument functional checks as appropriate (if not already completed)*
3. *Locate and record the helicopter position by using navigation aids when required by the examiner*
4. *Intercept and maintain given tracks or radials using the VOR or NDB. If the GNSS is to be used the examiner will nominate one of the functions to be used (e.g. VOR, map, route, 'direct to' etc)*

(f) ATC liaison with due observance of regulations etc:

1. *Set altimeter to QNH, Regional Pressure setting (RPS), Standard pressure setting, or QFE as specified in checklist, Flying Order Book or as appropriate*
2. *Maintain two-way R/T communication using correct phraseology throughout*
3. *Obtain ATC clearances and appropriate level of service*
4. *Comply with ATC clearances and instructions when required*
5. *Use the correct transponder and frequency monitoring codes*
6. *Display sound airmanship and cockpit management*
7. *Aerodrome arrival procedures*

8. *Carry out appropriate checks and drills*
9. *Set altimeters and cross check in accordance with check list, Flying Order Book or as required*
10. *Comply with published arrival procedure or clearance*
11. *Maintain adequate lookout and collision avoidance*
12. *Consider weather and wind conditions, landing surface and obstructions*
13. *Plan and follow the circuit pattern and orientation with the landing area*
14. *From the circuit pattern establish the recommended helicopter approach configuration adjusting speed and rate of descent to maintain a stabilised approach*
15. *Select and achieve the appropriate touchdown area*
16. *Complete all necessary checks and drills*

SECTION 4 – FLIGHT PROCEEDURES AND MANOEUVRES

Throughout this section the Examiner will be responsible for navigation, lookout and ATC liaison.

(a) Level flight, control of heading, altitude or height and speed:

1. *Establish straight and level flight at a nominated speed, height and heading*
2. *Control helicopter altitude, speed and heading using visual attitude flying techniques*
3. *Maintain directional control and balance throughout*
4. *Complete all necessary checks and drills throughout*
5. *Maintain lookout throughout*

(b) Climbing and descending turns to specified headings:

1. *Establish climb/descent and rate 1 turns onto nominated height and headings*
2. *Control helicopter altitude, and heading using visual attitude flying techniques*
3. *Maintain directional control and balance throughout*
4. *Complete all necessary checks and drills throughout*
5. *Maintain lookout throughout*

(c) Level turns with up to 30° of bank, 180° to 360° left and right:

1. *Establish steep turns (up to 30 degrees angle of bank) onto nominated headings whilst maintaining altitude/height and speed*
2. *Control helicopter altitude, speed and heading using visual attitude flying techniques*
3. *Maintain directional control and balance throughout*
4. *Complete all necessary checks and drills throughout*
5. *Maintain lookout throughout*

(d) Level turns 180 degrees left and right by sole reference to instruments (PPL Only):

The examiner will simulate inadvertent entry into cloud, by means of screens, visors or goggles and the applicant will be required to execute a rate one level turn on instruments through 180° to return the aircraft to VMC on a suitable heading. Applicants are expected to show consideration of the safety factors necessary for flight in IMC.

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

SECTION 5 ABNORMAL AND EMERGENCY PROCEDURES (SIMULATED WHERE APPROPRIATE)

The examiner shall select a minimum of 4 items from this section. These may be performed in sections 1 through 4 or as a separate section.

1. *Engine malfunctions including governor failure, carb/engine icing, oil systems, as appropriate*
2. *Fuel system malfunction*
3. *Electrical system malfunction*
4. *Hydraulic system malfunction including approach and landing without hydraulics, as appropriate*
5. *Main rotor/tail rotor malfunction (FFS or discussion only)*
6. *Fire drills including smoke control and removal, as applicable*
7. *Other abnormal and emergencies procedures as outlined in appropriate flight manual and with reference to Appendix 9 C to Part FCL, sections 3 and 4, including for ME helicopters: (a) simulated engine failure at take-off (1) rejected take-off at or before TDP or safe forced landing at or before DPATO. (2) Shortly after TDP or DPATO. (b) Landing with simulated engine failure: (1) landing or go around following engine failure before LDP or DPBL (2) following engine failure after LDP or safe forced landing after DPBL*

The applicant shall:

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

APPENDIX 2 CPL (H) SKILL TEST

A2.1 CPL Skill Test Administration

	CPL (H) SKILL TEST
UK FCL reference:	Part FCL Subpart D and Appendix 4
Standards Doc	Standards Document 3 (H)
Who Can Test:	FE with FCL. 1005.FE (a)(2) privileges)
SRG Form used:	SRG 1183H, Licence / Instrument Rating, SRG 2197 – Examiner Report for CPL(H)Skill Test, SRG 2129 – Examiner Report for Skill Test Failure
Test Format:	Skill Test as per Part FCL Appendix 4 and Standards Document 03(H).
Test Parameters:	Height – normal flight ± 100 ft/ simulated major emergency ± 150 ft Heading/Tracking of radio aids - normal flight ± 10°/ sim major emergency ± 15° Speed – take-off / approach ± 5 kt - all other flight regimes ± 10 kt Ground drift - T.O. & hover IGE ± 3 ft Drift permissible on landing Nil Navigation ETA - +/- 3 minutes
Pass/Partial/Fail Criteria	An applicant shall pass all the relevant sections of the skill test. 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. An applicant failing only in one section shall only repeat the failed section. 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. 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.
Form Guidance:	1. As indicated on the SRG Form 1183, 2197, 2129 and Standards Document 3(H).
Notes:	1. If the test is to be conducted on a MEH then applicants must comply with the class/type rating requirements for ME aircraft at Part FCL Subpart H. 2. If the applicant does not already hold the rating, then the TK oral questions for SEH type ratings are required to be assessed and recorded (see Rating Skill Test Table/Briefing 3. If the applicant is qualified on the type on which they were tested, the examiner may revalidate the rating and submit the appropriate form(s).
Validity:	If a new type rating the commencement of training and testing must be completed within 6 months.

A2.2 CPL(H) Skill Test Briefing

RECOMMENDED WEATHER MINIMA

Visibility: Generally greater than 5km, but not less than 3km.
Cloud: Navigation: generally greater than 1500'agl but not less than 1100'. GH not less than 1500' agl.
Wind: Within limits.

INITIAL BRIEFING

Meet, greet and establish ID; Confirm the test requirement; Weather general picture: Does it look good enough for you to fly the Skill Test?, Do we have a serviceable aircraft?

Document and equipment check:

- ✓ Evidence of completion of course of training.
- ✓ Evidence of successful completion of theoretical examinations.
- ✓ For each test series, a signed certificate of recommendation for test.
- ✓ If second or subsequent test, previous SRG2197.
- ✓ Second or subsequent series, evidence of retraining certified by Head of Training.
- ✓ Current licence if applicable; Valid Class 1 Medical Certificate
- ✓ FRTOL (or test completed).
- ✓ Aircraft documents; Tech Log; Fight authorisation sheet.
- ✓ IF visor/goggles, approved checklist, 2 compatible headsets (consider spare).
- ✓ Maps & Charts (current editions), nav planning equipment.

Note: *the examiner must review planning facilities and appropriate access to NOTAMS, Royal Flight information, Weather UK AIP, etc.*

Time Check. I will meet you here again for your Main Briefing at _____.

MAIN BRIEF

Note: The brief below is given as an example only and examiners are encouraged to use it as an aide-memoir to ensure that all the appropriate points are covered.

Introduction

I shall now brief you on the conduct of the CPL(H) Skill Test. There is no need to take notes, however, ask any questions you may have as we brief. I will give you the Nav details for your planning at the end of the brief.

You will be aware that the Skill Test comprises 5 Sections which may be covered in 2 flights, the first a Nav Flight, to which can be added some GH, with the IF Section and the second a GH Flight, each lasting approximately 1 hour. I will brief you on each Section separately in due course but for the moment I will brief you on general matters.

We will normally start by flying the Nav Section because that is the Section you will be planning in detail. Once completed you will have the option to come back for a refuel and rest or to continue with further elements. I will explain how we can continue during the brief.

The Purpose of the Flight(s)

Is for you to demonstrate, as if already a CPL holder, your ability to conduct a flight (or series of flights) to a safe level of competence as required of a Pilot in Command.

Responsibilities

You are to assume command and act as Captain of the aircraft in accordance with the Flight Manual, approved checklist and procedures for Single Pilot Operations.

You are responsible for all planning of the flight(s), observing all Rules of the Air, checking the aircraft Tech Log and making all necessary bookings with ATC, however, I will have overall command of the helicopter and will sign the Tech Log.

You will be expected to carry out all given exercises, manoeuvres and procedures unassisted, and to a safe and satisfactory standard. This means that I should be in no doubt as to the success or outcome of any particular exercise and should not need to take control at any time.

Throughout the test you are expected to display Captaincy, TEM and Airmanship by verbalising these points to me as they arise.

You will be responsible for cockpit administration and for the correct use of all aircraft equipment and controls (including Carb Heat if necessary), radio calls, frequency changes and transponder and altimeter settings as required.

I am not acting in the capacity of an instructor and you should consider me, for the test, as a passenger. I will be acting purely as an observer and will not offer any comment on any aspect of the flight. I will not initiate any conversation as this might distract you, but I will respond to any conversation initiated by you.

ATC instructions are always to be followed, even if contrary to my instructions. If necessary, I will interject on the radio to establish an alternative clearance.

Your callsign throughout the test will be……

Checks

You are to use the approved checklist. During your pre-flight walk-round you should tell me what you are checking and why. I may ask questions about the checks. Before we board the aircraft, you should brief me, as a passenger, on safety matters.

Complete the full internal checks using the checklist but thereafter you may complete the checks from memory. I want you to call out your check-list items as you do them. Please ensure the aircraft has an approved checklist.

Handling Tolerances

The handling tolerances for the test are prescribed in Part-FCL. *(Examiner should confirm the tolerances to be used*). They are there for guidance only and so you should not get overly anxious about the limits. Should the aircraft deviate from these limits I will be looking for you to make smooth corrections without undue delay.

In a similar way, if you think you have made a mistake then correct it and don't dwell on it. Everyone makes mistakes, so carry on with your flight, and concentrate on what you are doing.

During your flight I shall be an interested passenger, open to conversation and some basic assistance if you ask, but I won't be able to give advice or help you fly the aircraft. Please do not worry if I am being quiet. I will be trying not to interrupt your concentration.

Aircraft Control

At the end of the brief, when I give you the Nav details, I will ask you for the various parameters such as speeds and heights, that you plan to use. Once they are agreed you should use them but if you wish to change the height and/or speed you should notify me first.

Should we need to pass control of the aircraft between us at any time, the standard procedure is to be used, i.e., “Follow me through”, “You have control”, “I have control”.

Emergencies

As handling pilot, you should take the immediate action in response to any malfunction or emergency whether simulated or real. If the Emergency is real, you will be informed as such and the test will be suspended. You are to continue as the handling pilot and achieve a safe flight configuration. I will give you all the assistance you require but as Captain, I reserve the right to take control if necessary. There will be no simulated emergencies during the Navigation Section. I will talk about how we deal with simulated emergencies later.

Do you have any questions on the general brief before I move on to the detailed Section briefs?

Navigation

The Navigation Section (Section 3) comprises a route of a planned pure navigation leg, a short map reading leg, a planned track crawl, followed by a planned radio navigation tracking and then a diversion. I will give you grid references and locations of the turning points at the end of this brief and you will then have 1 hour to plan the flight. The flight should be planned, using a current 1:250,000 aeronautical chart although a 1:50,000 Ordnance Survey map shall be used for the final part of leg 1. When your planning is completed you will give me a detailed MATED brief prior to walking out to the aircraft.

Leg 1: The first leg should be flown in accordance with your navigation calculations, aiming to accurately maintain heading, height and speed. This leg will take us to a simulated landing site. You should navigate using a 1:250000 chart to an initial point (IP) of your choice, which should not be more than 5 km from the simulated landing site and then map read using the 1:50,000 map. The heading from the IP to the landing site using the 1:50,000 map may be varied according to your chosen route. When the landing site has been identified correctly to my satisfaction, I will ask you to continue on to the next leg.

At the start of the leg I will ask you for your initial heading to the IP and your ETA at the landing site. Should it become apparent that the aircraft is not maintaining the planned track, you should re-assess your required heading to the IP and your ETA at the landing site, make the necessary adjustments and let me know. I will accept your revised figures. If you wish to adjust your height, please tell me you are doing so and why. When you have identified the landing site I will ask you to go on to the next leg.

Leg 2: This leg is to be flown as a track crawl. You should return to using the 1:250,000 chart and maintain your track by map reading. The track should be ‘direct’ but sensible; use may be made of clearly identifiable features on the track ahead. If you wish to deviate from your planned track, you should give me your reason before doing so and return to the track as soon as possible after the deviation. Likewise, if you wish to adjust your height you should give me the reason before doing so.

Leg 3: The third leg will be a tracking leg using the VOR (or ADF) to maintain a radial. You will be told which facility is to be used at the end of this brief but will not be told the radial to be used until the completion of the previous leg. I will expect appropriate checks to be carried out before you use the facility. Once established on the radial, you should make any correction for wind.

The Diversion: As soon as I have seen enough on the previous leg, I will introduce the practise diversion. The purpose of this leg is for me to see that you can carry out ‘in-flight’ planning to go to an alternate location. I want you to assume that you are unable to proceed to your planned destination and must go elsewhere. I will take your chart for a moment whilst you are concentrating on the radio nav and mark the new destination on for you. When I pass the chart back, I will ensure you are aware of our current location and point out the new destination. You must assess the track and distance for the new destination and mentally calculate your new heading and ETA for that location. You may use any of the techniques you have used previously, including the GNSS. Tell me your heading altitude, speed and ETA which, as before, you may adjust but must keep me informed of any intended changes.

If you intend to use GNSS, it must have the latest software and mapping database installed.

That completes the Navigation Section of the test. I will give you the nav details at the end of the briefing. Do you have any questions on the navigation section of the test?

Flight Procedures and Manoeuvres by Sole Reference to Instruments (Section 4).

When the navigation has been completed, I will ask you if you wish to continue and if you agree, we will go on to complete the Flight Procedure and Manoeuvre exercises by sole reference to instruments required by section 4. I will ask you to accurately fly:

- Straight and level.
- Rate 1 level turns to the left and right.
- Climbing and descending, including turns, onto a stated heading.
- Recovery from unusual attitudes. I will take control then ask you to close your eyes and look down. Having placed the aircraft in an unusual attitude I will instruct you to 'recover'. You should recover to a safe flight condition without delay. If in a descent, the aircraft must be established in a climb, otherwise straight and level flight should be achieved.
- Avoiding turns left and right with up to 30 degrees of bank. I will simulate ATC warning of 'pop-up' traffic ahead, giving you avoiding action to turn left or right onto a specified heading.

For this section please ensure you have the foggles available and to hand in the cockpit. I will take control whilst you are putting them on and then pass control back to you when you are ready. The reverse procedure will apply when you have completed the exercise. During the instrument section, I will take responsibility for location and lookout.

Off airfield Advanced Handling and Confined Areas (Section 2).

Having completed the previous section, I will ask if you wish to continue with further test items and if you agree to continue, we can conduct the exercises that can be completed away from the airfield, namely auto-rotations, PFL and the confined area. I will ask you to demonstrate to me the entry to two autorotations. You should complete any required checks before entry and then I just want you to complete a safe entry and stabilise the aircraft at the appropriate speed and RRPM. I will tell you when to go around. We may then reposition for the PFL. When ready I will introduce a simulated emergency that will require you to complete a PFL, during which you should compete all of the required drills. Once again, I will tell you when to go-around. For the autorotations and PFL, we will discuss the use of throttle and touch drills shortly when we go through the Abnormal and Emergency Procedures section of the test. I may then identify a confined area and ask you to conduct the recce and checks before coming to the hover in the nominated area.

Emergencies and Abnormal Procedures (Section 5).

We may complete this section wholly or in part on the way back to the airfield. I will, using scenario-based techniques, introduce simulated emergencies or abnormal situations for which I will expect you to show me what action you would take. For example, I may point to a warning light and tell you that it has illuminated, point to a gauge and inform you of its reading, or suggest that the cockpit is filling with smoke, etc. You must then take the immediate action required by the aircraft flight manual, such as entering autorotation or landing immediately but all subsequent action must be touch drill only.

Note: *The Examiner must confirm the applicants' understanding of any immediate actions required by the specific aircraft type, the applicants' understanding of 'touch drills', describe how any throttle/FCL/engine training switches are to be manipulated during simulated malfunctions, and confirm that any required RT calls must be 'in cockpit' only*).

That will conclude the exercises required off the airfield and I will now ask you to return to the airfield for the hover manoeuvres and advanced handling exercises required by section 2.

Are there any questions on the emergencies and abnormal procedures section of the test?

On airfield Hover Manoeuvres and Advanced Handling (Section 2).

The General Handling section (Section 2) of the Skill Test reflects the type rating requirements of the test for the helicopter type on which your licence will be opened. On return to the airfield I will ask you if you wish to continue as before and we may need to consider the fuel state. During this part, you will be asked to carry out a variety of manoeuvres as required by the test schedule. Although the manoeuvres may not be in the order I am about to discuss, I will endeavour to give them to you in a logical sequence to avoid unnecessary positioning delays. This is not a memory exercise, so I will tell you which manoeuvre I wish to see next whilst in the air. For completeness, the exercises I am about to go through is a complete list, including those items that you will have already completed off airfield. You will be asked to demonstrate the following:

- Spot turns (in the hover) left and right.
- Lift-off and touch down crosswind and downwind.
- Sideways and backwards hover manoeuvring.
- Sloping ground landings.
- Quickstops into and downwind.
- A standard, accurate training circuit.
- A take-off at max weight (simulated) - which may be combined with -
- A take-off and landing in a designated area using limited power techniques, to include the appropriate power checks.
- An arrival to and departure from a confined area using the full checks and recce technique.
- A simulated engine failure from the hover. Usually this exercise will be pre-emptied by the warning "practice engine failure" followed by a countdown of "three, two, one" - I will then roll off the throttle).
- A standard autorotative landing into wind to an agreed position on the airfield. You are to enter autorotation and be wings level, with no slip or drift, at the given autorotation speed, by 300 ft AGL. I will ask you to confirm that we will reach the designated touch-down area and will assist you to close the throttle if necessary. Should I call "I have control" you are to release control to me immediately.
- Two autorotations.
- A simulated emergency which will necessitate a PFL. Remember that you should respond accordingly and manoeuvre the aircraft in autorotation towards a suitable landing area. The appropriate simulated drills and radio calls should be completed (in the cockpit only) but not to the detriment of flying. Once again, I will call for the go-around.

Parameters

Note: The examiner should establish and note down, for reference during the debrief, the flight parameters to be used during the skills test to include climb, descend, autorotations (including RPM), instrument flight, etc. Those used during the navigation exercise can be noted during the MATED brief.

Summary

That concludes the brief. If you do not have any questions, please sign the top half of the SRG 1172.
You now have 1 hour to complete the planning. I shall then return for a pre-flight brief covering at least the following and incorporating the relevant TEM elements:

Note: the MATED brief is only included as a suggested aide memoir.

Met: Appropriate to the area and time of the flight.
Aircraft: AUM, C of G calculation, fuel load, tech log details.
a**T**c: Airfield details, NOTAMS, Royal Flights, RT services etc.
Exercise: How the Navex is to be conducted.
Duties: Pax Brief, normally conducted at the aircraft.

Any questions?

A2.3 CPL(H) Skill Test Completion of Report Forms SRG 2197, SRG 1183H and SRG 2129

Examiners must ensure that they are using the most up to date version of the report forms downloaded from the CAA website.

Before flight – SRG 2197

1. **Section 1. Applicant Details**

   Completed and signed by the applicant at the end of the main brief.

2. **Section 2. Flight Test**

   (a) Sections to be taken:

   Annotate the test section(s) to be taken with a '✓'.

   When conducting the re-take of a 'Partial Pass' or completing an incomplete test, strike through any section(s) or item(s) that are not required with a diagonal line and annotate as N/A.

3. **Section 3. Flight training organisation**

   Complete in full.

After flight

1. **SRG 2197, Section 2. Flight Test**

   (a) Route: Enter the route flown including the start point, turning points, diversion destination, VOR used and end point.

   (b) Helicopter Type and Reg: Enter the helicopter type using standard licence type designation including the variant (if applicable) and the helicopter registration.

   (c) Take off, Land: Enter the take off and landing times (local). Where the test was conducted in more than one flight on the same day, the time of the first take off an of the last landing must be entered.

   (d) Total Flight Time: Enter the total rotors running time for the flight(s).

   (e) Result: Annotate according to the following:

   'P' or 'PASS' must be used to annotate items or sections that have been passed.

   'F' or 'FAIL' must be used to annotate items or sections that have been failed.

   'N/F' or 'NOT FLOWN' must be used to annotate items or sections that were not flown by applicant when the test was terminated or to identify items not flown in an incomplete section.

   'INC' or 'INCOMPLETE' must be used to annotate section(s) that were not completed due to unforeseen circumstances. For example, illness, un-forecast weather, aircraft technical problems, etc.

   (f) Re-test Items: Indicate the section(s)that will need to be retested by entering 'YES'. Only those sections failed should be annotated. Whilst the test section 1 will invariably have to

be completed on a re-test of a 'Partial Pass', it should not be annotated as 'YES' unless it was a failed section.

(g) Test Sections incomplete due: Include a brief description of why the section was not completed. For example, 'Test terminated by the examiner (or applicant) due to un-forecast weather'.

(h) Items not completed: List the incomplete item(s) by letter, for example (a) or 'ALL' for a complete section.

(i) Re-training required/recommended *: At the examiners' discretion, further training may be specified as 'required' or 'recommended'. 'Required' or 'Recommended' must be deleted as appropriate and the number of flight hours of training entered. Further training must not be awarded as a punitive measure. Specific training details must be provided in the entries in the associated SRG 2129 form (see below).

* 'Recommended' indicates that re-training is not mandatory. 'Required' indicates that the training is mandatory and will require a course completion certificate appropriate to the training received.

(j) Confirmation of applicants' instruction, experience and required exercises and manoeuvres completed: Examiner are required to validate the applicants training and experience complies with Part FCL, prior to conducting the test. Upon completion of the test annotate the form with a '✓' to confirm the above and that all the required manoeuvres and exercises have been completed.

(k) English Language Proficiency: Complete using the guidance at Annex 10.

(l) Examiner's details: Enter all examiner details as annotated.

(m) Authorising competent authority and Date of briefing: If the test was completed by a UK licenced examiner – enter 'UK CAA' as the competent authority and 'N/A' for the briefing date. Any other licenced examiner must enter the name of their competent authority and the date that they completed the UK requirements for examiner briefing.

(n) Received (Applicant) signature: After informing the applicant of the result, the applicant must sign the form at the bottom of section 2.

2. SRG 1183H, Section 13. Confirmation of Skills Test

If the Skills Test was successful, complete this section of the form.

3. SRG 2129

If the applicant has failed any items, an SRG 2129 must be completed to include a description of the failed item(s). These comments must be concise and factual using actual heading, height or airspeed deviations whenever appropriate. Personal opinion is NOT fact and must be avoided. The following are examples of expressions that should not be used without quantification: 'Poor circuit', 'Outside limits' ''Off track', 'PFL failed'.

Examiner will either recommend or mandate the amount and type of training required to be undertaken. 'Recommended' indicates that re-training is not mandatory. Mandatory training will require a course completion certificate appropriate to the training received.

A2.4 CPL(H) Skill Test Schedule and Standards

SECTION 1 – PRE-FLIGHT/POST FLIGHT CHECKS AND PROCEDURES

(a) Helicopter knowledge - tech log, fuel, mass and balance, performance, Flight planning, NOTAM'S, Weather briefing:

1. *Check all documents required for a commercial, passenger carrying flight are correct.*
2. *Obtain and assess all elements of the prevailing and forecast weather conditions.*
3. *Collate all relevant ATC information, NOTAMS, Royal Flights, Navaids, RT services.*
4. *Complete an appropriate flight navigation log and chart.*
5. *Determine that the helicopter is correctly fuelled for the flight.*
6. *Complete a manual Mass & Balance schedule.*
7. *Calculate helicopter Performance criteria and limitations applicable to the forecast weather conditions and make adjustments if required for actual conditions before take off.*
8. *Identify Threats and appropriate mitigations to be put in place.*

(b) Helicopter pre-flight inspection action, location of parts and purpose:

1. *Check helicopter serviceability record and technical log.*
2. *Using an approved checklist perform all elements of the helicopter pre-flight inspections, identifying components and functions as required by the Examiner.*
3. *Confirm that the helicopter is in a serviceable and safe condition for flight.*
4. *Check and complete all necessary documentation.*
5. *Complete an appropriate passenger emergency procedure briefing for the Examiner.*

(c) Cockpit inspection. Starting procedures:

1. *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:

1. *Complete all recommended communication and navigation equipment checks.*
2. *Select and set appropriate frequencies and transponder codes.*

(e) Pre-take off procedure RT procedure, ATC liaison – compliance:

1. *Complete all recommended pre-take off checks using an approved checklist.*
2. *Obtain and ATC clearance and follow ATC instructions.*
3. *Complete all necessary after take off checks from memory.*
4. *Comply with airport markings.*
5. *Use charts or other published information as required.*
6. *Execute a safe departure in accordance with clearance and with due regard for other air traffic.*
7. *Use correct lookout techniques.*
8. *Observe the Rules of the Air and ATC Regulations.*
9. *Maintain directional control and drift corrections throughout.*
10. *Follow any noise routing or departure procedures and ATC instructions.*
11. *Complete all necessary climb checks.*
12. *Demonstrate standard R/T procedures and phraseology.*
13. *Demonstrate compliance with ATC instructions.*
14. *Operate on the ground and in the air with particular regard for passenger safety and comfort.*

(f) Parking shutdown and post-flight procedure:

1. *Return helicopter to parking area and complete engine shutdown.*
2. *Complete all after landing checks and drills.*
3. *Secure helicopter and complete documentation.*

SECTION 2 – HOVER MANOEUVRES ADVANCED HANDLING AND CONFINED AREAS:

(a) Take-off and landing (lift off and touch down):

1. *Lift to and establish a stable hover maintaining ground position and heading.*
2. *Descend to land maintaining ground position and heading.*
3. *Complete all necessary checks and drills throughout.*
4. *Maintain lookout throughout.*

(b) Taxi, Hover Taxi:

1. *Demonstrate control of heading, height and groundspeed in hover taxi.*
2. *Complete all necessary checks and drills throughout.*
3. *Maintain lookout throughout.*

(c) Stationary hover with head/cross/ tail wind:

1. *Maintain heading, height and ground position whilst in the stationary hover into wind, crosswind and downwind.*
2. *Complete all necessary checks and drills throughout.*
3. *Maintain lookout throughout.*

(d) Stationary hover turns 360 degrees left and right:

1. *Carry out a spot (pedal) turn, maintaining the height, ground position and rate of turn throughout.*
2. *Complete all necessary checks and drills throughout.*
3. *Maintain lookout throughout.*

(e) Forward, sideways and backwards manoeuvring:

1. *Establish and maintain throughout each manoeuvre the nominated height, heading and speed.*
2. *Backwards manoeuvre to be preceded by lookout turn and increase of hover height.*
3. *Maintain directional control and balance throughout.*
4. *Complete all necessary checks and drills throughout.*
5. *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)

1. *Prevent the aircraft tendency to drift and roll.*
2. *Stop the yaw tendency.*
3. *Cushion the touchdown.*
4. *When on the ground lower the collective lever.*
5. *Complete all necessary checks and drills throughout.*
6. *Maintain lookout throughout.*

(g) Quickstops - into wind and downwind:

1. *Establish straight and level flight at the nominated speed, height and heading with cruise power set.*
1. *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.*
2. *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.*
3. *Complete all necessary checks and drills throughout.*
4. *Maintain lookout throughout.*
5. *Maintain directional control and balance throughout.*

(h) Sloping ground/unprepared sites landing and take off:

1. *Identify landing area on slope and conduct recce to consider at least the following points:*

    - *Size - Large enough to land the aircraft onto without striking the tail/blades.*
    - *Shape - Valley, bowl, direction of slope.*
    - *Surrounds - Blade/tail clearance, FOD, trees/shrubs, people.*
    - *Slope - Within limits of aircraft/pilot.*
    - *Surface - Firm, slippery, muddy, rocky.*

2. *Move onto slope area and conduct up slope/cross slope landing.*
3. *Maintain heading, ground position, and prevent movement of aircraft on slope.*
4. *When landed centralise the flying controls.*
5. *Prior to take off preposition controls.*
6. *Lift into hover maintaining heading and ground position.*
7. *Move away from slope ensuring tail is not turned towards the slope.*
8. *Be prepared to abort the landing at any stage.*
9. *Complete all necessary checks and drills throughout.*
10. *Maintain lookout throughout.*

(i) Take offs (various profiles):

(Can be combined with items j, k & m)

1. *Demonstrate take-off/transition from the hover as detailed by the Examiner.*
2. *Maintain directional control and balance throughout.*
3. *Complete all necessary checks and drills throughout.*
4. *Maintain lookout throughout.*

(j) Cross wind, down wind take-off (if practical):

1. *Demonstrate take-off cross wind/down wind transitions from the hover.*
2. *Maintain directional control and balance throughout.*
3. *Complete all necessary checks and drills throughout.*
4. *Maintain lookout throughout.*

(k) Take off at maximum take off mass (actual or simulated):

(Can be combined with item m)

1. *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.*
2. *Maintain directional control/balance throughout.*
3. *Complete all necessary checks and drills throughout.*
4. *Maintain lookout throughout.*

(l) Approaches (various profiles):

(Can be combined with item m)

1. *Demonstrate an approach nominated by the Examiner.*
2. *Maintain directional control/ balance throughout.*
3. *Complete all necessary checks and drills throughout.*
4. *Maintain lookout throughout.*

(m) Limited Power take-off and landing:

(Normally simulated by the Examiner giving an simulated power limitation)

1. *Carry out hover power check.*
2. *Select and demonstrate a transition from the hover using an appropriate technique for the simulated power limit set by the Examiner.*
3. *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.*
4. *Select and demonstrate an appropriate technique for the approach and landing using only the simulated power limit set by the Examiner.*
5. *Maintain directional control and balance throughout.*
6. *Complete all necessary checks and drills throughout.*
7. *Maintain lookout throughout.*

(n) Auto-rotations:

(The Examiner will nominate 2, from basic, range, low speed, and 360° turns)

1. *Select an area and height/altitude for the nominated autorotation.*
2. *Carry out HASEL (or other appropriate) checks.*
3. *Establish straight and level flight at the nominated speed, height and heading with cruise power set (into wind).*
4. *Initiate manoeuvre with verbal warning – Practice Autorotation Go- and establish autorotation.*
5. *Fly the appropriate parameters for the nominated technique.*
6. *Close throttle to idle position (only if appropriate and briefed by the Examiner).*
7. *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.*
8. *Complete all necessary checks and drills throughout.*
9. *Maintain lookout throughout.*
10. *Maintain directional control and balance throughout.*
11. *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)

1. *Identify the nominated landing area, if appropriate conduct recce (Size, Shape, Surrounds, Slope Surface).*
2. *Carry out HASEL (or other appropriate) checks.*
3. *Establish final approach (into wind), straight and level flight at the nominated speed, height and heading with cruise power set.*
4. *Initiate manoeuvre with verbal warning – Practice Engine Failure Go- and establish autorotation using the appropriate parameters for the nominated technique.*
5. *Close throttle to idle position (only if appropriate and briefed by the Examiner), if necessary the Examiner will assist.*
6. *Ensure no aircraft slip or drift by 300ft AGL.*
7. *Apply appropriate flare at appropriate height for aircraft/conditions.*
8. *Cushion the aircraft onto the ground, with a running landing if appropriate, whilst maintaining heading.*
9. *Lower collective lever judiciously.*
10. *Complete all necessary checks and drills throughout.*
11. *Maintain lookout throughout.*
12. *Maintain directional control and balance throughout.*
13. *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.

1. *Enter autorotation.*
2. *Select the landing site.*
3. *Adopt the appropriate autorotative technique to 'make' the selected landing site.*
4. *Carry out the appropriate radio calls (in the cockpit only).*
5. *Carry 'touch drills' to indicate emergency cockpit drills.*
6. *Close throttle to idle position (only if appropriate and briefed by the Examiner).*
7. *Give appropriate warning to passenger.*
8. *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.*
9. *Complete all necessary checks and drills throughout.*
10. *Maintain lookout throughout.*
11. *Maintain directional control and balance throughout.*
12. *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)

1. *Identify the nominated landing area and conduct appropriate recce to cover at least the following points (normally not conducted lower than 500ft AGL):*
    - *Size - Is the confined area large enough for pilot's ability and aircraft size and which type of approach will it require?*
    - *Shape - In relation to the wind direction/final approach.*
    - *Surrounds:*
        - *Outer - habitation, hazards that may affect the circuit, approach, overshoot*
        - *Inner - hazards in the immediate area of the landing site.*
    - *Slope & Surface - Suitability of the landing site (may require confirmation prior to landing)*
    - *Other factors such as sun, shadow, wires etc may need to consider as appropriate.*
2. *Carry out power check (normally into wind, not below 500ft AGL of the landing area), note power available.*

3. *Conduct circuit and approach, identifying escape routes and landing committal point in order to carry out a landing, dummy approach or overshoot (go around) as appropriate.*
4. *stablish hover at appropriate height in the confined area (land/spot turn only if requested by Examiner).*
5. *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.*
6. *Maintain directional control and balance throughout.*
7. *Control Nr throughout.*
8. *Complete all necessary checks and drills throughout.*
9. *Maintain lookout throughout.*

SECTION 3 – NAVIGATION EN-ROUTE PROCEDURES

(a) Navigation and orientation at various altitudes/map reading:

1. *Complete all elements of VFR planning for the route prescribed with particular reference to planned altitudes and safe levels of operation.*
2. *Identify position visually by reference to ground features and map.*

(b) Altitude/height/level, speed, heading control, observation of airspace, altimeter settings:

1. *Control helicopter altitude speed and heading using visual attitude flying techniques.*
2. *Maintain the heading height and speed as computed in navigation log or advised to the Examiner within the prescribed limits observing airspace.*
3. *Complete all necessary checks and drills.*
4. *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:

1. *Navigate by means of calculated headings, ground speed and time.*
2. *Make appropriate corrections to maintain track.*
3. *Achieve destinations or turning points within 3 minutes of estimated time of arrival (ETA).*
4. *If appropriate configure engine for cruise/endurance performance in accordance with Flight Manual.*
5. *Adjust and monitor fuel consumption for range or endurance if appropriate.*
6. *Make regular checks for carburettor icing, if appropriate.*

(d) Observation of weather conditions, diversion planning:

1. *Calculate heading, ground speed, ETA and fuel required during any unscheduled diversion.*
2. *Calculate Minimum Safe Altitude for track to new destination.*
3. *Navigate by means of calculated headings, ground speed and time.*
4. *Maintain the heading height and speed as computed in navigation log or advised to the Examiner within the prescribed limits.*
5. *Observation of weather conditions with timely, appropriate captaincy decisions.*

(e) Tracking positioning (NDB or VOR) identification of facilities:

1. *Select and identify appropriate radio and navigation aids as required or nominated by Examiner.*
2. *Carry out aircraft navigation instrument functional checks (if not previously conducted).*
3. *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:

1. *Altimeter to QNH, Regional Pressure setting (RPS), Standard pressure setting, or QFE as specified in checklist, Flying Order Book or as appropriate.*
2. *Maintain two way R/T communication using correct phraseology throughout.*
3. *Obtain ATC clearances and appropriate level of service.*
4. *Comply with ATC clearances and instructions when required.*
5. *Use the correct transponder and frequency monitoring codes*
6. *Display sound airmanship and cockpit management.*
7. *Aerodrome arrival procedures.*
8. *Carry out appropriate checks and drills.*
9. *Set altimeters and cross check in accordance with check list, Flying Order Book or as required.*
10. *Comply with published arrival procedure or clearance.*
11. *Maintain adequate lookout and collision avoidance.*
12. *Consider weather and wind conditions, landing surface and obstructions.*
13. *Plan and follow the circuit pattern and orientation with the landing area.*
14. *From the circuit pattern establish the recommended helicopter approach configuration adjusting speed and rate of descent to maintain a stabilised approach.*
15. *Select and achieve the appropriate touchdown area.*
16. *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:

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

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

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

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

1. *Establish climb/descent and turns at rate 1, on to Examiners nominated headings whilst maintaining altitude/height and speed.*
2. *Demonstrate competence at manoeuvring the aircraft by sole reference to flight instruments.*
3. *Use an appropriate technique of instrument scanning and cross check to maintain flight within prescribes limits.*

4. *Maintain directional control and balance throughout.*
5. *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.

1. *Regain control of the aircraft.*
2. *Adjust/correct aircraft attitude, speed and altitude, demonstrating an appropriate sequencing technique.*
3. *Demonstrate competence at manoeuvring the aircraft by sole reference to flight instruments.*
4. *Use an appropriate technique of instrument scanning and cross check to maintain flight within prescribes limits.*
5. *Maintain directional control and balance throughout.*
6. *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:

1. *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.*
2. *Demonstrate competence at manoeuvring the aircraft by sole reference to flight instruments.*
3. *Use an appropriate technique of instrument scanning and cross check to maintain flight within prescribes limits.*
4. *Maintain directional control and balance throughout.*
5. *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.

1. *Engine malfunctions including governor failure, carb/engine icing, oil systems, as appropriate.*
2. *Fuel system malfunction.*
3. *Electrical system malfunction.*
4. *Hydraulic system malfunction including approach and landing without hydraulics, as applicable*
5. *Main rotor and/or tail rotor malfunction (FFS or discussion only).*
6. *Fire drills including smoke control and removal, as applicable.*
7. *Other abnormal and emergencies procedures as outlined in Appendix 4 section to Part-FCL or as outlined in the appropriate flight manual.*

The applicant shall:

1. *Analyse emergency or abnormal situation and formulate appropriate plan.*
2. *Execute abnormal or emergency drills iaw FM/POH*
3. *Plan and execute further actions to ensure safe recovery of helicopter, pax and crew.*
4. *Use check list to confirm actions when time permits.*
5. *Make suitable emergency R/T calls (given to Examiner but not transmitted).*
6. *Inform ATC of practice emergency situation and assistance required (where appropriate).*

APPENDIX 3 IR SKILL TEST

A3.1 IR Skill Test Administration

	IR (H) SKILL TEST
UK Reference:	Part FCL Subpart G and Appendix 7
Standards Doc:	Standards Document 1 (H)
Who can test:	IRE or approved CAA TI
SRG Forms used:	IR Application Form SRG1161, Examiners Report Form SRG2135 and Failure Form SRG2129, Temporary Certificate of Licence Privilege SRG 1100
Test format:	Skill test as Part FCL Appx 7, Form SRG2135 and Standards Document 1H.
Test Parameters:	**Height** 1. Generally ± 100' 2. Starting a go around at DH/DA +50'-0' 3. MDA/MAP/altitude +50'-0' **Tracking** 1. On Radio Aids ±5° 2. Angular deviations – half scale deflection, azimuth and glide path (e.g. LPV, ILS, MLS, GLS) 3. 2D (LNAV) and 3D (LNAV/VNAV) Linear lateral deviations - cross-track error/deviation shall normally be limited to ± ½ the RNP value associated with the procedure. Brief deviations from this standard up to a maximum of 1 time the RNP value are allowable. 4. 3D linear vertical deviations (e.g. RNP APCH (LNAV/VNAV) using Baro-VNAV) - not more than - 75 feet below the vertical profile at any time, and not more than + 75 feet above the vertical profile at or below 1000 feet above aerodrome level. **Heading** 1. All engines operating - ±5° 2. Sim engine failure - ±10° **Speed** 1. All engines operating - ±5kts 2. Sim engine failure - +10kts/-5Kts
Pass/partial/Fail Criteria:	An applicant shall pass all the relevant sections of the skill test. 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. An applicant failing only one section shall only repeat the failed section. 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. 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 a failed skill test. There is no limit to the number of skill tests that may be attempted.
Form guidance:	As indicated on the application form and Standards Doc 1H.
Notes:	Where the RNP APCH is to be performed in an appropriately equipped FSTD due to the a/c not being appropriately equipped and certified, ATC restrictions or for unacceptable transit distances, the examiner should liaise with the ATO in order to confirm the administration associated with carrying out the RNP APCH in the FSTD. This should include issues such as: • Applicant rest between a/c and FSTD test. • IOS operation. • The scenario that the applicant should expect. • FSTD familiarisation."

A3.2 IR Skill Test Briefing

RECOMMENDED WEATHER MINIMA

Cloud: IMC autorotation and unusual attitude – VMC.
Wind: Within limits.

The forecast / ATIS / ATC weather is to be used for planning the flight, IMC conditions will be simulated by a visor, foggles or screens to obstruct your forward view and assume that:

(a) for the aircraft pre-flight inspection that aircraft has been left outside overnight in conditions which may have caused light rime ice to form so please take this into account when you are conducting the inspection.
(b) for the IFR part of the flight that we are IMC in possible icing conditions
(c) for departure assume that the weather is at or about minima
(d) for arrivals assume that the weather is at or about minima

INITIAL BRIEFING

Meet, greet and establish ID and confirm the test requirement, weather suitability for the test and availability of aircraft. Examiner to brief:

- Health and safety.
- Route profile to be flown.
- Call sign to be used.
- Timing for briefing.
- Any questions.

Document and equipment check:

- ✓ Evidence of completion of course of training.
- ✓ Evidence of successful completion of theoretical examinations.
- ✓ For each test series, a signed certificate of recommendation for test.
- ✓ If second or subsequent test, previous SRG2135.
- ✓ Second or subsequent series, evidence of retraining certified by Head of Training.
- ✓ Current licence; Valid Medical Certificate
- ✓ FRTOL (or test completed).
- ✓ Aircraft documents; Tech Log; Fight authorisation sheet.
- ✓ IF visor/goggles, approved checklist, 2 compatible headsets (consider spare).
- ✓ Maps, charts, approach plates, a/c databases (current editions), nav planning equipment.
- ✓ Flight plan

Note: *the examiner must review planning facilities and appropriate access to NOTAMS, Royal Flight information, Weather, UK AIP, etc.*

Time Check. I will meet you here again for your Main Briefing at _____.

MAIN BRIEF

Note: The brief below is given as an example only and examiners are encouraged to use it as an aide-memoir to ensure that all the appropriate points are covered.

Introduction

I shall now brief you on the conduct of the IR(H) Skill Test. There is no need to take notes, however, ask any questions you may have as we brief.

You will be aware that the Skill Test comprises 7 Sections: Departure, General Handling, En-Route (IFR Procedures), Arrival Procedures; 3D Operations; 2D Operations and Abnormal and Emergency Procedures. I will brief you on appropriate sections in due course but for the moment I will brief you on general matters.

The Purpose of the Flight

For you to demonstrate your competence to safely operate a passenger carrying flight under IFR in IMC in accordance with Part FCL and the company operations manual.

Your Responsibilities

- Assume you are the pilot in command of an IFR flight in simulated or actual IMC.
- You are to operate the flight iaw the RFM/Ops Man/Checklists.
- You are to adhere to ATC instructions and are expected to conduct the flight in an expeditious manner without cutting corners.
- The AP HOLDs will be available for use except for the departure to ToC and for the 3D approach.
- Any holds that are carried out will be required to be flown iaw ICAO procedures with an outbound leg of 1 minute in still air, all holds will be assessed.
- You will operate all radios throughout the flight unless I advise “my radios” – call sign is EXAM____
- You are to ident all radio and navigation aids etc. before use.
- You will be responsible for all checks and should carry them out at the appropriate time, remembering to verbalise them.
- Throughout the test you are expected to display Captaincy, TEM and Airmanship by verbalising these points to me as they arise. You will be responsible for cockpit administration and for the correct use of all aircraft equipment and controls, radio calls, frequency changes and transponder and altimeter settings as required.
- You will be expected to carry out all given exercises, manoeuvres and procedures unassisted, and to a safe and satisfactory standard. This means that throughout the flight, I should be in no doubt as to the success or outcome of any particular exercise and should not need to take control at any time.

My Responsibilities

- I, (Safety Pilot) will take no active part in the flight other than carrying out the taxi and take-off and the final approach, taxi and landing on completion of the flight as well as taking control for specified exercises.
- I, (Safety Pilot) will remain in command of the aircraft throughout the flight and will sign the Tech Log.
- I, (Safety Pilot) will be acting purely as an observer and will not offer any comment on any aspect of the flight. I will not initiate any conversation as this might distract you but I will respond to any conversation initiated by you.

Checks

You are to use the approved checklist. During your pre-flight walk-round you should tell me what you are checking and why. I may ask questions about the checks. I will require a passenger safety briefing from you.

Complete the full internal checks using the checklist but thereafter you may complete the checks from memory. I want you to verbalise your checklist items as you do them. Please ensure the aircraft has an approved checklist.

Handling Tolerances

The handling tolerances for the test are prescribed in Part-FCL. *(the examiner should confirm the tolerances to be used)*. They are there for guidance only and so you should not get overly anxious about the limits. Should the aircraft deviate from these limits I will be looking for you to make smooth corrections without undue delay.

In a similar way, if you think you have made a mistake then correct it and don't dwell on it. Everyone makes mistakes, so carry on with your flight, and concentrate on what you are doing.

Aircraft Control

At the end of the brief, I will ask you for the various speeds etc. that you plan to use. Once they are agreed you should use them but if you wish to change them you should notify me first.

Should we need to pass control of the aircraft between us at any time, the standard procedure is to be used, i.e. “Follow me through”, “You have control”, “I have control”.

Emergencies

As pilot flying, you should take the immediate action in response to any malfunction or emergency whether simulated or real. If the emergency is real, you will be informed as such and the test will be suspended. You are to continue as the pilot flying and achieve a safe flight configuration. I will give you all the assistance you require but I (Safety Pilot) reserve the right to take control if necessary.

I will use scenario-based techniques to introduce simulated emergencies or abnormal situations for which I will expect you to show me what action you would take. For example, I may point to a warning light and tell you that it has illuminated, point to a gauge and inform you of its reading, or suggest that the cockpit is filling with smoke, etc. You must then take the immediate action required by the aircraft flight manual, such as entering autorotation or landing immediately but all subsequent action must be touch drill only.

Autopilot Holds are available throughout the flight but only with my prior permission.

For the MEH autorotation I will complete the safety checks after which I shall then advise ‘Practice Double Engine Failure – GO’. You should react accordingly and depending on the situation I shall select both engines to IDLE. You are required to manoeuvre as necessary in autorotation to reach a suitable area for a successful landing. I shall recover both engines to FLIGHT by 500 ft AGL and declare so. Depending where this exercise is taking place etc. I will instruct you to either ‘GO AROOUND’ or to continue to your selected landing area for a full flare recovery. You should initiate the engine’s off technique as required but aim to establish in a high hover taxi before coming to a normal hover. During the descent you should complete any drills etc. as required.

The examiner must confirm the applicants’ understanding of any immediate actions required by the specific aircraft type, the applicants’ understanding of ‘touch drills’, describe how any throttle/FCL/engine training switches are to be manipulated during simulated malfunctions, and confirm that any required RT calls must be ‘in cockpit’ only).

Do you have any questions on the general brief before I move on to the detailed Section briefing?

Detailed section briefing

Worst case for the weather is to be assumed, overnight freezing and icing is forecast at all levels. Assume the cloud base and visibilities will be at the minima for your approach. Please follow your standard procedures for ice detection and operate the equipment accordingly.

The examiner should carry out a brief confirmation of the route to be flown to include the departure, en-route, arrival, holding, approaches, etc. to include the VMC exercises and recovery.

***Section 2*:** During Section 2 I will take control of the radio, navigation safety altitudes and lookout for limited panel turns, unusual attitudes and autorotation.

The whole flight is to be carried out in a practical and expeditious manner without cutting corners. I will only intervene during the flight if the safety of the aircraft is in doubt, however, I will respond on request, to ATC calls concerning conflicting traffic.

Route Briefing

Have you got your chart and approach plates? (Check chart currency and similar plate editions).

- Make a practical and expeditious departure (examiner to determine the departure procedure to be used - SID/RNAV).
- For the en-route phase you will be required to follow the SID/STAR or plan, having declared the desired track associated with the VOR/NDB/RNAV etc.
- For the arrival at _____, you are to request and enter the HOLD (confirm procedures and headings for the HOLD).
- From the HOLD you will fly a procedural 3D approach to r/way _____
- You are required to follow the vertical and horizontal profiles down to minima (DH) and will then be required to execute a missed approach.
- The MAP will be as published or as directed by ATC.
- Following the MAP you will be required to fly a procedural 2D approach to r/way _____
- You are required to follow the vertical and horizontal profiles down to minima (MDA) and will then be required to execute a missed approach at the MAPt.
- During these approaches, you should expect a simulated OEI scenario at some point and should respond accordingly remembering that your drills should be verbalised with touch drills only and R/T voiced in the cockpit only. Once the OEI exercise is completed, I will recover the aircraft to AEO and advise you accordingly. I may recover the aircraft back to AEO temporarily for a period of positioning before returning to an OEI condition to complete the required exercise.
- The examiner shall describe how any throttle/FCL/training switches are to be manipulated to simulate malfunctions.
- During the flight you will be required to carry out the limited panel, UAs and a simulated IMC Autorotation and Recovery (Describe when and how these exercises will be carried out).

Parameters

The examiner should establish and note down, for reference during the debrief, the flight parameters to be used during the skill test to include climb, descend, autorotations (including RPM), instrument flight, etc.

Summary

That concludes the brief. If you do not have any questions, please sign the top half of the SRG2135. You now have 1 hour to complete the planning. I shall then return for a pre-flight brief covering at least the following and incorporating the relevant TEM elements:

Note: The MATED brief is only included as a suggested aide memoir.

Met:	Appropriate to the area and time of the flight
Aircraft:	AUM, C of G calculation, fuel load, tech log details
a**T**c:	Airfield details, NOTAMS, Royal Flights, RT services etc.
Exercise:	How the test is to be conducted
Duties:	Pax Brief, normally conducted at the aircraft

Pre-flight briefing

Is your planning complete? *(Check Performance, Wt & Balance, Planning etc.)* Is the route clear to you? Have you prepared/filed your flight plan? I will maintain a log of the flight simply as my record of events. Don't be put off by my writing.

Do you plan to fly on QFE or QNH on approaches? What speeds will you be flying? What angles of bank, rates of climb and descent will you be using? What power limits will you be using for OEI? If you wish to change any of these parameters tell me before you change them stating your reason for change.

What are your approach minima? (Ask questions to establish understanding of the procedures, the data on the plates i.e. CAT I, II or III holding points on a taxiway, the MSA at spot heights etc.).

You must liaise with ATC in a practical manner to achieve the aims of the flight.

A3.3 IR(H) Skill Test Completion of Report Forms SRG 2135, SRG 1161 and SRG 2129

Examiners must ensure that they are using the most up to date version of the report forms downloaded from the CAA website.

During the initial briefing for the IRT, the examiner should inform the applicant that the RNP APCH will be carried out in the FSTD after the flight and that the examiner will brief the applicant prior to entering the FSTD on what to expect and what is required of the applicant. The examiner should allow a short period of re-familiarisation in the FSTD to allow the applicant to 'settle back in' in preparation for the RNP APCH.

If the RNP APCH is to be flown in the FSTD, the applicant is required to fly conventional 3D and 2D approaches during the a/c flight test.

SRG 2135 - Before flight

1. **Section 1. Applicant Details**

   Completed and signed by the applicant at the end of the main brief.

2. **Section 2. Flight Test**

   (a) Sections to be taken:

   Annotate the test section(s) to be taken with a '✓'.

   When conducting the re-take of a partial pass or completing an incomplete test, strike through any section(s) or item(s) that are not required with a diagonal line and annotate as N/A.

3. **Section 3. Flight training organisation**

   Completed in full.

After flight

4. **SRG 2135, Section 2. Flight Test**

   (a) Route: Enter the route flown including the initial departure location, navaids used relevant approaches and the final destination point.

   (b) Helicopter Type and Reg: Enter the helicopter type using standard licence type designation including the variant (if applicable) and the helicopter registration. If an FSTD is used enter the device identification.

   (c) Take-off, Land: Enter the take-off and landing times (local). Where the test was conducted in more than one flight on the same day, the time of the first take off and the last landing must be entered.

   (d) Total Flight Time: Enter the total rotors running time for the flight(s).

   (e) Sections to be taken: Enter 'Y' or 'YES' and 'N' or 'NO' as necessary.

   (f) Result: Annotate according to the following:

   'P' or 'PASS' must be used to annotate items or sections that have been passed.

   'F' or 'FAIL' must be used to annotate items or sections that have been failed.

'N/F' or 'NOT FLOWN' must be used to annotate items or sections that were not flown by the applicant when the test was terminated or to identify items not flown in an incomplete section.

'INC' or 'INCOMPLETE' must be used to annotate section(s) that were not completed due to unforeseen circumstances. For example, illness, un-forecast weather, aircraft technical problems, etc.

(g) Re-test Items: Indicate the section(s) that will need to be retested by entering 'YES'. Only those sections failed should be annotated.

(h) Test Sections incomplete due: Include a brief description of why the section was not completed. For example, 'Wx' for un-forecast weather or 'A/c U/S' for an equipment failure on the aircraft or 'ATC' for an inability to complete a section.

(i) Items not completed: List the incomplete item(s) by letter, for example (a) or 'ALL' for a complete section.

(j) Confirmation of applicants' instruction, experience and required exercises and manoeuvres completed: examiners are required to validate the applicants training and experience complies with Part FCL, prior to conducting the test. Upon completion of the test annotate the form with a '✓' to confirm the above and that all the required manoeuvres and exercises have been completed.

(k) Examiner's details: Enter all examiner details as annotated.

(l) Non-UK examiners: If the test was completed by an approved non-UK licenced examiner, enter the approval reference number issued by the Authority.

(m) Applicant's signature: After informing the applicant of the result, the applicant is required to sign the form at the bottom of section 2.

5. SRG 2129

If the applicant has failed any items, an SRG2129 must be completed to include a description of the failed item(s). These comments must be concise and factual using actual heading, height or airspeed deviations whenever appropriate. Personal opinion is NOT fact and must be avoided. The following are examples of expressions that should not be used without quantification: 'Poor airspeed', 'Outside limits', 'Off track', 'Auto failed'.

The examiner will either recommend or mandate the amount and type of training required to be undertaken. 'Recommended' indicates that re-training is not mandatory. Mandatory training will require a course completion certificate appropriate to the training received.

A3.4 IR(H) Skill Test Completion and Standards

Use of checklist, airmanship, anti-icing/de-icing procedures, etc., apply in all sections.

SECTION 1 - DEPARTURE

(a) Use of Flight Manual (or equivalent) especially a/c performance calculation; mass and balance:

1. Correct use of the Flight Manual, Operations Manual, aircraft tech log.
2. Determine helicopter performance.
3. Determine mass and balance.

(b) Use of Air Traffic Services document, weather document:

1. Use of the correct documents, including maps, charts and approach plates to prepare a flight plan and flight log.
2. Collate and interpret the weather data to determine the departure, en-route, destination and diversion weather.

(c) Preparation of ATC flight plan, IFR flight plan/log:

1. Preparation of the ATC IFR flight plan for the route, including any off-airways sectors, and preparation of a full navigation and RTF flight log.
2. Obtain and assess all elements of the prevailing and forecast weather conditions for the route.
3. Complete an appropriate flight navigation log.
4. Complete the required ATC flight plan(s).
5. Determine that the helicopter is correctly fuelled, loaded and legal for the flight.
6. Confirm any helicopter performance criteria and limitations applicable in relation to airfield and weather conditions.
7. Demonstrate sufficient knowledge of the regulatory requirements relating to IFR flight.

(d) Identification of the required navaids for departure, arrival and approach procedures:

The examiner (Safety Pilot) will need to have a working knowledge of the navigation systems, conventional and RNAV in the event they need to take control of the aircraft for whatever reason.

1. Correctly identifies and confirms the associated navaids and frequencies for the flight from the charts, plates etc.
2. Correctly interprets the required data from the charts, approach plates for the planned procedures.

(e) Pre-flight inspection:

1. Perform all the elements of the helicopter pre-flight inspections using an approved checklist as detailed and applicable to simulated icing conditions.
2. Confirm that the helicopter is in a serviceable and safe condition for flight.
3. Check and completes all necessary documentation.
4. Take appropriate action with respect to any identified unsatisfactory conditions.
5. Carries out a comprehensive Safety Briefing from the Passenger Briefing Card.

(f) Weather Minima:

1. Confirmation of acceptability of weather affecting the departure, route, destination and diversion.

2. Determination of the expected instrument approach minimum heights/altitudes.

(g) Taxiing/Air taxy in compliance with ATC or as instructed:

The examiner (Safety Pilot) will take control of the aircraft once the applicant declares that they are ready for take-off/taxi. The examiner (Safety Pilot) should follow the ATC instructions and manoeuvre the aircraft appropriately as requested by the applicant in order to carry out a check of the instruments and navaids. The applicant will normally retain control of the R/T.

1. During taxiing checks for correct instrument and navaids displays.
2. Aerodrome markings and indicators, including marshalling instructions and signals.
3. Pre-start checks iaw RFM.
4. Post start checks iaw RFM.
5. Instrument and avionics checks iaw Ops Man procedures including set up for departure/flight.
6. Pre-take-off checks iaw the RFM.

(h) PBN departure (if applicable):

The PBN departure should be flown manually until stabilising the aircraft at the ToC.

1. Check that the correct procedure has been loaded in the navigation system.
2. Cross-check between the navigation system display and the departure chart.

(i) Pre-take off briefing, procedure and checks:

1. Obtain ATC departure clearance, cockpit preparation.
2. Confirmation of departure and passenger emergency briefing.
3. Complete all recommended taxi checks and procedures.
4. Comply with airport markings and signals.
5. Complete all appropriate checks and drills.
6. Obtain ATC taxi clearance.
7. Complete an appropriate passenger briefing. (Emergency handling details should be discussed in the pre-flight brief).
8. Confirm any performance criteria, including wind limitations.
9. Action any anti-icing procedures.
10. Complete all necessary after take-off checks and climb at the appropriate power and speed settings agreed at the briefing.

(j) Transition to instrument flight:

The examiner (Safety Pilot) will conduct the take-off in accordance with the performance calculations using the correct techniques. Once established in the climb, the examiner (safety Pilot) will hand over control to the applicant who will then complete a smooth transition to instrument flight and complete the after take-off checks and drills.

(k) Instrument departure procedures, including PBN procedures:

The departure is to be flown manually until stabilising the aircraft at the ToC for the en-route section.

1. Complete the Standard Instrument Departure (SID)/PBN procedure or ATC departure instructions into the en-route phase.
2. Use of correct altimeter setting procedures. Maintaining helicopter control, speed, heading and level.
3. Maintain directional control and drift corrections within acceptable limits of speed, heading, height and track.
4. Identify any navigation aids used.

5. Follow any noise routing or departure procedures and ATC clearances.
6. Complete all necessary climb checks including altimeter setting procedures and ice precautions.

SECTION 2 - GENERAL HANDLING

These exercises may be completed whilst manoeuvring within other sections of the test.

(a) Control of the helicopter by reference solely to instruments including:

1. Establish straight and level flight at a nominated speed, height and heading.
2. Demonstrate competence at controlling helicopter altitude speed and heading by sole reference to flight instruments.
3. Use an appropriate technique of instrument scanning and cross check to maintain flight within prescribes limits.
4. Maintain directional control and balance throughout.
5. Complete all necessary checks and drills throughout.
6. Straight and level flight at various speeds maintaining balance and trim.
7. Demonstrate appropriate cockpit management procedures in identifying, selecting and confirming AP Hold and RNAV functions.

(b) Climbing and descending turns with sustained Rate 1 turn:

1. Smooth control maintaining balance and trim onto designated heights and headings.
2. Correct use of AP Holds and their adjustments to achieve the required flight path.

(c) Recoveries from unusual attitudes, including sustained 30° bank turns and steep descending turns:

These exercises should be carried out in VMC and at the end of the IRT.

1. The examiner will state the required recovery parameters of heading, altitude/FL, airspeed and simulated safety altitude to the applicant before taking control and then requesting the applicant closes their eyes and places their head on chest. The examiner (Safety Pilot) places the aircraft into an 'unusual attitude'. On being given the instruction "you have control" the applicant is to take control and recover the aircraft to a safe configuration before expeditiously returning it to the required parameters. Two UAs are to be flown *(e.g. high speed turning descent, low speed with high rate of descent).*

1. Regain control of the aircraft.
2. Adjust/correct aircraft attitude, speed and altitude, demonstrating an appropriate sequencing technique.
3. Demonstrate competence at manoeuvring the a/c by sole reference to flight instruments.
4. Use an appropriate technique of instrument scanning and cross check to maintain flight within prescribed limits.
5. Maintain directional control and balance throughout.
6. Complete all necessary checks and drills throughout.
7. Establish turns at up to 30 degrees angle of bank, using the direction indicator, on to nominated heights and headings whilst maintaining speed and altitude.

SECTION 3 - EN-ROUTE IFR PROCEDURES

(a) Tracking, including interception, e.g. NDB, VOR, RNAV:

1. Track to and from a facility using the appropriate displays needles during procedural IFR approaches to either 3D or 2D approaches.

2. Correct use of AP Holds and their adjustments to achieve the required flight path.

(b) Use of radio aids:

1. Correct use of naviads/RNAV with regard to promulgated range, identification and interpretation.
2. Use of appropriate ATS where available.

(c) Level flight, control of heading, altitude and airspeed, power setting:

1. Establish straight and level flight at a nominated speed, height and heading.
2. Demonstrate competence at controlling helicopter altitude speed and heading by sole reference to flight instruments.
3. Use an appropriate technique of instrument scanning and cross check to maintain flight within prescribes limits.
4. Maintain directional control and balance throughout.
5. Complete all necessary checks and drills throughout.
6. Correct use of AP Holds and their adjustments to achieve the required flight path.

(d) Altimeter settings:

1. Correct altimeter setting procedures
2. Cross checking and monitoring of en-route MSA.

(e) Timing and revision of ETAs:

1. Accurate timing revision of ETAs including en-route hold procedures if required.

(f) Monitoring of flight progress, flight log, fuel usage, systems management:

1. Completion of the navigation and RTF log to monitor flight progress.
2. Provide position reports and manage the fuel system.
3. Monitoring and managing the other helicopter systems.
4. Use of checklists.

(g) Ice protection procedures simulated if necessary and applicable:

1. Monitoring of OAT.
2. Use of anti-icing and de-icing procedures as required.

(h) ATC Liaison – compliance, R/T procedures:

1. ATC Liaison using the correct RTF procedures and phraseology and compliance with procedures and clearances.
2. Following the flight planned route or any other ATC route requirements within the operating limits specified.
3. Identify and use navaids/RNAV systems correctly.
4. Use the correct altimeter setting procedures and show awareness of MSA.
5. Maintain the flight log for navigation, R/T and fuel use, sufficient to give position reports and to confirm acceptable minimum fuel states.
6. Conduct an en-route hold if required by ATC.
7. Use the correct R/T procedures and phraseology.

SECTION 3A – ARRIVAL PROCEDURES

(a) Setting and checking of navigational aids, if applicable:

1. Use of navaids/RNAV with regard to promulgated range, identification.

(b) Arrival procedures, altimeter checks:

1. Descent planning and consideration of MSA.
2. Completion of the published arrival procedure or as instructed by ATC including altimeter settings.
3. ATC Liaison and R/T procedures.

(c) Altitude and speed constraints, if applicable:

1. Establishing a stabilised approach using the correct techniques for attitude, heading and power control.
2. Correct assessment of drift and rate of descent.
3. Correct use of AP Holds and their adjustments to achieve the required flight path.

(d) PBN arrival (if applicable):

1. Check that the correct procedure has been loaded in the navigation system; and
2. Cross-check between the navigation system display and the arrival chart.

SECTION 4 – 3D OPERATIONS

To establish PBN privileges, one approach in either Section 4 or 5 shall be an RNP APCH. Where an RNP APCH is not practicable, it shall be performed in an appropriately equipped FSTD.

The 3D approach should be flown manually from no later than the FAF – care should be taken to ensure the applicant has sufficient time to take stabilised control of the aircraft from the AP. On the GA the examiner should initiate an OEI condition. The OEI condition can be suspended once the applicant stabilises at ToC on the MAP before re-establishing the OEI condition during the final approach for the 2D approach.

(a) Setting and checking of navigational aids:

1. Check Vertical Path angle for RNP APCH.
2. Check that the correct procedure has been loaded in the navigation system.
3. Cross-check between the navigation system display and the arrival chart.
4. Use of navigation aids with regard to promulgated range, identification and interpretation.

(b) Approach and landing briefing, including descent/approach/landing checks:

1. The approach briefing including weather and confirmation of instrument approach procedure minima, and all procedures, checks and drills in preparation for landing.

(c) Holding Procedure:

To be performed in Section 4 or Section 5. AP Holds may be used for holding.

1. Completion of appropriate entry procedures followed by a hold, making the appropriate corrections to heading and time.
2. Complete an approach briefing and the checks and drills for landing. Sets and identify any navigation aids. Use the appropriate altimeter settings and R/T procedures.

3. Correct use of AP Holds and their adjustments to achieve the required flight path.

(d) Compliance with published approach procedure:

1. Compliance with the appropriate published instrument approach procedure.

(e) Approach timing:

1. Monitoring or controlling the approach procedure using timing as necessary.

(f) Altitude, speed, heading control (stabilised approach):

1. Establishing a stabilised approach using the correct techniques for attitude, heading and power control. Correct assessment of drift and rate of descent.

(g) Go-around action:

To be performed in Section 4 or Section 5.

The examiner should initiate a simulated OEI condition shortly after the applicant correctly initiates the GA. The OEI GA should continue to be flown manually until reaching ToC for the MAP. The OEI condition can be suspended once the applicant stabilises at ToC on the MAP before being re-establishing the OEI condition during the final approach for the 2D approach.

1. At the minima, or as directed by ATC, transitioning to a climb at the correct speed and completing the checks.

(h) Missed approach procedure/landing:

To be performed in Section 4 or Section 5.

1. Following the missed approach procedure. (Normally, following the 3D approach, a go-around and missed approach procedure will be required.)
2. Demonstrate knowledge of the missed approach procedure.
3. Initiate the missed approach procedure upon reaching Decision Height/Altitude if required visual references for landing runway are not obtained.
4. Establish the helicopter in a safe climb and initiate power changes as required to achieve the performance climb segments.
5. Follow the designated missed approach procedure or as required by ATC.
6. Correctly and without inappropriate delay, respond to the OEI condition.

(i) ATC liaison – compliance, R/T procedures:

1. ATC liaison using the correct R/T procedures and phraseology, and compliance with procedures and clearances.

SECTION 5 – 2D OPERATIONS

To establish PBN privileges, one approach in either Section 4 or 5 shall be an RNP APCH. Where an RNP APCH is not practicable, it shall be performed in an appropriately equipped FSTD.

The 2D approach should be flown fully coupled. The OEI condition should be carried forward from the 3D GA or if warranted the examiner can establish AEO for the procedure then revert to OEI for the final approach before re-establishing AEO during the GA for the MAP.

(a) Setting and checking of navigational aids. For RNP APCH:

1. Check that the correct procedure has been loaded in the navigation system.
2. Cross-check between the navigation system display and the approach plate.
3. Check Vertical Path angle for RNP APCH.
4. Use of navigation aids with regard to promulgated range, identification and interpretation.

(b) Approach and landing briefing, including descent/approach/landing checks and identification of facilities:

1. The approach briefing including weather and confirmation of instrument approach procedure minima, and all procedures, checks and drills in preparation for landing.

(c) Holding Procedure:

To be performed in Section 4 or Section 5.

1. Completion of appropriate entry procedures followed by a hold, making the appropriate corrections to heading and time.
2. Complete an approach briefing and the checks and drills for landing. Sets and identify any navigation aids. Use the appropriate altimeter settings and R/T procedures to liaise with ATC to prevent disruption to commercial traffic.
3. Correct use of AP Holds and their adjustments to achieve the required flight path.

(d) Compliance with published approach procedure:

1. Compliance with the published vertical and horizontal profile to the nominated minima.

(e) Approach timing:

1. Monitoring or controlling the approach procedure using timing as necessary.

(f) Altitude, speed, heading control (stabilised approach):

1. Establishing a stabilised approach using the correct techniques for attitude, heading and power control. Correct assessment of drift and rate of descent.
2. Correct use of AP Holds and their adjustments to achieve the required flight path.

(g) Go-around action:

To be performed in Section 4 or Section 5.

1. At the minima, or as directed by ATC, transitioning to a climb at the correct speed and completing the checks.

(h) Missed approach procedure:

To be performed in Section 4 or Section 5.

1. Demonstrate knowledge of the missed approach procedure.
2. Initiate the missed approach procedure upon reaching MAPt.
3. Establish the helicopter in a safe climb and initiate power changes as required to achieve the performance climb segments.
4. Follow the designated missed approach procedure or as required by ATC.

5. Correct use of AP Holds and their adjustments to achieve the required flight path.

(i) ATC liaison – compliance, R/T procedures:

1. ATC liaison using the correct R/T procedures and phraseology and compliance with procedures and clearances.

SECTION 6 - ABNORMAL AND EMERGENCY PROCEDURE

This section may be combined with sections 1 through 5. The test shall have regard to control of the helicopter, identification of the failed engine, immediate actions (touch drills), follow up actions and checks and flying accuracy, in the following situations;

(a) Simulated engine failure after take-off and on/during approach (at a safe altitude unless carried out in an FFS or FNPT II/III, FTD 2,3) - multi engine only:

Carried out on the GA from the 3D approach.

1. Without delay, establish the correct attitude, power setting and airspeed for the simulated OEI condition.
2. Make best use of the AP HOLDS - if permitted.
3. Correctly diagnose the emergency condition using TEM principles.
4. Make the appropriate announcements to the passengers as well as simulated call to ATC.
5. Complete the correct actions required from the RFM/Checklists for the emergency (touch drills).
6. Continue to fly the MAP within the prescribed parameters.

(b) Failure of stability augmentation devices/hydraulic system (if applicable):

Comply with any restrictions from the RFM. If the exercise is unable to be simulated then it should be carried out as a verbalised only exercise. May be used to prepare applicant for a manually flown 3D approach.

(c) Limited panel:

Where displays cannot be switched off in-flight, the examiner should make appropriate use of blanks/covers etc. as adopted by the ATO to remove the main instrument displays where possible.

1. Correctly adjusts focus to standby instruments to maintain entry conditions.
2. Continues to fly the aircraft within the prescribed parameters whilst manoeuvring as directed to include changes in heading, altitude and airspeed.

(d) Autorotation and recovery to a pre-set altitude:

To be conducted in VMC. Examiner is responsible for carrying out the HASELL checks.
Altitude for recovery must be clearly declared. On initiation of the exercise:

1. Expeditiously enters autorotation whilst correctly managing rotor speed.
2. Establishes a/c into wind, whilst establishing correct airspeed for exercise.
3. Uses AP HOLDs if available.
4. Declares emergency and warns passengers (R/T calls must be ‘in cockpit’ only).
5. Carries out appropriate restart/shutdown checks – touch drills only.

On reaching declared altitude or a when informed to ‘Go Around’:

6. Expeditiously commences correct powered recovery.

7. Establishes correct airspeed for AEO climb.
8. Re-establishes flight parameters as directed.

(e) 3D operations manually without flight director or:

3D operations manually with flight director:

Only one item to be tested. See Section 4.

APPENDIX 4 SPH/MPH TYPE SKILL TEST/PROFICIENCY CHECK AND IR PROFICIENCY CHECK

Examiners conducting tests in FSTD's should refer to Annex 1 – Use of Flight Simulation Training Devices. For MP operations refer to Annex 2 – Testing multi-pilot operations in Helicopters.

A4.1 SPH/MPH Type Skill Test and Proficiency Check Administration

	SPH/MPH TYPE SKILL TEST/PROFICIENCY CHECK AND IR PROFICIENCY CHECK
UK FCL Ref:	Part FCL Subpart H and Appendix 9
Standards Doc	SPH Standards Doc 14H; MPH Standards Doc 24H
Who Can Test:	FE CPL (H), FE PPL (H), TRE(H), SFE(H)
Validity	12 months validity The revalidation may be flown within 3 months of the due date, the new validity being 12 months from the end of the month of that due date. When the revalidation is flown as part of a proficiency check then the IR will be valid for the same period as the type rating. If a candidate chooses to fulfil the revalidation requirements earlier than 3 months immediately preceding the expiry date, the new validity period shall commence from the date of the proficiency check.
Form Used:	SRG 1173 (ST Initial Issue), SRG 2138 Examiners Record Form, SRG 1100 Temporary Certificate of Licence Privilege. SRG 2129 Failure Form if req.
Form Guidance:	As indicated on the SRG 2138.
Test Format:	As shown on SRG 2138 and Standards Doc 14 (H). **Skill Test** 1. If the test is to be conducted for a first MEH type, then applicants must meet the requirements of Part-FCL720.H. 2. If a skill test is to be completed on a SEH then the examiner is required to conduct an oral TK test for which the applicant requires 75% to pass (a list of oral questions is provided on the SRG 2138 and in Skill Test/Proficiency Check Briefing Guidance Notes). **Proficiency Check** There are three proficiency check schedules (an oral examination is not required; however, the examiner may wish to clarify some points by oral questioning): (a) IR only - The applicant shall complete Section 5 and those parts of Section1 of the PC relevant to the intended flight. This PC confers no credit for the sections and items required if a type rating PC is flown on a separate occasion. (b) Type Rating only - The applicant shall complete sections 1, 2, 3, and 4 plus 6 (as required) of the PC. (c) Type Rating plus IR - The applicant shall complete sections 1, 2, 3, 4 and 5, plus section 6 as required of the proficiency check. Note the examiner is required to exercise judgement in conducting the test/check given circumstances or aircraft types. The non-mandatory items on the form give the examiner the ability to adjust the flight test to suit operational conditions or helicopter type. Those items that are not annotated 'M' (for mandatory) should not be taken to mean that the item must always be ignored. It is not satisfactory simply to fly the basic minimum profile, without assessing the pilot's ability to operate those aircraft systems that are necessary for the safe operation of the aircraft type, in both normal and abnormal conditions.
Test Parameters	**IFR flight limits**

	Height Generally ±100 ft Starting a go-around at decision height/altitude +50 ft/-0 ft Minimum descent height/altitude +50 ft/-0 ft **Tracking** On radio aids: ±5° For "angular" deviations: Half-scale deflection, azimuth and glide path (e.g. LPV, ILS, MLS, GLS) On DME Arcs ± 1 Nm DME range fix before FAF ± 1 Nm DME range fix after FAF ± 0.5 Nm DME MAPt 0 nms after MAPt 2D (LNAV) and 3D (LNAV/VNAV) "linear" lateral deviations: cross-track error/deviation shall normally be limited to ± ½ of the RNP value associated with the procedure. Brief deviations from this standard up to a maximum of one time the RNP value are allowable. 3D linear vertical deviations (e.g. RNP APCH (LNAV/VNAV) using BaroVNAV): not more than – 75 ft below the vertical profile at any time, and not more than + 75 ft above the vertical profile at or below 1 000 ft above aerodrome level. **RNP approaches – FMS tolerance -** Maximum acceptable difference in track between an FMS database and that published shall be the lesser of that required by regulation, a manufacturer limitation or that defined as part of an Operators' approval **Heading** Normal operations ±5° Abnormal operations/emergencies ±10° **Speed** Generally ±10 knots /With simulated engine failure +10 knots/-5 knots **VFR flight limits** **Height** Generally ±100 ft Heading: Normal operations ±5° /Abnormal operations/emergencies ±10° **Speed** Generally ±10 knots/With simulated engine failure +10 knots/-5 knots **Ground drift** T.O. hover I.G.E. ±3'/ Landing ±2 ft (with 0' rearward/lateral flight)
Pass/Partial/Fail Criteria	1. In the case of skill test or proficiency check for type ratings and the ATPL, applicants shall pass Sections 1 to 4 and 6 (as applicable) of the skill test or proficiency check. Failure in more than five items will require applicants to repeat the entire test or check. Applicants failing not more than five items shall repeat the failed items. Failure in any item in the case of a retest or a recheck or failure in any other items already passed will require the applicants to repeat the entire test or check again. All sections of the skill test or proficiency check shall be completed within 6 months. 2. In the case of proficiency check for an IR, applicants shall pass Section 5 of the proficiency check. Failure in more than 3 items will require applicants to repeat the entire Section 5. Applicants failing not more than 3 items shall repeat the failed items. Failure in any item in the case of a recheck or failure in any other items of Section 5 already passed will require applicants to repeat the entire check.
Notes:	**Revalidate by Experience**: A pilot who successfully completes a skill test for an additional type or a proficiency check can achieve revalidation for other types in accordance with below: **SEP Types** as listed in AMC1 FCL. 740.H(a)(3) may be revalidated by conducting the check/test on one of the applicable types, provided the applicant has completed at least 2 hours as PIC in the validity period on each of the other types to be revalidated.

	SET Types of a maximum AUM of 3175 kg may be revalidated by conducting the check/test on one of the applicable types held, provided the applicant has: (i) Completed at least 300 hours as PIC of helicopters; and (ii) Completed 15 hours on each of the types held; (iii) Completed at least 2 hours as PIC flight time on each of the other type(s) during the validity period. Notes: (i) The examiner shall ensure that there is a rotation of types tested on. (ii) The licence entry for the type ratings revalidated by experience shall show EXP in the date of test and the same validity expiry date as that on which the PC was completed. **PBN Privileges:** To establish or maintain PBN privileges, one approach shall be an RNP APCH. Where an RPN APCH is not practicable, it shall be performed in an appropriately qualified FSTD. Where the RNP APCH is to be performed in an appropriately equipped FSTD due to the a/c not being appropriately equipped and certified, ATC restrictions or for unacceptable transit distances, the examiner should liaise with the ATO in order to confirm the administration associated with carrying out the RNP APCH in the FSTD. This should include issues such as: • Applicant rest between a/c and FSTD test. • IOS operation. • The scenario that the applicant should expect. • FSTD familiarisation."

A4.2 SPH/MPH Type rating Skill Test/Proficiency Check Briefing

RECOMMENDED WEATHER MINIMA

Visibility: Generally greater than 5km, but not less than 3km.
Cloud (VFR): Navigation: generally greater than 1500'agl but not less than 1100'. General Handling not less than 1500' agl.
Cloud (IFR): IMC autorotation and unusual attitude – VMC.
Wind: Within limits.

Note for IFR applicants: Whilst the forecast / ATIS / or as given to you by ATC weather is to be used for planning the flight, IMC conditions will be simulated by screens to obstruct your forward view and you are to assume that:

(e) for the aircraft pre-flight inspection that aircraft has been left outside overnight in conditions which may have caused light rime ice to form so please take this into account when you are conducting the inspection.
(f) for the IFR part of the flight that we are IMC in possible icing conditions
(g) for departure we assume that the weather is at or about minima
(h) for arrivals we assume that the weather is at or about minima'

INITIAL BRIEFING

Meet, greet and establish ID; Confirm the test requirement (ST / PC / OPC / IRR / Initial issue / Revalidation / Renewal); Weather general picture: Does it look good enough for you to fly the Proficiency Check/Skill Test? Do we have a serviceable aircraft?

Document and equipment check:

- ✓ Evidence of completion of course of training (if applicable).
- ✓ Evidence of successful completion of theoretical examinations (if applicable).
- ✓ For each test series, a signed certificate of recommendation for test.
- ✓ If second or subsequent test, previous SRG2138.
- ✓ Second or subsequent series, evidence of retraining.
- ✓ Current licence if applicable; Valid Medical Certificate
- ✓ FRTOL.
- ✓ Aircraft documents; Tech Log; Fight authorisation sheet.
- ✓ IF visor/goggles, approved checklist, 2 compatible headsets (consider spare).
- ✓ Maps & Charts (current editions), nav planning equipment.

Note: *the examiner must review planning facilities and appropriate access to NOTAMS, Royal Flight information, Weather UK AIP, etc.*

MAIN BRIEF

Note: The brief below is given as an example only and examiners are encouraged to use it as an aide-memoir to ensure that all the appropriate points are covered.

The Purpose of the Flight(s)

Is for you to demonstrate your ability to conduct a flight as Pilot-in-Command, under normal and simulated emergency conditions VFR and IFR, to a safe level of competence, as required of a Pilot in accordance with Part FCL (and the Operations Manual - if appropriate).

Responsibilities

You are to assume command and act as Captain of the aircraft in accordance with the Flight Manual and procedures for Single (Multi) Pilot Operations.

You are responsible for all planning of the flight(s) including observing all Rules of the Air, checking the aircraft Tech Log and making all necessary bookings with ATC. However, I will have overall command of the helicopter and will sign the Tech Log.

You will be expected to carry out all given exercises, manoeuvres and procedures unassisted, and to a safe and satisfactory standard. This means that, always, I should be in no doubt as to the success or outcome of any particular exercise and should not need to take control at any time.

Throughout the test you are expected to display Captaincy, TEM and Airmanship by verbalising these points to me as they arise.

You will be responsible for cockpit administration, including the correct use of all aircraft equipment, controls, optional equipment, radio calls, frequency changes and transponder and altimeter settings as required. You are required to carry out the pre-flight checks, the SOPs, POH FM procedures for any equipment used and carry out the relevant actions when a warning is triggered.

For the IFR section, I shall fly the aircraft where the IF hood/visor make it impracticable for you to fly, such as hover taxying and the take-off, lookout is my responsibility.

I am not acting in the capacity of an instructor and you should consider me, for the test, as a passenger. I will be acting purely as an observer and will not offer any comment on any aspect of the flight. I will not initiate any conversation as this might distract you, but I will respond to any conversation initiated by you.

ATC instructions are to be followed at all times, even if contrary to my instructions. If necessary, I may need to operate the radio to establish an alternative clearance.

Your callsign throughout the test will be……

Checks

You are to use the approved checklist. During your pre-flight walk-round you should tell me what you are checking and why. I may ask questions about the checks.

Before we board the aircraft, you should brief me, as a passenger, on safety matters.

Complete the full internal checks using the checklist but thereafter you may complete the checks from memory. I want you to call out your check-list items as you do them. Please ensure the aircraft has an approved checklist.

Handling Tolerances

The handling tolerances for the test are prescribed in Part-FCL. *(Examiner should confirm the tolerances to be used*). They are there for guidance only and so you should not get overly anxious about the limits. Should the aircraft deviate from these limits I will be looking for you to make smooth corrections without undue delay.

In a similar way, if you think you have made a mistake then correct it and don't dwell on it. Everyone makes mistakes, so carry on with your flight, and concentrate on what you are doing.

During your flight I shall be an interested passenger, open to conversation and some basic assistance if you ask, but I won't be able to give advice or help you fly the aircraft. Please do not worry if I am being quiet. I will be trying not to interrupt your concentration.

Aircraft Control

At the end of the brief, I will ask you for the various parameters such as speeds and heights, that you plan to use. Once they are agreed you should use them but if you wish to change the height and/or speed you should notify me first.

Should we need to pass control of the aircraft between us at any time, the standard procedure is to be used, i.e., “Follow me through”, “You have control”, “I have control”.

Emergencies

As handling pilot, you should take the immediate action in response to any malfunction or Emergency whether simulated or real. If the Emergency is real, you will be informed as such and the test will be suspended. You are to continue as the handling pilot and achieve a safe flight configuration. I will give you all the assistance you require but as Captain, I reserve the right to take control if necessary. There will be no simulated emergencies during the instrument Section.

I will, using scenario-based techniques, introduce simulated emergencies or abnormal situations for which I will expect you to show me what action you would take. For example, I may point to a warning light and tell you that it has illuminated, point to a gauge and inform you of its reading, or suggest that the cockpit is filling with smoke, etc. You must then take the immediate action required by the aircraft flight manual, such as entering autorotation or landing immediately but all subsequent action must be touch drill only.

Autopilot Holds are available throughout the flight but only with my prior permission.

For the MEH autorotation I will complete the safety checks after which I shall then advise ‘Practice Double Engine Failure – GO’. You should react accordingly and depending on the situation I shall select both engines to IDLE. You are required to manoeuvre as necessary in autorotation to reach a suitable area for a successful landing. I shall recover both engines to FLIGHT by 500 ft AGL and declare so. Depending where this exercise is taking place etc. I will instruct you to either ‘GO AROOUND’ or to continue to your selected landing area for a full flare recovery. You should initiate the engine’s off technique as required but aim to establish in a high hover taxi before coming to a normal hover. During the descent you should complete any drills etc. as required.

Note: *The Examiner must confirm the applicants’ understanding of any immediate actions required by the specific aircraft type, the applicants’ understanding of ‘touch drills’, describe how any throttle/FCL/engine switches are to be manipulated during simulated malfunctions, and confirm that any required RT calls must be ‘in cockpit’ only*).

Aircraft Limitations/Oral TK Questioning

For all tests and checks, the examiner should ascertain through oral questioning or written test paper the appropriate level knowledge to be able to safely operate the aircraft type.

For Single Engine Helicopters skills tests, Part-FCL.725 additionally mandates that a theoretical knowledge examination shall be conducted verbally by the examiner during the skill test to determine whether a satisfactory level of knowledge has been achieved. A minimum of 10 questions should be asked for which the applicant shall achieve at least 75% pass rate. The questions asked and the results shall be recorded by the examiner.

The oral theoretical knowledge questions are to be type related and shall include at least the following:

(a) Weight limitations/MAUM /MTOW
(b) Vne/Vno Vy
(c) Power limitations
(d) Sloping ground limitations
(e) Avoid curve parameters
(f) Starter/Start limitations

(g) Fuel capacity/consumption/endurance
(h) Autorotation Speeds
(i) RRPM limits (power on/power off)
(j) Wind limitations/critical wind azimuth areas

For Multi Engine Helicopters the following should also be confirmed:

(a) Clear area profile: TDP, Vtoss, OEI climb, LDP
(b) VTOL/Helipad profiles: TDP, Vtoss, OEI climb, LDP

Order of Events

VFR:

The Examiner, with regard to weather, a/c availability, ATC restrictions etc, will determine the sequencing of the test /check and should use SRG2138 as an aide memoire.

For the IFR elements.

To establish or maintain PBN privileges, one approach shall be an RNP APCH. Where an RNP APCH is not practicable, it shall be performed in an appropriately equipped FSTD.

If an RNP APPCH is to be flown in the a/c, the applicant should demonstrate a suitable level of competency in how they will manage the navigation system used for the RNP APCH.

If the RNP APCH is to be flown in the FSTD, the applicant will be required to fly a conventional 3D and 2D approach before moving to the FSTD for the required RNP APCH. The examiner should liaise with the FSTD operator with regards to the administration of using the FSTD for the RNP APCH.

Slot time at ……. ET to ……. Departure time …… Walkaround……

During post-start checks you are to demonstrate how you are checking the serviceability of radio aids and flight instruments.'

During taxi, you should complete any instrument/navaids checks and request any appropriate manoeuvring as necessary.

'The route and types of approaches to be flown:

(a) A clear area take-off (call at TDP) will be conducted and I shall hand over control at about 100 to 200ft above the surface, trimmed at the attitude for the briefed climb speed with your briefed power setting.
(b) You are to fly the route as cleared to …… Once you have established on track to/from …. AP holds will be available to you from the ToC.
(c) The Hold (if required) will be established at …….
(d) If no Hold is required, you can request radar vectors to the 3D approach if available. You will fly the 3D approach as depicted on the plate at …… with the AP Holds being available to you up to being established on the FAT and before the FRF where the approach and GA will be flown manually.
(e) (Examiner should establish from applicant the approach minima).
(f) You will fly the 2D approach in accordance with the approach plate OEI. I shall set an OEI condition and you shall fly with OEI throughout the MAP. Once established at the ToC for the MAP I may recover to AEO before re-establishing OEI for the 2D approach. AP Holds will be available from this point for the 2D approach and GA.
(g) You will fly the 2D approach as depicted on the plate with OEI, with the AEO condition being re-established during the GA/MAP.
(h) (Examiner should establish from applicant the ILS DA and Min vis).

(i) You are to set up the radio aids however you require them, however but I may have to restrict your use of certain equipment at times, such as denying glide slope information during a 2D approach.

If ATC requires deviations from the planned route or order of approaches you shall be given the opportunity to reassess the situation before commencing an approach.'

After the last approach I will direct you to an area suitable for the autorotation and UA exercises. For these exercises I will declare the required recovery parameters for the GA and the UAs.

Following completion of the IFR section, we will revert to VFR for the remainder of the test/check.

Do you understand what is required and have you been adequately briefed?

Parameters

Note: The examiner should establish and note down, for reference during the debrief, the flight parameters to be used during the skills test to include climb, descend, autorotations (including RPM), instrument flight, etc. Additionally, for Multi Engine Helicopters, the OEI parameters that will be used.

If you have a requirement to change any of these parameters, please re-brief me at the time, before making the change.

Summary

That concludes the brief. If you do not have any questions, please sign the top half of the SRG 2138. You now have time to complete your planning. I shall then return for a pre-flight brief covering at least the following and incorporating the relevant TEM elements:

Note: the MATED brief is only included as a suggested aide memoir.

Met: Appropriate to the area and time of the flight.
Aircraft: AUM, C of G calculation, fuel load, tech log details.
a**T**c: Airfield details, NOTAMS, Royal Flights, RT services etc.
a**T**c (IFR): Airfield approach slot timings and approach plates.
Exercise: How the VFR/IFR sections are to be conducted.
Duties: Pax Brief, normally conducted at the aircraft.

Any questions?

A4.3 SPH/MPH Type rating Skill Test/Proficiency Check completion of Report Forms SRG 2138, SRG 2129 and SRG 1100

Examiners must ensure that they are using the most up to date version of the report forms downloaded from the CAA website.

Before flight – SRG2138

1. **Section 1. Applicant Details**

   Completed and signed by the applicant at the end of the main brief.

After flight

1. **SRG 2138, Section 2. Examiners Report of Test or Check**

   (b) Confirmation of applicants' instruction, experience and required exercises and manoeuvres completed: Examiner is required to validate the applicants training and experience complies with Part FCL, prior to conducting the test. Upon completion of the test annotate the form with a '✓' to confirm the above and that all the required manoeuvres and exercises have been completed.

   (c) A/C Type & Reg/FS: Examiner to complete the A/C or FS details with take-off landing times. If the flight was conducted in 2 parts, a line is used for each part.

   (d) Result to be annotated with ✓ (if fail or 'Partial Pass' complete a SRG2129 (see below)

   (e) For SEH type rating skill test the Oral TK at Section 7 requires completing and score entering. Note: a minimum of 75% is required to pass.

2. **SRG 2138, Section 3. Revalidation**

   For revalidation by experience of SEH/IR Cross Credit the examiner must validate the applicant's compliance with Part FCL.740H or Appendix 8 as applicable and enter the relevant aircraft types on the form. The new validity period of all type ratings revalidated in accordance with this shall commence together with the validity period of the type rating for which the skills test or proficiency check is performed.

3. **SRG 2138, Section 4. English Language Proficiency**

   Annotate with ✓ as appropriate using the guidance at Annex 10.

4. **Section 5 Confirmation**

   (a) Examiner's details: Enter all examiner details as annotated.

   (b) Non-UK examiners: annotate with ✓.

   (c) Applicant signature: After informing the applicant of the result, the applicant must sign the form.

5. SRG 2138, Page 2. Applicants details section:

(a) Complete applicant's details
(b) A/C Type & Reg/FS: Examiner to complete the A/C or FS details with take-off landing times. If the flight was conducted in 2 parts a line is used for each part.

6. SRG 2138, Page 2. Manoeuvres and Procedures Section 1-7:

Result: Annotate according to the following:

'P' or 'PASS' must be used to annotate items that have been passed.

2P if an item is passed on a second attempt during the flight.

'F' or 'FAIL' must be used to annotate items that have been failed.

'N/F' or 'NOT FLOWN' must be used to annotate items or sections that were not flown by applicant when the test was terminated or to identify items not flown in an incomplete section.

'INC' or 'INCOMPLETE' must be used to annotate section(s) that were not completed due to unforeseen circumstances. For example, illness, un-forecast weather, aircraft technical problems, etc.

7. SRG 2129, Section 10. Confirmation of Skills Test

If the applicant has failed any items, an SRG 2129 must be completed to include a description of the failed item(s). These comments must be concise and factual using actual heading, height or airspeed deviations whenever appropriate. Personal opinion is NOT fact and must be avoided. The following are examples of expressions that should not be used without quantification: 'Poor circuit', 'Outside limits' ''Off track', 'PFL failed'.

Examiner will either recommend or mandate the amount and type of training required to be undertaken. 'Recommended' indicates that re-training is not mandatory. Mandatory training will require a course completion certificate appropriate to the training received.

8. SRG 1100 Temporary Certificate of Licence Privileges

(a) Section 1 Personal Particulars of Applicant: Examiner to complete the applicant's details.

(b) Section 2 Temporary Privileges: Examiner to complete the items applicable only to the test/check conducted after verifying the applicant has fulfilled all the applicable necessary requirements to exercise the temporary privilege.

(c) Section 3 Confirmation of ST, PC or AoC: Examiner to complete.

(d) Section 4 Declaration of CAA Inspector or Examiner: Examiner to complete after satisfying the applicant has met all the necessary requirements for the privilege being exercised.

A4.4 SPH/MPH Type rating Skill Test/IR Proficiency Check Assessment Criteria

Where the letter "M" appears on the form SRG 2138 schedule this indicates a mandatory exercise. These items are the ***minimum*** requirement of the test or check schedule. As it is not possible to design a one-size-fits-all test for all helicopters, the examiner is required to exercise judgement in conducting flight tests given the circumstances or aircraft type. The non-mandatory items in the check/test give the examiner room to adjust the flight test to suit operational conditions or helicopter type. Those items that are not annotated 'M' should not be taken to mean that the item must always be ignored. It is not satisfactory simply to fly the basic minimum profile, without assessing the pilot's ability to operate those aircraft systems that are necessary for the safe operation of the aircraft type, in both normal and abnormal conditions. For example, in aircraft equipped with an autopilot, flight director or flight management systems, the applicant will be required to demonstrate the testing and correct use of the equipment.

SECTION 1 – PRE-FLIGHT PREPARATION AND CHECKS

1.1 Helicopter exterior visual inspection component location and purpose of inspection

1. *Complete all elements of the helicopter and equipment pre-flight inspections as detailed in checklist, operating handbook or flight manual*
2. *Check helicopter serviceability record and technical log*
3. *Using an approved checklist perform all elements of the helicopter pre-flight inspections, identifying components and functions as required by the examiner*
4. *Check and complete all necessary documentation*
5. *Complete an appropriate passenger emergency procedure briefing for the Examiner*

1.2 Cockpit Inspection

1. *Complete all elements of the helicopter internal and cockpit pre-flight inspections as detailed in checklist, operating handbook or flight manual*

1.3 Starting Procedures, radio and navigation equipment check, selection and setting of navigation and communication frequencies

1. *Complete engine starting procedures in accordance with checklist, operating handbook or flight manual*
2. *Complete all recommended communication and navigation equipment checks*
3. *Select and set appropriate frequencies and transponder codes*

1.4 Taxiing/air taxiing in compliance with ATC/instructor instructions

1. *Complete all recommended taxying checks and procedures*
2. *Comply with ATC instructions, airport markings and signals*
3. *Maintain control and proper spacing from other aircraft and obstacles*
4. *Demonstrate standard RTF procedures and phraseology*
5. *Demonstrate compliance with ATC instructions*

1.5 Pre take-off procedures and checks

1. *Ensure all systems are within normal operating range and aircraft correctly configured for departure*
2. *Complete all departure checks and drills including engine operation*
3. *Obtain and comply with ATC departure clearance*
4. *Confirm any helicopter performance criteria including crosswind condition*

5. *Position the helicopter correctly for take off*
6. *Use the correct take off technique using the recommended speeds for transition and initial climb*
7. *Ensure a safe climb and departure adjusting power and helicopter configuration as appropriate*
8. *Complete all necessary after take-off checks*
9. *Execute a safe departure in accordance with clearance and with due regard for other air traffic*
10. *Use correct lookout techniques*
11. *Complete all necessary climb checks*

SECTION 2 – FLIGHT MANOEUVRES AND PROCEDURES

2.1 Take-offs (various profiles)

1. *Confirm any helicopter performance criteria*
2. *Use the correct take off technique using the recommended speeds for rotation/lift-off and initial climb*
3. *Ensure a safe climb and departure adjusting power and helicopter configuration as appropriate*
4. *Complete all necessary after take-off checks*
5. *Execute a safe departure in accordance with clearance and with due regard for other air traffic*
6. *Use correct lookout techniques*
7. *Complete all necessary climb checks*

2.2 Sloping ground & crosswind take-off & landing

1. *Identify landing area on slope and conduct recce*
2. *Move onto slope area and conduct up slope/cross slope landing*
3. *Maintain heading, ground position, and prevent movement of aircraft on slope*
4. *When landed centralise the flying controls*
5. *Prior to take off preposition controls*
6. *Lift into hover maintaining heading and ground position*
7. *Move away from slope ensuring tail is not turned towards the slope*
8. *Be prepared to abort the landing at any stage*
9. *Complete all necessary checks and drills throughout*
10. *Maintain lookout throughout*

2.3 Take off at maximum take-off mass (actual or simulated mass)

Normally simulated by the examiner giving a simulated power limitation.

1. *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*
2. *Maintain directional control/balance throughout*
3. *Complete all necessary checks and drills throughout*
4. *Maintain lookout throughout*

2.4 Take off with simulated engine failure shortly before reaching TDP or DPATO (ME)

1. *For aircraft with a number of Cat A profiles it is recognised that this exercise may be a selection from each so that a reject and flight continued with one engine operative can be assessed*
2. *Control RRPM*
3. *Maintain direction and balance*
4. *Observe power limitations (OEI)*
5. *Follow correct profile as per RFM*
6. *Maintain lookout throughout*
7. *Complete all necessary drills and checks*

2.4.1 Take off with simulated engine failure shortly after reaching TDP or DPATO (ME)

1. *Control RRPM*
2. *Maintain direction and balance*
3. *Observe power limitations (OEI)*
4. *Follow correct profile as per FM*
5. *Maintain lookout throughout*
6. *Complete all necessary drills and checks*

2.5 Climbing and descending turns onto specified headings

1. *Establish climb/descent and turns onto nominated height, headings and rates of bank*
2. *Control helicopter altitude, and heading using visual attitude flying technique*
3. *Maintain control and balance throughout*
4. *Complete all necessary checks and drills throughout*
5. *Maintain lookout throughout*

2.5.1 Turns with up to 30 deg AOB, 180 degrees to 360 degrees left and right by sole reference to instruments (if section 5 is not to be completed)

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

2.6 Autorotative descent

1. *Select an area and height/altitude for the nominated autorotation*
2. *Carry out HASEL (or other appropriate) checks*
3. *Establish straight and level flight at the nominated speed, height and heading with cruise power set*
4. *Initiate manoeuvre with verbal warning – Practice Autorotation Go- and establish autorotation (MEH Practice Double Engine Failure Go)*
5. *Fly the appropriate parameters for the nominated technique.*
6. *When instructed by the Examiner to 'Go Around' (or at an agreed height/altitude) open throttle and establish the aircraft into a climb using the nominated climbing speed.*
7. *Maintain lookout throughout*
8. *Maintain directional control and balance throughout*
9. *Control Nr throughout*
10. *Complete all necessary checks and drills throughout*

2.6.1 Autorotative landing (SEH only) or power recovery

Note: Completion of this item is required for both SE and ME helicopters. If a SEH, then an autorotative landing is normally required. For MEH an autorotation to a power recovery is required.

1. *Identify the nominated landing area, if appropriate conduct recce (Size, Shape, Surrounds, Slope Surface)*
2. *Carry out HASEL (or other appropriate) checks*
3. *Establish final approach (into wind), straight and level flight at the nominated speed, height and heading with cruise power set*
4. *Initiate manoeuvre with verbal warning – Practice Engine Failure Go- and establish autorotation using the appropriate parameters for the nominated technique*
5. *Close throttle to idle position (only if appropriate and briefed by the examiner), if necessary the Examiner will assist.*
6. *Ensure no aircraft skid or drift, Nr is appropriate, ROD is appropriate and landing area is achievable by 300ft agl*
7. *Apply appropriate flare at appropriate height for aircraft/conditions*
8. *Cushion the aircraft onto the ground, with a running landing if appropriate, whilst maintaining heading*
9. *Lower collective lever judiciously*
10. *If instructed by the Examiner to 'Go Around' (or at an agreed height/altitude) open throttle and establish the aircraft into a climb using the nominated climbing speed.*
11. *Maintain lookout throughout*
12. *Maintain directional control and balance throughout*
13. *Control Nr throughout*

2.7 Landings various profiles

1. *Demonstrate an approach nominated by the Examiner.*
2. *Maintain lookout throughout*
3. *Maintain directional control and balance throughout*
4. *Control Nr throughout*

2.7.1 Go around or landing following simulated engine failure shortly before LDP or DPBL (ME)

1. *Control RRPM*
2. *Maintain direction and balance*
3. *Observe power limitations (OEI)*
4. *Follow correct profile as per RFM*
5. *Maintain lookout throughout*
6. *Complete all necessary drills and checks*

2.7.2 Landing following simulated engine failure after LDP or DPBL (ME)

For aircraft with a number of CAT A profiles it is recognised that this exercise may be a selection from each so that a go around and subsequent landing with one engine operative can be assessed

1. *Control RRPM*
2. *Maintain direction and balance*
3. *Observe power limitations (OEI)*
4. *Follow correct profile as per RFM*
5. *Maintain lookout throughout*
6. *Complete all necessary drills and checks.*

SECTION 3 NORMAL AND ABNORMAL OPERATIONS OF SYSTEMS AND PROCEDURES

The examiner shall select a mandatory minimum of 3 items from this section to be given to the applicant in a realistic scenario so that the applicant can demonstrate their ability to maintain control of the aircraft whilst carrying out the appropriate drills as per the aircraft flight manual. The examiner must observe both the normal and abnormal operations of the relevant system being tested. Items tested in this section must be different to those tested in Section 4.

SECTION 4 - ABNORMAL AND EMERGENCY PROCEDURES

The Examiner shall select a mandatory minimum of 3 items from this section to be given to the applicant in a realistic scenario, so that the applicant can demonstrate their ability to identify the emergency/malfunction and carry out the appropriate drills IAW with the FM, in a timely manner. Items tested in this section must be different to those tested in Section 3.

SECTION 5 - INSTRUMENT FLIGHT PROCEDURES (ACTUAL OR SIM IMC)

Section 5 will always require the applicant's presentation of an IFR Flight Plan and submission where required and where practical should enter Class A airspace. Flight in controlled airspace is desirable so that ATC liaison and compliance with ATC clearance and control may be assessed. It is recognised this may prove difficult to achieve due to airspace restrictions and geographic locations. Therefore, it is essential that flight into controlled airspace should be included during flying training

The applicant remains responsible for the accurate and safe conduct of the flight irrespective of whether the aircraft is being manually flown or operated via autopilot, flight director and/or flight management system.

The autopilot may be used throughout, however for the 3D approach, the upper modes of the autopilot should be disconnected once established on the localiser and before the FAF so that the applicant's handling of any trim change during final configuration may be assessed.

Where failure of instruments is required in a helicopter this should be simulated by covering the instruments or by switching off/dimming EFIS displays. For aircraft fitted with electromechanical instruments, standby instrument flight should be demonstrated; however, for EFIS equipped aircraft it may be appropriate to assess flight in composite/reversionary modes. Testing in the aircraft of unusual attitudes is to be conducted in VMC. In a FSTD the failure should be initiated from the console and preferably should be insidious.

5.1 Instrument take off: transition to instrument flight as soon as possible after becoming airborne

The take-off and departure should be flown manually until ToC and stabilising for the en-route section.

1. *Perform take-off in accordance with the performance calculations using the correct techniques.*
2. *Establish the climb, complete a smooth transition to instrument flight and complete after take-off checks and drills*
3. *Complete the Standard Instrument Departure procedure (SID) or follow the ATC departure instructions. Use of correct altimeter setting procedure*
4. *Maintain helicopter control, speed, heading, level and balance*
5. *Apply appropriate drift corrections to maintain published departure track or as instructed by ATC*
6. *Identify any navigation aids used*
7. *Comply with any noise routing or departure procedures and ATC clearances*
8. *Complete all necessary climb checks including altimeter setting procedures and ice precautions*
9. *En-route IFR*
10. *Follow the flight-planned route or any other ATC route requirements within the operating limits specified*
11. *Identify and use navigation systems correctly*
12. *Use the correct altimeter setting procedures and show awareness of MSA*

13. *Maintain a flight log for navigation, RTF, and fuel use, sufficient to give position reports and to confirm acceptable minimum fuel states*
14. *Conduct en-route holding procedures if required by ATC*
15. *Monitor OAT and the helicopter surfaces for ice, and take the appropriate actions if necessary. (This may be simulated if there is no actual icing)*
16. *Use correct RTF procedures and phraseology*

5.1.1 Simulated engine failure during departure

1. *Establish helicopter in a safe climb Observe power limitations (OEI). Control RRPM*
2. *Maintain direction and balance*
3. *Configure the helicopter to achieve and maintain the climb performance in the POH/Aircraft Flight Manual.*
4. *Perform OEI checks and procedures as outlined in the POH/Flight manual.*
5. *Use correct RT procedures.*
6. *Follow published departure procedure/profile or as directed by ATC*

5.2 Adherence to departure and arrival routes and ATC instructions

1. *Follow all vertical and horizontal profiles as per published procedures or as directed by ATC.*
2. *Maintain correct RT procedures. Adhere to ATC instructions.*

5.3 Holding Procedures

Although this exercise is not mandatory, periodical inclusion of an unplanned hold is strongly recommended. Automatics can be used and therefore value can be obtained by giving a last-minute clearance into the hold or, if FMS is fitted, an early exit from the hold to see how the FMS is handled.

1. *Complete any holding procedure with appropriate corrections for tracking and timing to achieve the published holding pattern.*

5.4 3D operations to DH/A

Whenever possible, all checks should include a mix of radar-vectored and procedural instrument approaches.

5.4.1 3D approach down to CAT1 DA/DH manually without flight director (M)

In order to ensure a low DA/H and assessment of skills to fly an approach down to where the indications are sensitive and critical, an angular approach ILS, LPV or LNAV/VNAV should be selected.

While it may be possible to combine various test items for expediency, since this exercise is fairly demanding, it may be wise to avoid overloading the applicant in this way. According to the AFM, RNP APCH procedures may require the use of autopilot or Flight director. The procedure to be flown manually shall be chosen taking into account such limitations. For example, an ILS approach may be more appropriate.

1. *Complete the checks and drills for landing and configure the aircraft correctly*
2. *Set and identify relevant navigation aids*
3. *Set and cross check the appropriate altimeter settings*
4. *Use correct RTF procedures and terminology and comply with all ATC instructions and clearances*
5. *Confirm the availability and serviceability of selected navigation equipment*
6. *Comply with the published arrival and precision approach procedures*
7. *Establish the appropriate helicopter configuration and airspeed for the phase of the approach*

8. *Complete the necessary helicopter checks and drills*
9. *Complete the manoeuvring pattern as required to establish the final approach segment within the specified flight tolerances*
10. *Establish the final approach and maintain the approach path in horizontal and vertical profile to Decision Height/Altitude*
11. *Control the aircraft as necessary to achieve a stable and trimmed final approach path*
12. *Acquire visual references and continue to land or initiate missed approach by Decision Height/Altitude DH/A*

5.4.2 3D Approach manually, with or without flight director (M)

While it may be possible to combine various test items for expediency, since this exercise is fairly demanding, it may be wise to avoid overloading the Applicants in this way. A degraded coupled ILS also meets the requirement for a manual approach. The flight may be referenced to FD or raw as appropriate.

1. *Complete the checks and drills for landing and configure the aircraft correctly*
2. *Set and identify relevant navigation aids*
3. *Set and cross check the appropriate altimeter settings*
4. *Use correct RTF procedures and terminology and comply with all ATC instructions and clearances*
5. *Confirm the availability and serviceability of selected navigation equipment*
6. *Comply with the published arrival and precision approach procedures*
7. *Establish the appropriate helicopter configuration and airspeed for the phase of the approach*
8. *Complete the necessary helicopter checks and drills*
9. *Complete the manoeuvring pattern as required to establish the final approach segment within the specified flight tolerances*
10. *Establish the final approach and maintain the approach path in horizontal and vertical profile to Decision Height/Altitude*
11. *Control the aircraft as necessary to achieve a stable and trimmed final approach path*
12. *Acquire visual references and continue to land or initiate missed approach by Decision Height/Altitude DH/A*

5.4.3 3D approach down to CAT1 DA/DH with coupled autopilot

Whist the manual OEI ILS is mandatory, this item is not. An examiner should consider assessing an applicant's use of the AP functionality in managing an automated ILS.

1. *Select and comply with the appropriate ILS instrument approach procedure.*
2. *Confirm the serviceability of selected navigation equipment.*
3. *Comply with all ATC instructions and clearances.*
4. *Use correct RTF for ILS procedures.*
5. *Establish the appropriate helicopter configuration and airspeed for all phases of the approach.*
6. *Complete the necessary helicopter checks and drills.*
7. *Complete the manoeuvring to establish the final approach segment within the specified limits.*
8. *Establish the final approach segment and maintain the approach track and vertical profile to DH/DA*
9. *Acquire visual references and continue to land or initiate missed approach by MAP*
10. *If flying a circling approach, acquire visual references by circling minima and circle IAW the published procedure or conduct MAP.*

5.4.4 Manually with simulated OEI

Engine failure has to be simulated during final approach before passing 1000 feet above aerodrome level until touchdown or until completion of missed approach procedure

1. *Select and comply with the appropriate ILS instrument approach procedure.*
2. *Confirm the serviceability of selected navigation equipment.*

3. *Comply with all ATC instructions and clearances.*
4. *Use correct RTF for ILS procedures.*
5. *Establish the appropriate helicopter configuration and airspeed for all phases of the approach.*
6. *Complete the necessary helicopter checks and drills.*
7. *Complete the manoeuvring pattern to establish the final approach segment within the specified limits.*
8. *Establish the final approach segment and maintain the approach track and vertical profile to DH/DA*
9. *Acquire visual references and continue to land or initiate missed approach by MAP*
10. *If flying a circling approach, acquire visual references by circling minima and circle IAW the published procedure or conduct MAP.*

5.5 2D operations to MDA/H

This may be flown either automatically or manually. If the use of LNAV has been approved, this may be used. The crew remain responsible for monitoring the radio aid(s) and ensuring the tracking remains within limits when flying this 'overlay' Type of approach.

A Non-Directional Beacon (NDB) aural ident need not be continuously monitored during a 2D Approach, on a non-EFIS equipped aircraft, if the needle or visual ident disappears or if the needle fails to a "parked" position when the signal is lost. However, if it is the company's policy to monitor NDB idents continuously, in all cases, pilots shall obey company SOPs. An RNAV approach is quite acceptable as meeting the 2D requirement

A 2D operation may be flown either using aircraft automation or manually. However, a two-dimensional (2D) instrument approach operation means an instrument approach operation using lateral navigation guidance only. Therefore, a 2D approach must be flown with the vertical path manually selected and controlled.

If the approach requires the use of ground-based radio aid(s), e.g. NDB/DME, VOR/DME, the pilot remains responsible for monitoring these and ensuring the tracking remains within limits, the same applies when flying an 'overlay' approach. If the aircraft is equipped with a means of visually identifying a radio aid and validity of signal, then an audio ident is not necessary. However, awareness and monitoring of a reliable and valid signal must be demonstrated.

A 2D operation shall normally be flown to the specified minima and not to circling minima, unless they are coincident. This is to ensure that the transition from an instrument approach procedure to a visual manoeuvre does not occur at such an early stage as to preclude comprehensive assessment of the former. Provided you are satisfied in this respect, it is not necessary for a further 2D operation to be flown.

A 2D operation may be flown using the Continuous Descent Final Approach (CDFA) technique. If this technique is used, then pilots must be trained and checked iaw the company OM Part D, and the examiner must establish which technique is to be used on the test/check.

Note: The new GM5 CAT.OP.MPA.110 'Use of DH for 2D flown using the CDFA technique' clarifies that it is not usually necessary to add an increment to the MDA/H for an 2D procedure in order to derive a DA/H for a CDFA operation. The safety of the use of MDH as DH in CDFA operations has been verified by at least two independent analyses concluding that CDFA using MDH as DH without any add-on is safer than the traditional step-down and level-flight 2D operation. It should be noted that the design limits of the ILS approach design, e.g. the maximum GP angle of 3,5 degrees, must be observed for the CDFA in order to keep the validity of the comparison. In some circumstances (e.g. descent path steeper than 3.5 degrees), the operator may need to make a specific safety assessment.

Whilst lateral and vertical tolerances in accordance with the performance criteria shall be taken into account, you should use your professional judgement and take into account all factors when deciding whether a 2D operation has been flown to the required standard or not, e.g. for a crew who share a high level of situation awareness of the profile by communicating altitude versus distance to go to the

threshold, and are flying a stabilised approach whilst making sensible corrections based upon the type of approach flown.

It is noted that many Operators use on-board equipment to 'manage' an approach laterally and vertically when conducting most normal approach operations. However, whilst this may be encouraged and best practice during normal operating conditions, Operator Proficiency Checks or scenario-based training and assessment details, executing a manually selected vertical profile remains an approach option on modern commercial aircraft and is a requirement of part FCL Appendix 9, so competency shall be demonstrated. However, for such Operators, creating realistic scenarios that compel pilots to use a vertical intervention mode may present difficulty. Whilst some options do exist - e.g. temperature colder than the approach limitations, unplanned diversion with the approach not in the aircraft FMS data base - if these impede training value, you may wish to brief and conduct a 2D operation as a stand-alone test item. The Authority actively encourages techniques that optimise Situational Awareness and the mitigation of threats and errors, indeed these aspects are observable crew competencies. Therefore, the appropriate use of aircraft systems, such as vertical path indicators, Vertical Situation Displays (VSD's), expanded Navigational Displays, EGPWS, etc. may be utilised when reliable. However, such displays may only be used to augment Situational Awareness, you must ensure that crew co-ordination and vertical path monitoring skills are assessed.

1. *Select and comply with the appropriate VOR/NDB/RNP instrument approach procedure*
2. *Confirm the serviceability of selected navigation equipment*
3. *Comply with all ATC instructions and clearances*
4. *Use correct RTF for VOR/NDB/RNP procedures*
5. *Establish the appropriate helicopter configuration and airspeed for all phases of the approach*
6. *Complete the necessary helicopter checks and drills*
7. *Complete the manoeuvring pattern to establish the final approach segment within the specified limits*
8. *Establish the final approach segment and maintain the approach track and vertical profile to MDA/H*
9. *Acquire visual references and continue to land or initiate missed approach by MAP*
10. *If flying a circling approach, acquire visual references by circling minima and circle iaw the published procedure or conduct MAP*

5.6 Go around with all engines operating on reaching DA/DH or MDA/MDH

1. *Establish helicopter in a safe climb*
2. *Configure the helicopter to achieve and maintain the climb performance in the POH/Aircraft Flight Manual (full use of the AP should be made including any ALT PRE/ALT AQUIRE functionality).*
3. *Follow published missed approach procedure or as directed by ATC*

5.6.1 Other missed Approach Procedures

As required.

5.6.2 Go around with OEI on reaching DA/DH or MDA/MDH

1. *Establish helicopter in a safe climb.*
2. *Configure the helicopter to achieve and maintain the climb performance in the POH/Aircraft Flight Manual.*
3. *Perform OEI checks and procedures as outlined in the POH/Flight manual.*
4. *Use correct RT procedures.*
5. *Follow published missed approach procedure or as directed by ATC.*
6. *Make appropriate use of AP Holds if permitted.*

5.7 IMC autorotation with power recovery

1. *Establish a safe autorotative configuration.*
2. *Maintain speed and RRPM as per the POH/Flight Manual.*
3. *Carry out forced landing procedure turning into last known wind direction.*
4. *Secure aircraft configuration as per the POH/Flight manual including shut down touch drills.*
5. *Initiate Go-around at pre-briefed altitude and recover aircraft to safe condition using power recovery.*

5.8 Recovery from unusual attitudes

2. *Recover from unusual attitudes (at least 2 e.g. high speed turning descent, low speed with high rate of descent).*
3. *Establish, Wings level, in balance, correct Attitude, appropriate Speed, Power application as required. (WASP).*
4. *Recover to planned altitude / minimum safe altitude and adjust heading where applicable.*

SECTION 6 – USE OF OPTIONAL EQUIPMENT

The examiner should consider the equipment fit of the aircraft and its optimum use - TAWS, Radar, GPS, radar altimeter etc and incorporate its use in the test/check. The pilot should know/carry out the pre-flight checks, the SOPs/POH/FM for the equipment use, and what the relevant actions are if the warning is triggered. The equipment tested should be annotated on the section 6 of the SRG2138.

SECTION 7 – Oral TK for SE Type Ratings (as Applicable)

The oral theoretical knowledge questions are to be type related and shall include at least the following:

7.1 Weight limitations/MAUM /MTOW
7.2 Vne/Vno Vy
7.3 Power limitations
7.4 Sloping ground limitations
7.5 Avoid curve parameters
7.6 Starter/Start limitations
7.7 Fuel capacity/consumption/endurance
7.8 Autorotation Speeds
7.9 RRPM limits (power on/power off)
7.10 Wind limitations/critical wind azimuth areas
7.11 Other limitations from the appropriate flight manual

APPENDIX 5 OPERATOR PROFICIENCY CHECKS AND RECURRENT FLYING TRAINING PROGRAMME

A5.1 SPH/MPH Operator Proficiency Check Administration

	SPH/MPH OPERATOR PROFICIENCY CHECK
Part ORO:	Part ORO.FC.230 (b)(1)
Standards Doc	SPH Standards Doc 14H; MPH Standards Doc 24H
Who Can Test:	TRE(H), SFE(H), FE CPL (H) with OPC Privilege
Validity	6 months validity The revalidation may be flown within 3 months of the due date, the new validity being 6 months from the end of the month of that due date.
Form Used:	Company OPC form from OM Part D.
Form Guidance:	Company OM Part D
Test Format:	As shown on SRG 2138 and Standards Doc 14 (H). **Proficiency Check** As per OM-Part D and Section FEM Section A4.
Test Parameters	As per OMPart D
Pass/Partial/Fail Criteria	As per OM Part D
Content OPC	ORO.FC.230. b) Recurrent checking Recurrent checking should comprise the following: (1) Operator proficiency checks (ii) Helicopters (A) Where applicable, operator proficiency checks should include the following abnormal/emergency procedures: (See Note1 Below) — engine fire; — fuselage fire; — emergency operation of under carriage; — fuel dumping; — engine failure and relight; — hydraulic failure; — electrical failure; — engine failure during take-off before decision point; — engine failure during take-off after decision point; — engine failure during landing before decision point; — engine failure during landing after decision point; — flight and engine control system malfunctions; — recovery from unusual attitudes; — landing with one or more engine(s) inoperative; — instrument meteorological conditions (IMC) autorotation techniques; — autorotation to a designated area; — pilot incapacitation; — directional control failures and malfunctions. (B) For pilots required to engage in IFR operations, proficiency checks include the following additional abnormal/emergency procedures: — 3D approach operation to minima; — go-around on instruments from minima with, in the case of multi-engine helicopters, a simulated failure of one engine; — 2D approach operation to minima; — at least one of the 3D or 2D approach operations should be an RNP APCH or RNP AR APCH operation; — in the case of multi-engine helicopters, a simulated failure of one engine to be included in either the 3D or 2D approach operation to minima;

	— landing with a simulated failure of one or more engines; — where appropriate to the helicopter type, approach with flight control system/flight director system malfunctions, flight instrument and navigation equipment failures. (C) Before a flight crew member without a valid instrument rating is allowed to operate in VMC at night, he/she should be required to undergo a proficiency check at night. Thereafter, each second proficiency check should be conducted at night. (iii) Once every 12 months the checks prescribed in (b)(1)(ii)(A) may be combined with the proficiency check for revalidation or renewal of the aircraft type rating.
Recurrent Training	**RECURRENT TRAINING SYLLABUS** (a) Recurrent training Recurrent training should comprise the following: (4) Aircraft/FSTD training (i) General (A) The aircraft/FSTD training programme should be established in a way that all major failures of aircraft systems and associated procedures will have been covered in the preceding 3 year period. (B) When engine-out manoeuvres are carried out in an aircraft, the engine failure should be simulated. (C) Aircraft/FSTD training may be combined with the operator proficiency check. (D) When the aircraft/FSTD training is conducted within 3 calendar months prior to the expiry of the 12 calendar months period, the next aircraft/FSTD training should be completed within 12 calendar months of the original expiry date of the previous training. (ii) Helicopters (A) Where a suitable FSTD is available, it should be used for the aircraft/FSTD training programme. If the operator is able to demonstrate, on the basis of a compliance and risk assessment, that using an aircraft for this training provides equivalent standards of training with safety levels similar to those achieved using an FSTD, the aircraft may be used for this training to the extent necessary. (B) The recurrent training should include the following additional items, which should be completed in an FSTD: — settling with power and vortex ring; — loss of tail rotor effectiveness.
Notes	**1.** CAA ALT MOC to ORO.FC.230 allows approved helicopter Operators to establish a training and checking programme covering normal, abnormal and emergency procedures over a three-year cycle comprising up to 6 OPCs.

A5.2 Operator Proficiency Checks - General

AOC Operators are required to conduct recurrent training and checking as specified in Part ORO.FC.230. The mandatory OPC content published in the AMC, is similar to that for an ST or PC and it is usual to combine these checks. However, it must be remembered that whenever an item requires both training and checking, the recurrent aircraft/FSTD training and operator proficiency check of an item should not take place at the same time. You should be familiar and fully conversant with the Operator's requirements. Whilst Part OPS provides no specific guidance on the conduct of recurrent checks and the standards that should be required, it is expected that the limits, general guidance, principles of overall competency, including repeat and re-test requirements described within this FEM are aligned with part FCL Appendix 9 and should be applied to the conduct of OPCs and Operator recurrent training and checking programmes. An Operator may wish to set higher standards for recurrent checking and indeed incorporate additional items beyond those required in Appendix 9. These standards should be specified in their Operations Manual Part D (Training), for acceptance by the Authority. Reference may be made to Part FCL Appendix 9, Standards

Documents and the CAA FEM if these standards are to be applied. If the applicant is to be qualified to operate under Instrument Flight Rules, the OPC should be conducted in actual or simulated IMC. If a valid IR is not held then before a pilot can operate VMC at night an OPC at night is required and thereafter each second OPC shall be conducted at night.

Some Operators may in agreement with the Authority, include ground training alongside recurrent flight training; for example, during the briefing. The Authority supports alternative training concepts where possible and reasonable controls assuring compliance and quality, however the mandatory briefing and testing requirements must be fulfilled.

A5.3 OPC Briefing

The OPC is different from a PC or Type Rating Skills Test in several ways

- it has to reflect the operation and operating environment associated with the AOC;
- the number of failed items is determined by the Operator.
- It can include training alongside testing
- Content is prescribed by ORO.FC.230, not Appendix 9 to Part FCL

The format of the OPC follows the same briefing, conduct, assessment and debriefing elements of the PC/ST contained in Appendix 4. This section only addresses the differences and aspects uniquely associated the OPC.

A5.3.1 Recommended Weather Minima

If the OPC is combined with a PC, then use those specified in Appendix 4. Otherwise use those contained in the Operator's OM Part D.

A5.3.2 Aim of the OPC

The aim of the OPC is to demonstrate competence in carrying out normal, abnormal and emergency procedures using a normally constituted crew, utilising the appropriate checklists/SOPs, performance calculations and flight profiles associated with commercial air transport operations. In order to do this, the TRE should consider the following guidance when planning, briefing and conducting the OPC:

(a) Effective – For the OPC to be effective the TRE must have a full understanding of the AOC operation, the company SOPs, the requirements of the Chief Pilot, and the reasoning for the elements contained in the OPC. The examiner should be aware of the applicants training, experience and previous OPC performance in order that the check can be tailored, where appropriate, to be as effective as possible and therefore permitting the applicant to gain the maximum benefit from the flight.

(b) Efficient – The OPC is a non-revenue flight, therefore it should be planned to be conducted as efficiently as possible to achieve the required aims. Long transit flights, unnecessary repetition of exercises and simple GH handling exercises (that are already part of a PC, or known to be in the capabilities of the pilot) should not be conducted at the expense of more the relevant exercises, and if possible avoided altogether.

(c) Pragmatic – The exercises in the OPC should be given in a pragmatic manner and wherever possible in a scenario based on the AOC operation. For example rather than stating ' I am going to give you x power - show me cushion creep take off', it is more pragmatic to say 'you now have picked up x passengers, you have x fuel and therefore only have x power in hand, show me what you are going to do'.

(d) Challenging – The OPC should be challenging for the applicant, therefore enabling the TRE to see the capabilities of the applicant when operating under pressure.

(e) Malfunctions & Emergencies – In the planning stage, the examiner must decide which malfunctions and emergency procedures that they want to see practically demonstrated in flight, as opposed to those the wish to discuss in the classroom. As a general rule, 'tell me what you would do' should be reserved for the classroom and 'show me what you would do' used in flight. To ensure the maximum benefit is gained from this element of the check, the applicant must be permitted to demonstrate all of their skills including diagnostic, problem solving, Airborne Decision Making (ADM), TEM, CRM, knowledge of FM/SOPs etc and not just demonstrate physical handling skills.

A5.4 Helicopter/FSTD Crewing

As per the Operator's OM Part D and FEM Appendix 4.

A5.5 Training Alongside Testing

A5.5.1 Proactive Training

During a combined PC/OPC it is accepted that the check may include an element of training. It is acceptable, and often necessary and desirable, to train difficult and complex items (usually multiple events: e.g. total electrics failure, autopilot malfunctions). In an FSTD you may use freeze function to point out and explain in "slow time" the indications of the failure. However, any routine aspects of the item such as the competence to read a straightforward checklist shall never be in doubt. Straightforward exercises (e.g. engine fire, pilot incapacitation), which line pilots are routinely expected to manage successfully without training input, should be subject to check in the accepted manner.

A5.5.2 Reactive or Remedial Training

This is when instructional input is needed to improve an applicant's performance. It is generally well recognised by examiners that the skill test/proficiency check is a "two attempt" test or check, with all items in attempt number one having to have been attempted by the Applicant before any re-testing/re-checking can occur in attempt number two. By definition, retraining will have to be given before this re-testing/re-checking [**Note**: the intended meaning of the foregoing is that any retraining deemed necessary shall precede re-testing/re-checking, rather than that retraining is mandatory], and this has led to some confusion amongst examiners – this retraining can be given at any appropriate time prior to the re-test/re-check – it does not have to be performed immediately prior to any re-test/re-check. As an extreme example, an applicant may crash at the beginning of a test/check, say on an engine failure after take-off. It would be inappropriate and counterproductive to attempt to carry on without any training input - indeed it would make perfect sense to train the Applicant to proficiency before continuing the test/check. The re-test/re-check would then be performed after the completion of attempt number one.

A5.5.3 Training Input during PC/OPC Brief

It is perfectly proper – indeed desirable – for examiners to include some training input during the briefing. This should not include handy hints or tips that would effectively brief out errors – e.g. "Watch that inbound NDB course – it is offset by five degrees", "with today's wind you'll need a heading of about three, two, six degrees".

Likewise, care shall be exercised when responding to a question from an applicant who is seeking an answer on how to carry out a particular approach to be flown during the test/check - an appropriate response would be to facilitate a generic understanding of the profile or procedure. It is also quite in order to choose a topic for revision – or to respond to such a request – and then to give a generic training brief. Such topics may, for example, include single engine profiles or instrument approaches.

Many Operators use a large proportion of the pre-test/pre-check briefing time to deal with 'discussion items'. These may have been pre-notified if the Applicants are expected to have revised the topics in question, and their purpose is to test/check, refresh and improve knowledge. The topics may also be preparatory, in a general sense, to the practical test/check, which is about to take place. This may satisfy the requirements for an oral examination as part of the skill test/proficiency check.

It is essential to make clear in the opening part of your briefing to the Applicants which elements of the day's proceedings are to be assessed as part of the test/check. Many examiners cover this with a broad statement such as "*Everything you do today and tomorrow planned or otherwise, will be assessed as part of the test/check.*"

Any unacceptable reduction in safety margin, unacceptable performance or behaviour shall not be permitted at any time. Such sub-standard performance must be rectified before returning to line operations. A CAT or PT Operator is unlikely to conduct a stand-alone proficiency check; invariably it will be combined with an OPC for reasons that are obvious to any examiner but might be less so to the Applicant. It is therefore important when briefing to be specific in defining the purpose of a test/check; e.g. licensing check, Operator check or combined licensing/Operator check. In summary:

- Training may be integrated with testing/checking.
- When training is combined with a test/check, you shall delineate clearly when moving from test/check to training and vice versa. The frequency of this should be reasonably contained so that the Applicant is not confused.
- The Applicant shall know, in advance, what is being assessed.
- Choose terminology carefully; e.g. LOFT, training, skill test, proficiency check, operator proficiency check or combined proficiency checks.

A5.6 OPC's Conducted in an FSTD

Checks (PC/OPC) should normally be conducted in an FSTD and in a LOFT style to satisfy the Part FCL requirement to conduct checks in a simulated and relevant operational scenario, thus allowing the crew to deal with it as they would on the line. LOFT does not necessarily involve extended en-route sectors, unless this is a planned part of the scenario, and could include, for example, a planned sector with early recovery to the departure point following an appropriate malfunction or operational requirement. However, examiners should manage the content of short sectors so as not to unreasonably overload the applicant or create an unrealistic scenario. Some training items such as manoeuvres that are largely skill based may benefit from "in-seat instruction (ISI)", where the examiner may set up a flight condition and allow the applicant the opportunity to practice skill based flying techniques. In FSTD's ISI may be conducted from the pilot seat or IOS seat as appropriate. To summarise, training may involve LOFT, ISI and system instruction using the full FSTD capabilities such as freeze and replay as appropriate. Checking should involve LOFT style scenarios as appropriate without the use of freeze or speed up functions to aid the applicant, except during remedial training. The overall aim is to maintain and improve crew performance standards and derive the greatest benefit to the applicants during the allotted training hours.

In FSTD's, tests/checks are based on real-time scenarios, with the distinct benefits of improved realism and, even more important, the need for crews to make decisions and act accordingly. However, for expedience and time management, it is sometimes necessary to use reposition functions and train or test items outside of a full scenario. This is acceptable provided the overall test contains an appropriate

scenario-based assessment. If repositions are used, the Applicant/crew shall be briefed about their new situation and position and the examiner must ensure that the Situational Awareness of the Applicant/crew is maintained by appropriate pre-emptive briefing.

A5.7 OPC's Conducted in an Aircraft

OPC's conducted in the aircraft give less opportunity to recreate an operational environment and of course a reduced set of emergency and abnormal procedures that can be safely replicated. However, every effort should be made to induce a sense of realism for example at the end of a rejected take off – asking to "touch drill" the shut down checks and brief aircraft evacuation of "passengers" as well as what they would communicate to ATC etc.

Failures during simulated operational manoeuvres should included, such as engine failures during LVTO or at low airspeed or in the hover at heights typically used for photographic sorties.

OPC's conducted in the aircraft bring additional risks which must be briefed and guarded against (TEM) – see Annex 5 for further guidance. The TRE must be familiar with the Company PART D, OSD and SMS Training Risk Assessments.

A5.8 Failure

Operators should define clearly in their Operations Manual Part D what action is to be followed in the event of a failure to pass an OPC or if unsatisfactory performance is evident in any other recurrent training programme. It is recommended there should be a clear statement that the flight crewmember may not thereafter act as a crewmember on commercial air transport or public transport flights until Operator proficiency has been achieved

APPENDIX 6 LAPL EXTENSION OF PRIVILEGE /REVALIDATION/RENEWAL

A6.1 LAPL Extension of Privilege /Revalidation/Renewal Administration

	LAPL Type Endorsement Revalidation/Renewal
UK Reference:	Part-FCL, 135 140.H LAPL(H)
Standards Doc:	NA
Who can test:	FE(PPL), FE(CPL), Note: LAPL(H) holders who comply with the dual hours requirements specified in AMC2 to FCL.725(a) should follow the normal procedures for Designation of Examiners. LAPL(H) holders wishing to extend licence privileges to fly other types after completing extension training consisting of less dual instructional flight hours than specified in AMC2 to FCL.725(a) will be required to be examined by a FE nominated by the CAA for the skill test.
Form used:	SRG 1105 – PPL/LAPL Skill Test Extension of Privilege - SRG2138Skill Test/IR/Proficiency Check Schedule Examiners Record and Notification of Failure SRG2129
Test format:	**Extension of Privilege** (a) The privileges of an LAPL(H) shall be limited to the specific type and variant of helicopter in which the skill test was taken. This limitation may be removed when the pilot has completed: (1) 5 hours of flight instruction, including: (a) 15 dual take-offs, approaches and landings; (b) 15 supervised solo take-offs, approaches and landings; (2) a skill test to demonstrate an adequate level of practical skill in the new type. During this skill test, the applicant shall also demonstrate to the examiner an adequate level of theoretical knowledge for the other type in the following subjects: (a) Operational procedures, (b) Flight performance and planning, (c) Aircraft general knowledge. Note 1: The skill test for the extension of privilege is at Appendix 4. Note 2: See 'Who can test' above. **Recency** Holders of an LAPL(H) shall exercise the privileges of their licence on a specific type only if in the last 12 months they have either: (a) completed at least six hours of flight time on helicopters of that type as PIC, or flying dual or solo under the supervision of an instructor, including six take-offs, approaches and landings and completed a refresher training of at least 1 hour of total flight time with an instructor; (b) passed a proficiency check with an examiner on the specific type before resuming the exercise of the privileges of their licence. That proficiency check programme shall be based on the skill test for the LAPL(H). Note: AMC1 FCL.140.H(b)(1) LAPL(H) states: AMC The proficiency check should follow the content of the skill test that is set out in AMC2 FCL.125, point (e). Note: That proficiency check programme shall be based on the LAPL skill test at Appendix 1.

APPENDIX 7 FI(H)/IRI CERTIFICATE INITIAL AOC/REVALIDATION/RENEWAL

A7.1 FI(H) Certificate Initial AoC/Revalidation/Renewal Administration

	FI (H) CERTIFICATE INITIAL ISSUE/REVALIDATION/RENEWAL
UK FCL Ref:	Part FCL Subpart J
Standards Doc	Standards Document 10
Who can test:	Staff FE or FIE nominated by the Authority.
Validity	3 years
Form used:	SRG1131 Application form (Initial Issue), SRG 1135 Revalidation/Renewal SRG 1177 Examiners Report Form, SRG 1100 Temporary Certificate of Licence Privilege, SRG 2129 Failure Form as appropriate
AoC format:	As shown on SRG1177 Report and Standards Document 10.
Test Parameters	**Height** Normal flight ± 100 ft/ simulated major emergency ± 150 ft **Heading/Tracking of radio aids** Normal flight ± 10°/ sim emergency ± 15° **Speed** take-off / approach ± 5 kt - all other flight regimes ± 10 kt **Ground drift** - T.O. & hover IGE ± 3 ft Drift permissible on landing Nil
Pass/Partial/Fail Criteria	The examiner shall consider all aspects of the assessment and the overall performance as well as individual items and sections. The assessment should be addressed as 2 elements: 1. Lecture and Ground Associated Subjects 2. The Pre-Flight Briefing, Airborne Exercises and Debrief. A pass will be achieved when both the above elements of the assessment are assessed as satisfactory. A failure of one element only will result in a 'Partial Pass'. The re-assessment requirement must be specified as follows: Element 1 Fail = Re-assessment Element 1. Element 2 A failure in the pre-flight, air exercise or debrief will require all of element 2 to be reassessed. Failure of more than one Section will require a complete re-assessment as attempt one in a new series. Every attempt at the assessment must be recorded on a separate form. Following any 'Partial Pass', the same examiner shall complete the re-assessment. Where this is not possible, the case should be referred to the CAA who will select the new examiner. Retraining may be recommended after failing a first attempt but is mandatory after failing a series; second series fails should be referred to the CAA.
Notes:	**Initial Issue** Complete a course of training at an ATO and receive a Recommendation for Test. For the FI TK assessment, examiners should use two topics for each of the subjects required by SRG 1177, section 1. **Revalidation** Complete any 2 of the 3 following: (a) 50 hours instruction as FI, TRI, IRI or examiner during the rating validity period, if the privileges to instruct for an IR 10 hours of these hours are to be IF instruction and shall have been completed in the last 12 months. (b) Attend an approved refresher course at any time during the 3year validity. (c) Pass an AoC any time within the last 12 months of the validity

	Note: An AoC shall be included as one of the requirements at least every alternate revalidation **Renewal.** If the FI certificate has expired, applicants shall, within a period of 12 months before the application date for the renewal complete instructor refresher training as an FI at an ATO or at a competent authority and complete an assessment of competence For the FI TK assessment, examiners should use two topics for each of the subjects required by SRG 1177, section 1. All relevant exercises should be completed within a period of 6 months, however, all exercises should, where possible, be completed on the same day.

A7.2 Instructor AoC Briefing

RECOMMENDED WEATHER MINIMA

Visibility: Generally greater than 5km, but not less than 3km.
Cloud: Navigation: generally greater than 1500'agl but not less than 1100'. Off airfield GH, not less than 1500' agl. On airfield, GH not less than 800' agl.
Wind: Within limits.
IFR (IRI only): Within limits including: freezing and icing forecast at all levels using standard procedures for ice detection and equipment accordingly and suitable cloud base and visibilities for any approach minima.

INITIAL BRIEFING

Meet, greet and establish ID; Confirm the test requirement; Weather general picture: Does it look good enough for you to fly the assessment of competence? Do we have a serviceable aircraft?

Document and equipment check:

- ✓ Evidence of completion of course of training.
- ✓ Evidence of successful completion of theoretical examinations.
- ✓ For each test series, a signed certificate of recommendation for test.
- ✓ If second or subsequent test, previous SRG1177.
- ✓ Second or subsequent series, evidence of retraining certified by Head of Training.
- ✓ Current licence if applicable; Valid Class Medical Certificate
- ✓ FRTOL (or test completed).
- ✓ Aircraft documents; Tech Log; Fight authorisation sheet.
- ✓ IF visor/goggles (IRI only), approved checklist, 2 compatible headsets (consider spare).
- ✓ Maps & Charts (current editions).

Note: *the examiner must review planning facilities and appropriate access to NOTAMS, Royal Flight information, Weather UK AIP, etc.*

Time Check. I will meet you here again for your Main Briefing at _____.

MAIN BRIEF

Note: The brief below is given as an example only and examiners are encouraged to use it as an aide-memoir to ensure that all the appropriate points are covered. The brief is generic and covers AoC for FI and IRI and therefore examiners should use only the elements appropriate to the task.

Introduction

I shall now brief you on the conduct of the FI/IRI/TRI Assessment of Competence. There is no need to take notes, however, ask any questions you may have as we brief.

You will be aware that the AoC comprises 5 Sections which will be covered in ground exercises and an instructional flight.

We will normally start with the pre-flight briefing and flight and I will give you the flight exercise that you will be teaching me, at the end of the brief.

The purpose of the assessment

Is to assess your ability to give instruction to a student pilot both in the air and on the ground; therefore, throughout the day you will be assessed on the following competencies:

- Preparation of resources,
- Creating a climate conducive to learning,
- Presentation of knowledge,
- Integration of Threat and Error Management (TEM) and CRM,
- Management of time to achieve training objectives,
- Facilitation of learning,
- Assessment trainee performance,
- Monitoring and reviewing progress,
- Evaluation of the training sessions,
- Reporting of outcome.

In addition, you will be assessed on the following practical skills:

- Ability as an instructor to impart knowledge and skill.
- Flying ability, accuracy, demonstrations, airmanship and making efficient use of time and airspace.
- Knowledge of teaching exercises and their sequencing.
- Student involvement.
- Accuracy and synchronisation of 'patter.'
- Technical knowledge and standardisation of exercises.
- Analysis, correction and debrief of faults.

Responsibilities

You are to assume command and act as Captain of the aircraft in accordance with the Flight Manual and procedures for Single Pilot Operations.

You will be responsible for planning the flight and I may check your planning and ask questions on aspects of the flight, for example: choice of operating areas, altitudes, fuel planning, NOTAM, mass & balance and performance calculations etc.

You will be responsible for the decisions necessary for the safe and practical conduct of the flight, in accordance with current legislation and the Training Organisation's Flying Order Book or Operations Manual.

You are to assume that I am a student pilot and therefore, you can expect only limited assistance (however, I will have overall command of the aircraft and will sign the Tech Log where applicable).

You should liaise and comply with ATC instructions and clearances: if ATC instructions conflict with the briefing then ATC will take priority; I will only intervene if I decide to do so for reasons of safety or clarification. Your callsign throughout the assessment will be……

As part of the role play, I will play the part of a student pilot of average ability, who has completed all the elements of the course prior to today's lesson, including any pre-lesson study that you prescribed.

Checks

Throughout the assessment the approved aircraft checklist shall be used.

Assume that the assessment is the first flight of the day and you will be expected to carry out a pre-flight inspection explaining to the 'student' what you are checking and why. Airborne checks may be completed from memory, or from alternative notes, but must be in accordance with the checklist and each check item spoken aloud.

Handling Tolerances

You should be able to produce convincing demonstrations and therefore, your handling skills and flying accuracy should be of an above average standard. I expect you to be able to comfortably fly within the CPL ST tolerances for height, speed and heading (100ft/10kts/10deg). Should the aircraft deviate from these limits I will be looking for you to make smooth corrections without undue delay.

In a similar way if you think you have made a mistake then correct it, don't let it worry you. Everyone makes mistakes, carry on with your flight, and concentrate on what you are doing.

Aircraft Control

When we need to pass control of the aircraft between us at any time, the standard procedure is to be used, i.e., “Follow me through”, “You have control”, “I have control”.

Emergencies

If we experience a real emergency or malfunction, the handling pilot will deal with it and the assessment will be suspended. The handling pilot is to achieve a safe flight configuration. If I am not flying the aircraft I will give all the assistance required. As Captain, I reserve the right to take control if necessary.

Practice emergencies will be briefed prior to the exercise as appropriate.

Note: *The Examiner must confirm the applicants’ understanding of any immediate actions required by the specific aircraft type, the applicants’ understanding of ‘touch drills’, describe how any throttle/FCL/engine training switches are to be manipulated during simulated malfunctions, and confirm that any required RT calls must be ‘in cockpit’ only*).

ASSESSMENT ADMINISTRATION

DEFINITIONS

- If I ask you to ‘DEMONSTRATE’ a manoeuvre, I want you to fly the exercise as a demonstration of flying skill.
- If I ask you to ‘PATTER’ an exercise I want you to talk through as you fly the manoeuvre or exercise, bringing out any relevant teaching points but without breaking the exercise down into a lesson or giving student practice.
- Finally, if I ask you to ‘TEACH’ an exercise or manoeuvre, I want you to break down the exercise into its’ relevant parts and devise a lesson giving me practice as a student and noting or correcting any faults that I might display.

Use of Notes

Whilst it is expected that you should have a sound understanding of the content of the flight exercise, occasional and judicious reference to notes is permissible throughout the assessment, however, this should not be to the detriment of the smooth flow or safety of the exercise.

Lecture and Theoretical Knowledge Questions

On completion of the flight phase I will ask you to deliver the prepared lecture.

There will then be a period of theoretical knowledge questioning. I will ask you some student questions on subjects chosen from the theoretical knowledge subjects, which will be relevant to typical flying problems. You are to use these questions as a teaching situation and treat me as a student pilot. Use the board and any visual aids to illustrate your answers. Remember that this is an opportunity to demonstrate your teaching skills and not just an assessment of knowledge.

The subjects that you will be questioned on are considered to be fundamental to the syllabus and it is anticipated that having met the knowledge pre-requisite requirement for the course, you should already be familiar with the subject matter. However, you will also be assessed on the ability to impart the knowledge of the subject to the student. Whilst assistance from notes, 'board plans', aids and other readily available reference materials is permissible to assist, this should not detract from the overall flow and continuity of the lesson.

ASSESSMENT SEQUENCE

(This will be determined by the Examiner with regard to weather, a/c availability, ATC restrictions etc.)

I propose the following order of events: initially I will ask you to give me a pre-flight briefing on one of the syllabus exercises. We will then use this as the main lesson to be taught in the air. Upon completion, I will ask you to teach, demonstrate or patter a variety of secondary exercises. After the flight, I will ask you to debrief me as a student on my performance during the main exercise. We will then take a short break then reconvene with the lecture followed by some theoretical knowledge questions. Finally, I will debrief you on the day's activities, make my overall assessment and complete the paperwork. Are you happy with this format?

As well as teaching this lesson, you will be monitoring my performance for any mistakes and also to give a post flight debrief. When I have seen enough of this exercise I will re-brief you for the secondary exercises. You can expect the secondary exercises to include: [for example: steep turns, quick stops, PFL, autorotation, hold entry, NDB/VOR needle tracking, IMC autorotation, partial panel, unusual attitude recoveries, etc] For the secondary exercises you can assume that I've done all the required training up to that exercise and that I've been briefed before flight. After flight, you will be required to debrief me on my performance as a student pilot.

For the main flight exercises I want you to teach me … (nominated exercise).

Summary

That concludes the brief. If you do not have any questions, you now have 30 minutes to complete any preparation and planning before I return for the pre-flight brief. I will then deliver a MATED as would be expected of a student.

Note: the MATED brief is included here as an aide memoir.

Met: Appropriate to the area and time of the flight.
Aircraft: AUM, C of G calculation, fuel load, tech log details.
a**T**c: Airfield details, NOTAMS, Royal Flights, RT services etc.
Exercise: How the flight exercise is to be conducted.
Duties: Re-affirmation of role play requirements.

A7.3 Instructor AoC Completion of Report Forms SRG 1177

Examiners must ensure that they are using the most up to date version of the report forms downloaded from the CAA website.

Before flight – SRG 1177

1. **1. Applicant Details**

   Completed by the applicant at the end of the main brief.

2. **2. AoC Details**

   (a) All details, except flight times, completed by the applicant at the end of the main brief.
   (b) Type of AoC: must include FI or IRI and Initial, Revalidation or Renewal as appropriate.

3. **Sections 1 to 6.**

   (a) strike through Section 4 with a diagonal line and annotate as N/A
   (b) When conducting the re-take of a 'Partial Pass' or completing an incomplete test, strike through any section(s) that are not required with a diagonal line and annotate as N/A.

4. **3. Approved training organisation**

   Complete in full.

After flight

1. **SRG 1177, 1. Applicant details**

   (a) Take off, Landing time (local) and Flight time (rotors running time) to be entered by the applicant.

2. **SRG 1177, Sections 1 to 6 (as applicable)**
   (a) Result: Annotate according to the following:

   'P' or 'PASS' must be used to annotate items or sections that have been passed.

   'F' or 'FAIL' must be used to annotate items or sections that have been failed.

   'N/F' or 'NOT FLOWN' must be used to annotate items or sections that were not flown by applicant when the test was terminated or to identify items not flown in an incomplete section.

   'INC' or 'INCOMPLETE' must be used to annotate section(s) that were not completed due to unforeseen circumstances. For example, illness, un-forecast weather, aircraft technical problems, etc.

   (b) Questions asked (Section 1 only): Record the topics assessed during the theoretical knowledge assessment.

   (c) Observations: Record your main observations on the applicant based on the observed instructor competencies. See A7.4 'Instructor Assessment Content and assessment Criteria' for competency guidance.

3. SRG 1177, 4. Result

(a) Complete Examiner details in full.

(b) Retest requirement: Annotate with any failed sections to be retaken.

(c) Examiners are reminded that on signing they are confirming that the applicants' instruction and experience complies with Part FCL (checked prior to commencing the AoC).

4. SRG 1177, 5. Assessment of Competence – Notice of Failure

(a) If the applicant has failed any AoC sections, then this section must be completed in full and signed by the applicant. The examiner must ensure that any reason for failure comments are concise, factual and reflect their comments in the SRG 2129.

(b) If the applicant was successful, strike through this Section with a diagonal line and annotate as N/A.

5. SRG 1135H, Section 12. Confirmation of Assessment of Competence

If the Skills Test was for revalidation or renewal and was successful, complete this section of the form.

6. SRG 2129

If the applicant has failed any items, an SRG 2129 must be completed to include a description of the failed item(s). These comments must be concise and factual using actual heading, height or airspeed deviations whenever appropriate. Personal opinion is NOT fact and must be avoided. The following are examples of expressions that should not be used without quantification: 'Poor circuit', 'Outside limits' ''Off track', 'PFL failed'.

Examiner will either recommend or mandate the amount and type of training required to be undertaken. 'Recommended' indicates that re-training is not mandatory. Mandatory training will require a course completion certificate appropriate to the training received.

7. SRG 1100 Temporary Certificate of Licence Privileges

(a) Section 1 Personal Particulars of Applicant: Examiner to complete the applicant's details.

(b) Section 2 Temporary Privileges: Examiner to complete the items applicable only to the test/check conducted after verifying the applicant has fulfilled all the applicable necessary requirements to exercise the temporary privilege.

(c) Section 3 Confirmation of ST, PC or AoC: Examiner to complete.

(d) Section 4 Declaration of CAA Inspector or Examiner: Examiner to complete after satisfying the applicant has met all the necessary requirements for the privilege being exercised.

A7.4 Instructor Assessment Content and Assessment Criteria

The assessment of competence examiner record contains the required assessment criteria from Part FCL.920 and AMC3 FCL.935. Behavioural markers are identified for each of these criteria and annotated in the table below for reference by the examiner. A PASS is awarded for each of the criteria when the applicant demonstrates the behavioural markers to an acceptable standard. Examiners must be familiar with FCL.920 competencies and the require performance and knowledge.

Assessment criteria	Acceptable Behavioural Markers
Visual Presentation	Consistent use of colour; clarity; layout; 'must knows' are clear.
Technical Accuracy	Technically accurate; up to date; standardised.
Clarity of Explanation	Logical order; Use of enabling objectives; 'simple to complex'; 'known to unknown'; 'parts to whole'.
Clarity of Speech	Clear voice; varies tone and speed; correct phraseology.
Instructional Technique	Habits; 'chalk and talk'; eye contact; manner; uses a learning model.
Use of Models and Aids	Used where appropriate; correct models; correct orientation for the student.
Student Participation (ground)	Follows a 'Lesson' technique; uses appropriate questions to test for base knowledge, understanding and application; uses open questions were appropriate; reiterates student answers; gives praise.
Facilitation	Uses facilitation techniques where appropriate.
Arrangement of Demonstration	Logical sequencing.
Synchronisation of Speech	Speech is in synchronisation with demonstrations including aircraft movement.
Correction of Faults	Faults are identified; prioritised; appropriate corrective action given.
Aircraft Handling	Accurate to at least CPL(H) parameters.
General Airmanship and Safety	All exercise airmanship points are covered; is cognisant of student's airmanship; demonstrates a high level of personal airmanship and safety awareness.
Positioning and use of Airspace	Appropriate use of heights and locations relative to the flight exercise.
Student Participation (flight)	Includes the student in all phases of the flight exercise; encourages student practice and improvement; gives praise.
Preparation of resources	Has appropriate, complete and standardised exercise and TK notes; has planned the training session and required equipment.
Creating a climate conducive to learning	Has considered the training environment and adapts as required.
Presenting Knowledge	Has demonstrated the behavioural markers identified in each assessment section
Integration of Threat and Error Management (TEM) and CRM	Understands the concept and demonstrates application of TEM integration. Uses TEM phraseology
Management of time to achieve training objectives	Adapts the training session to adhere to appropriate time scales; is aware of indications of
Facilitating Learning	Use facilitation techniques were appropriate
Assessing Trainee Performance	Can accurately assess student performance and faults; categorises and prioritises student faults; corrects faults in manageable 'chunks'
Monitoring and Reviewing Progress	Recognises adequate performance to progress through a lesson; adapts to student's capabilities
Evaluation of Training Sessions	Can accurately de brief training sessions; understands the importance of immediate feedback; can complete training records

When debriefing the examiner should break it down into the following sections with each debriefed at the end of the section, where possible:

1) Pre-flight briefing
2) Flight exercise
3) Post flight debrief
4) Theoretical Knowledge
5) Lecture

General examiner guidance for each of these sections is given below:

1) Pre-flight briefing assessment:

The purpose of the pre-flight briefing is to ensure that the student is prepared for the airborne instruction he/she is about to receive. This should not be the time to introduce new concepts to the student – all the theory underpinning the practical lesson should have been learnt previously from a long briefing and by directed self-study. The pre-flight briefing should take approximately 40 minutes and ideally be given shortly before the airborne lesson, so that it is fresh in the student's mind.

Generally, examiners look at pre-flight briefing as a whole and assess it in three main areas: overall presentation, instructional technique and technical content. In addition to the competencies above the following bullet points are indicators of sound instructor competence:

(a) Overall presentation:

- The brief is presented in a location conducive to learning, for example an enclosed briefing room or private area with low ambient noise level.
- The temperature and lighting are adjusted to make the environment comfortable.
- The instructor is fully prepared for the briefing and prepares the room and training aids before the arrival of the student.
- The instructor utilises training aids in an appropriate and effective manner to enhance the impact of verbal briefing.
- Where a whiteboard, flip sheet or OHP is used, the layout is logical and uncluttered, colour is used consistently and effectively (e.g. red to indicate importance or danger); handwriting and diagrams are neat and clear.
- Where an OHP or digital media is used, the instructor uses a "gradual reveal" technique to focus the student's attention on the part of the lesson being discussed.
- Where training aids such as model aircraft or sectioned instruments are used, the instructor indicates movement or operation in the correct sense and from the perspective of the student.

(b) Instructional technique:

- The instructor's manner and attitude encourage a relaxed but effective and professional learning environment.
- The instructor recognises the trainee's needs and ability and adapts his/her teaching style accordingly.
- The instructor displays enthusiasm, patience, honesty, flexibility, self-confidence and where appropriate, humour; overall giving the impression that they have a vested interest in the student pilot's progress.
- The instructor does not exhibit any distracting mannerisms or display any negative personality traits such as sarcasm, disinterest, impatience, an overbearing or demeaning manner.
- The instructor uses appropriate question technique to establish the student's existing level of knowledge and personal preparation.
- Explanations given are clear, concise, technically correct and illustrated with appropriate use of visual aids.
- Throughout the brief the instructor makes it quite clear who will be in control of the aeroplane by using phrases such as, "I will teach.....,You will practise...., " rather than the less specific, "We will have a look at...."
- The student is encouraged to participate fully in the brief and the instructor regularly checks understanding by posing appropriate and relevant questions.

(c) Technical content:

- The instructor is familiar with the briefed material and demonstrates adequate knowledge for the role.
- The brief includes a clearly defined, relevant and achievable aim.
- The instructor builds upon previous lessons and indicates, in a logical sequence, how the lesson will progress; which skills will be revised from previous lessons, which new skills will be learnt and how the aim will be achieved.
- It is assumed that the lesson is part of a structured syllabus, in which case the instructor briefs all items within the syllabus lesson plan without omission.
- Where the instructor refers to specifics, for example engine and airframe limitations, these are technically correct.
- In addition to briefing the main exercise, the instructor incorporates practical guidance and training in airmanship, resource management and threat and error management, and indicates to the student why this is relevant and how it will be achieved.
- The instructor is able to provide clear, concise and technically correct answers to student questions or concerns related to but not necessarily part of the briefed exercise.

2) Flight Exercise Assessment

For the airborne exercise instructors will be assessed on their personal flying ability, flight management skills and ability to present a coherent and effective instructional lesson.

The flight lesson begins with pre-flight preparation. All instructors must be able to determine, without error, that they, their students and the aircraft they are about to fly are suitable prepared for flight. Pre-flight preparation includes (but is not limited to) the following items:

- Personal preparation, for example by using the “I’M SAFE” (Illness, Medication, Stress, Alcohol, Fatigue, Eating) mnemonic.
- Aircraft performance planning. The instructor calculates the aircraft performance for the prevailing conditions and ascertains that the take-off and landing distances available, after considering any additional factors, are sufficient for the flight to be conducted safely.
- Mass and Balance. The instructor calculates the aircraft mass and balance and confirms that it will remain within limits throughout the flight.
- Pilot Operating Handbook or Aircraft Flight Manual and Checklist. The instructor is thoroughly familiar with the POH/AFM & Checklist and is able to obtain information regarding the aircraft specifications, limitations, normal and abnormal operation, performance, loading, handling and systems without error.
- Fuel planning. The instructor completes a fuel plan and confirms that the fuel has been checked to ensure that the intended flight may be conducted safely and completed with sufficient reserve and contingency fuel.
- NOTAM and Weather Data. The instructor checks and correctly interprets NOTAM and weather information and ensures that the intended flight can be conducted safely and effectively with a high likelihood of achieving the aim.
- Use of AIP and AIC. The instructor has a working familiarity with the relevant parts of the AIP and associated AIC and is able to obtain information relevant to the airfields, airspace and aeronautical facilities likely to be used on the intended flight.

Although instructors must complete thorough pre-flight planning and preparation for all flights, for the sake of expediency examiners may select only one or two items to formally assess on an assessment or check. This may be conducted either as a teaching exercise or as a demonstration.

For the main airborne exercise, and any additional exercises, the assessment /check schedule lists the following items for assessment:

- Arrangement of demonstration;
- Synchronisation of speech/demo;
- Correction of faults;

- Aircraft handling;
- Instructional technique;
- General airmanship/Safety;
- Position and use of airspace.

As with the pre-flight brief, the examiner generally looks at the overall picture to assess whether the instructor gives an effective lesson and demonstrates satisfactory standards of aircraft handling and flight management. The following are reliable indicators of competence for an airborne instructional lesson:

- The instructor selects an appropriate operating area and altitude band in which to present the exercise. For example, for early training exercises an area with a distinct horizon and minimal turbulence and an altitude that ensures satisfactory aircraft performance.
- The instructor ensures that the student is comfortable, and that communication is unhindered (radio and intercom volume and squelch are correctly set). Where possible, a "quiet" frequency is selected so that the lesson is not interrupted with background radio chatter.
- The instructor uses clear, concise and unambiguous phrases with correct and appropriate aviation phraseology.
- Hand-over and take-over protocol is exemplary. There is never any doubt about who has control of the aircraft.
- The instructor refrains from making control inputs (riding the controls) when the student is flying. If corrective action is necessary, the instructor takes control from the student.
- When skills involving control inputs are being taught, the student is invited to "follow through" whilst the instructor manipulates the controls. Upon completion of the demonstration the student is instructed to "relax".
- The instructor briefs the student on the exercise to be flown, hands over control, then monitors in silence as the student practises the manoeuvre. Upon completion, the instructor takes back control before debriefing/re-briefing. Note: This is in contrast to the instructor handing over control then giving the brief or debriefing whilst the student is still in control of the aeroplane. The latter is poor instructional technique because the student must concentrate both on controlling the aircraft and listening to the instructor.
- Generally, it is poor practise to coach a student through a manoeuvre. Occasional words of encouragement are perfectly acceptable such as, "Good", "That's nice", "Well done" etc. However, the instructor should avoid providing further guidance, for example: "Add more power", "Raise the nose slightly", etc. An instructor who tends to do this should ask themselves the question, "How will my student perform when I'm not here?"
- When the instructor is flying, they keep the student mentally alert and engaged in the conduct of the flight, for example by asking for routine cruise checks.
- The instructor highlights where skills or procedures involve the practical application of previously acquired theoretical knowledge.
- The student is never put in a position where he/she is flying a manoeuvre or practising a skill that has not previously been taught.
- Once a manoeuvre or skill has been taught, the student is given every opportunity to practise that manoeuvre or skill, for example by configuring the aircraft for the next event.
- The instructor always adopts the same techniques as those taught to and expected of the student. For example, if students are taught and expected to perform a thorough lookout prior to commencing each manoeuvre (which they should be), then the instructor must set an exemplary example by doing likewise. It is all too easy to give the impression that there are two ways of flying, one when learning and another when qualified and experienced.
- All demonstrations are convincing and accurately flown with smooth, co-ordinated control inputs. When quoting speed, altitude, heading, power settings and other parameters the instructor ensures that they correspond with the actual aircraft performance and configuration.
- The instructor does not attempt to gloss over or bluster his/her way out of poor demonstrations. The instructor admits the error and repeats the demonstration, where appropriate making a teaching point out of it.
- Where appropriate, the instructor introduces "deliberate errors". For example, when first teaching how to regain level flight the instructor deliberately selects an attitude that is slightly too high or too low. He/she then indicates that the attitude selected is incorrect because the

altimeter indicates a gradual climb/descent and shows how an adjustment is necessary to refine level flight.

- The instructor's "patter" is co-ordinated with the demonstration such that the aircraft can be seen to be responding in the manner described.
- The lesson is developed in the same sequence and with the same content as the pre-flight brief.
- The instructor is attuned to the student's ability and progress and adjusts the pace of the lesson accordingly.
- The instructor maintains a high level of situational awareness and uses the airspace efficiently such that the lesson is not prolonged unnecessarily with re-positioning.
- The instructor continues to prosecute an effective lookout throughout the lesson and avoids becoming engrossed in events within the aircraft.
- The instructor recognises and corrects significant student-handling errors in a sympathetic and efficient manner and at the earliest appropriate moment.
- The instructor is not overly fussy about minor student handling errors to the detriment to the flow and continuity of the airborne exercise.
- The instructor encourages critical self-analysis.
- The instructor provides appropriate positive comment and praise to reinforce correct technique, effective flight management and sound decision-making by the student.
- The instructor incorporates or highlights practical examples of "airmanship", threat avoidance, resource management, aeronautical decision-making and error management into the air exercise.

3) Post Flight Debrief Assessment

The post-flight debriefing is an often overlooked but vital part of pilot training. It provides an opportunity for the student to consolidate his/her thoughts whilst the preceding lesson is still fresh in the mind and for the instructor to reinforce important teaching points and clear up any misunderstandings. Additionally, the instructor can focus attention and direct any self-study for the next lesson or part of the syllabus.

The following are indicators of competent debriefing skills:

- The instructor correctly identifies and states whether or not the student achieved the aim of the lesson.
- The instructor correctly identifies any critical handling errors and/or fundamental gaps in the student's knowledge, skills and understanding and specifies appropriate remedial training.
- The instructor correctly identifies any minor handling errors and/or any minor gaps in the student's knowledge, skills and understanding and corrects these by de-briefing and directed self study.
- The instructor correctly identifies and praises examples of student progress and achievement and developing competence, and skill.
- The instructor reinforces examples of sound decision-making and effective threat avoidance, resource and error management.
- Where appropriate, the instructor makes reference to a suitable behavioural marker system (e.g. NOTECH) to reinforce the debriefing of non-technical skills.
- The debrief focuses on significant aspects of the lesson, rather than simply following a chronological order of events.
- The instructor encourages student participation and uses facilitative techniques where appropriate to check comprehension and enhance the learning process.
- The instructor provides clear, concise and technically correct answers in response to direct student questions.
- The instructor provides directed self-study in anticipation of the next lesson or part of the syllabus.
- The instructor completes the student's training record with clear, concise notes and objective assessment.
- Inadequate student progress or critical errors and omissions are recorded and highlighted for attention and remedial action.

4) Theoretical Knowledge Assessment

As for the pre-flight briefing, examiners generally look at the theoretical knowledge oral and long briefing as a whole and assess three main areas: overall presentation, instructional technique and technical content. Many of the indicators of instructor competence are the same as those listed for the pre-flight briefing and post-flight debriefing. The following additional criteria apply:

- The instructor is able to locate and indicate the content of the relevant theoretical knowledge syllabus.
- The instructor retains a working knowledge and understanding of the majority of topics from the relevant theoretical knowledge syllabus and is able to discuss with confidence and answer questions related to the syllabus (theoretical knowledge oral).
- With sufficient time to prepare, the instructor demonstrates the ability to teach in depth and from basic principles any topic from within the appropriate theoretical knowledge syllabus (long briefing).
- Where the instructor makes a statement or provides information, either during a prepared brief or when answering questions, the information is technically correct.
- The instructor is able to indicate where relevant information may be found in source documents, reference material and training manuals.

5) Lecture Assessment

The applicant is required to give a lecture under test condition to other ‘students’, one of whom will be the examiner. The test lecture is to be selected from the items of Section 1. The amount of time for the preparation of the test lecture is agreed upon beforehand with the examiner (normally not more than 5 days). Appropriate literature may be used by the applicant. The test lecture should not exceed 45 minutes.

APPENDIX 8 TRI/SFI (H) CERTIFICATE AOC INITIAL/REVALIDATION/RENEWAL

A8.1 TRI/SFI (H) Certificate Initial AoC/Revalidation/Renewal Administration

	TRI/SFI (H) CERTIFICATE INITIAL/REVALIDATION/RENEWAL
UK reference:	Part FCL Subpart J,
Standards Doc:	Standards Document tbc
Who can test:	FIE, TRE with (b)(4) privileges.
Validity:	3 Years
Form used:	Application Form SRG1131, Examiners Report Form SRG1177, Temporary Certificate of Licence Privilege SRG 1100
AoC format:	Standards Doc tbc (applicable sections of the Instructor Assessment of Competence) & SRG1177
Test Parameters	**Height** Normal flight ± 100 ft/ simulated major emergency ± 150 ft **Heading/Tracking of radio aids** Normal flight ± 10°/ sim emergency ± 15° **Speed** take-off / approach ± 5 kt - all other flight regimes ± 10 kt **Ground drift** - T.O. & hover IGE ± 3 ft Drift permissible on landing Nil
Pass/Partial Pass/Fail Criteria	The examiner shall consider all aspects of the assessment and the overall performance as well as individual items and sections. The assessment should be addressed as 2 elements: 1. Lecture 2. The Pre-Flight Briefing, Airborne Exercises and Debrief. A pass will be achieved when both the above elements of the assessment are assessed as satisfactory. A failure of one element only will result in a 'Partial Pass'. The re-assessment requirement must be specified as follows: Element 1 Fail = Re-assessment Element 1. Element 2 A failure in the pre-flight, air exercise or debrief will require all of element 2 to be reassessed. Failure of more than one Element will require a complete re-assessment as attempt one in a new series. Every attempt at the assessment must be recorded on a separate form. Following any 'Partial Pass', the same examiner shall complete the re-assessment. Where this is not possible, the case should be referred to the CAA who will select the new examiner. Retraining may be recommended after failing a first attempt but is mandatory after failing a series; second series fails should be referred to the CAA.
Form guidance:	As indicated on the application form
Notes:	**Initial Issue** Complete course at an ATO and have a recommendation for test. **TRI Revalidation** To revalidate a TRI (H) certificate, applicants shall, within the validity period of the TRI certificate fulfil at least two out of the three following requirements: • completed at least 50 hours of flight instruction in each of the types of aircraft for which instructional privileges are held or in an FSTD representing those types, of which at least 15 hours shall be completed in the period of 12 months immediately preceding the expiry date of the TRI certificate. Time flown as FIs, IRI, STIs or as any kind of examiners shall be accounted for this purpose; • complete instructor refresher training as a TRI(H) as relevant, at an ATO;

	• in the period of 12 months immediately preceding the expiry date of the certificate, passed an assessment of competence in accordance with points FCL.935, FCL.910.TRI(b)(3) or FCL.910.TRI(c)(3), as applicable. • For at least each alternate revalidation of a TRI certificate, holders shall pass the assessment of competence in accordance with FCL.935. If TRI hold a certificate for more than one type of helicopter, the AoC taken on one of those types shall revalidate the TRI certificate for the other types, unless it is otherwise determined in the OSD. TRIs(H) holding an FI(H) certificate in the relevant type shall be deemed to comply with the above requirements. In that case, the TRI(H) certificate shall be valid until the expiry date of the FI(H) certificate. **TRI Renewal** To renew a TRI certificate, applicants shall, within the 12 months immediately preceding the date of the application: • have passed the assessment of competence in accordance with FCL.935 and shall have completed the following: • completed at least 10 hours of flight time, including take-offs and landings on the applicable aircraft type, of which maximum 5 hours may be completed in an FFS or FTD 2/3; • instructor refresher training as a TRI at an ATO, which shall cover the relevant elements of the TRI training course. If applicants held a certificate for more than one type of aircraft within the same category, the assessment of competence taken on one of those types of aircraft shall renew the TRI certificate for the other types held within the same category of aircraft, unless it is otherwise determined in the OSD. **SFI Revalidation** To revalidate an SFI certificate, applicants shall fulfil, before the expiry date of the SFI certificate, at least two out of the following three requirements: • have completed at least 50 hours as instructors or examiners in FSTDs, of which at least 15 hours in the period of 12 months immediately preceding the expiry date of the SFI certificate; • have completed instructor refresher training as an SFI at an ATO; • have passed the relevant sections of the assessment of competence in accordance with point FCL.935. • Additionally, applicants shall have completed, on an FFS, the proficiency checks for the issue of the specific aircraft type ratings representing the types for which privileges are held. • For at least each alternate revalidation of a SFI certificate, holders shall pass the assessment of competence in accordance with FCL.935. If an SFI holds a certificate in more than one type of aircraft within the same category, the assessment of competence taken on one of those types shall revalidate the SFI certificate for the other types held within the same category of aircraft, unless otherwise is determined in the OSD. **SFI Renewal** To renew the SFI certificate, applicants shall, within the period of 12 months immediately preceding the application for the renewal, comply with all of the following conditions: • have completed instructor refresher training as an SFI at an ATO; • have passed the assessment of competence in accordance with FCL.935 • have completed, on an FSTD, the skill test for the issue of the specific aircraft type ratings representing the types for which privileges are to be renewed.

A8.2 TRI/SFI (H) Briefing

The information below is generic and covers AoC for TRI and SFI and therefore examiners should use only the elements appropriate to the task.

RECOMMENDED WEATHER MINIMA

Visibility: Generally greater than 5km, but not less than 3km.
Cloud: Navigation: generally greater than 1500'agl but not less than 1100'. Off airfield GH, not less than 1500' agl. On airfield, GH not less than 800' agl.
Wind: Within limits.
IFR: Within limits including: freezing and icing forecast at all levels using standard procedures for ice detection and equipment accordingly and suitable cloud base and visibilities for any approach minima.

INITIAL BRIEFING

Meet, greet and establish ID; Confirm the test requirement; Weather general picture: Does it look good enough for you to fly the assessment of competence? Do we have a serviceable aircraft?

Document and equipment check:

- ✓ Evidence of completion of course of training.
- ✓ For each test series, a signed certificate of recommendation for test.
- ✓ If second or subsequent test, previous SRG1177.
- ✓ Second or subsequent series, evidence of retraining certified by Head of Training.
- ✓ Current licence if applicable; Valid Class Medical Certificate.
- ✓ Aircraft documents; Tech Log; Fight authorisation sheet.
- ✓ Approved checklist, 2 compatible headsets (consider spare).
- ✓ Maps & Charts (current editions).

Note: *the examiner must review planning facilities and appropriate access to NOTAMS, Royal Flight information, Weather UK AIP, etc.*

Time Check. I will meet you here again for your Main Briefing at _____.

MAIN BRIEF

Note: The brief below is given as an example only and examiners are encouraged to use it as an aide-memoir to ensure that all the appropriate points are covered.

Introduction

I shall now brief you on the conduct of the TRI/SFI Assessment of Competence. There is no need to take notes, however, ask any questions you may have as we brief.

You will be aware that the AoC comprises 5 Sections which will be covered in ground exercises and an instructional flight.

We will normally start with the pre-flight briefing and flight and I will give you the flight exercise that you will be teaching me, at the end of the brief.

The purpose of the assessment

Is to assess your ability to give instruction to a student pilot both in the air and on the ground; therefore, throughout the day you will be assessed on the following competencies:

- Preparation of resources,
- Creating a climate conducive to learning,

- Presentation of knowledge,
- Integration of Threat and Error Management (TEM) and CRM,
- Management of time to achieve training objectives,
- Facilitation of learning,
- Assessment trainee performance,
- Monitoring and reviewing progress,
- Evaluation of the training sessions,
- Reporting of outcome.

In addition, you will be assessed on the following practical skills:

- Ability as an instructor to impart knowledge and skill.
- Flying ability, accuracy, demonstrations, airmanship and making efficient use of time and airspace.
- Knowledge of teaching exercises and their sequencing.
- Student involvement.
- Accuracy and synchronisation of 'patter.'
- Technical knowledge and standardisation of exercises.
- Analysis, correction and debrief of faults.

Responsibilities

You are to assume command and act as Captain of the aircraft in accordance with the Flight Manual.

You will be responsible for planning the flight and I may check your planning and ask questions on aspects of the flight, for example: choice of operating areas, altitudes, fuel planning, NOTAM, mass & balance and performance calculations etc.

You will be responsible for the decisions necessary for the safe and practical conduct of the flight, in accordance with current legislation and the Training Organisation's Flying Order Book or Operations Manual.

You are to assume that I am a student pilot and therefore, you can expect only limited assistance (however, I will have overall command of the aircraft and will sign the Tech Log where applicable).

You should liaise and comply with ATC instructions and clearances: if ATC instructions conflict with the briefing then ATC will take priority; I will only intervene if I decide to do so for reasons of safety or clarification. Your callsign throughout the assessment will be……

As part of the role play, I will play the part of a student pilot of average ability, who has completed all the elements of the course prior to today's lesson, including any pre-lesson study that you prescribed.

Checks

Throughout the assessment the approved aircraft checklist shall be used.

Assume that the assessment is the first flight of the day and you will be expected to carry out a pre-flight inspection explaining to the 'student' what you are checking and why. Airborne checks may be completed from memory, or from alternative notes, but must be in accordance with the checklist and each check item spoken aloud.

Handling Tolerances

You should be able to produce convincing demonstrations and therefore, your handling skills and flying accuracy should be of an above average standard. I expect you to be able to comfortably fly within the CPL ST tolerances for height, speed and heading (100ft/10kts/10deg). Should the aircraft deviate from these limits I will be looking for you to make smooth corrections without undue delay.

In a similar way if you think you have made a mistake then correct it, don't let it worry you. Everyone makes mistakes, carry on with your flight, and concentrate on what you are doing.

Aircraft Control

When we need to pass control of the aircraft between us at any time, the standard procedure is to be used, i.e., “Follow me through”, “You have control”, “I have control”.

Emergencies

If we experience a real emergency or malfunction, the handling pilot will deal with it and the assessment will be suspended. The handling pilot is to achieve a safe flight configuration. If I am not flying the aircraft, I will give all the assistance required. As Captain (signing for the aircraft), I reserve the right to take control if necessary.

Practice emergencies will be briefed prior to the exercise as appropriate.

Note: *The Examiner must confirm the applicants’ understanding of any immediate actions required by the specific aircraft type, the applicants’ understanding of ‘touch drills’, describe how any throttle/FCL/engine training switches are to be manipulated during simulated malfunctions, and confirm that any required RT calls must be ‘in cockpit’ only*).

ASSESSMENT ADMINISTRATION

DEFINITIONS

- If I ask you to ‘DEMONSTRATE’ a manoeuvre, I want you to fly the exercise as a demonstration of flying skill.
- If I ask you to ‘PATTER’ an exercise I want you to talk through as you fly the manoeuvre or exercise, bringing out any relevant teaching points but without breaking the exercise down into a lesson or giving student practice.
- Finally, if I ask you to ‘TEACH’ an exercise or manoeuvre, I want you to break down the exercise into its’ relevant parts and devise a lesson giving me practice as a student and noting or correcting any faults that I might display.

Use of Notes

Whilst it is expected that you should have a sound understanding of the content of the flight exercise, occasional and judicious reference to notes is permissible throughout the assessment, however, this should not be to the detriment of the smooth flow or safety of the exercise.

Lecture

On completion of the flight phase I will ask you to deliver the prepared lecture.

ASSESSMENT SEQUENCE

(This will be determined by the Examiner with regard to weather, helicopter/FSTD availability, ATC restrictions etc.)

I propose the following order of events: initially I will ask you to give me a pre-flight briefing on one of the syllabus exercises. We will then use this as the main lesson to be taught in the air. Upon completion, I will ask you to teach, demonstrate or patter a variety of secondary exercises. After the flight, I will ask you to debrief me as a student on my performance during the main exercise. We will then take a short break then

reconvene with the lecture. Finally, I will debrief you on the day's activities, make my overall assessment and complete the paperwork. Are you happy with this format?

As well as teaching this lesson, you will be monitoring my performance for any mistakes and also to give a post flight debrief. When I have seen enough of this exercise I will re-brief you for the secondary exercises. You can expect the secondary exercises to include: [for example: steep turns, PFL, autorotation, Category A profiles, etc] For the secondary exercises you can assume that I've done all the required training up to that exercise and that I've been briefed before flight. After flight, you will be required to debrief me on my performance as a student pilot.

For the main flight exercises I want you to teach me … (nominated exercise).

Summary

That concludes the brief. If you do not have any questions, you now have 30 minutes to complete any preparation and planning before I return for the pre-flight brief. I will then deliver a MATED as would be expected of a student.

Note: the MATED brief is included here as an aide memoir.

Met:	Appropriate to the area and time of the flight.
Aircraft:	AUM, C of G calculation, fuel load, tech log details.
a**T**c:	Airfield details, NOTAMS, Royal Flights, RT services etc.
Exercise:	How the flight exercise is to be conducted.
Duties:	Re-affirmation of role play requirements.

A8.3 Instructor AoC Completion of Report Forms SRG 1177

Examiners must ensure that they are using the most up to date version of the report forms downloaded from the CAA website.

Before flight – SRG 1177

1. **1. Applicant Details**

   Completed by the applicant at the end of the main brief.

2. **2. AoC Details**

   (c) All details, except flight times, completed by the applicant at the end of the main brief.
   (d) Type of AoC: must include TRI or SFI and Initial, Revalidation or Renewal as appropriate.

3. **Sections 1 to 6.**

   (c) strike through Section 1 with a diagonal line and annotate as N/A
   (d) When conducting the re-take of a 'Partial Pass' or completing an incomplete test, strike through any section(s) that are not required with a diagonal line and annotate as N/A.

4. **3. Approved training organisation**

   Complete in full.

After flight

1. **SRG 1177, 1. Applicant details**

   (a) Take off, Landing time (local) and Flight time (rotors running time) to be entered by the applicant.

2. **SRG 1177, Sections 1 to 6 (as applicable)**

   (d) Result: Annotate according to the following:

   'P' or 'PASS' must be used to annotate items or sections that have been passed.

   'F' or 'FAIL' must be used to annotate items or sections that have been failed.

   'N/F' or 'NOT FLOWN' must be used to annotate items or sections that were not flown by applicant when the test was terminated or to identify items not flown in an incomplete section.

   'INC' or 'INCOMPLETE' must be used to annotate section(s) that were not completed due to unforeseen circumstances. For example, illness, un-forecast weather, aircraft technical problems, etc.

   (e) Observations: Record your main observations on the applicant based on the observed instructor competencies. See A7.4 'Instructor Assessment Content and assessment Criteria' for competency guidance.

3. SRG 1177, 4. Result

(a) Complete Examiner details in full.

(b) Retest requirement: Annotate with any failed sections to be retaken.

(c) Examiners are reminded that on signing they are confirming that the applicants' instruction and experience complies with Part FCL (checked prior to commencing the AoC).

4. SRG 1177, 5. Assessment of Competence – Notice of Failure

(a) If the applicant has failed any AoC sections, then this section must be completed in full and signed by the applicant. The examiner must ensure that any reason for failure comments are concise, factual and reflect their comments in the SRG 2129.

(b) If the applicant was successful, strike through this Section with a diagonal line and annotate as N/A.

5. SRG 1135H, Section 12. Confirmation of Assessment of Competence

If the Skills Test was for revalidation or renewal and was successful, complete this section of the form.

6. SRG 2129

If the applicant has failed any items, an SRG 2129 must be completed to include a description of the failed item(s). These comments must be concise and factual using actual heading, height or airspeed deviations whenever appropriate. Personal opinion is NOT fact and must be avoided. The following are examples of expressions that should not be used without quantification: 'Poor circuit', 'Outside limits' ''Off track', 'PFL failed'.

Examiner will either recommend or mandate the amount and type of training required to be undertaken. 'Recommended' indicates that re-training is not mandatory. Mandatory training will require a course completion certificate appropriate to the training received.

7. SRG 1100 Temporary Certificate of Licence Privileges

(e) Section 1 Personal Particulars of Applicant: Examiner to complete the applicant's details.

(f) Section 2 Temporary Privileges: Examiner to complete the items applicable only to the test/check conducted after verifying the applicant has fulfilled all the applicable necessary requirements to exercise the temporary privilege.

(g) Section 3 Confirmation of ST, PC or AoC: Examiner to complete.

(h) Section 4 Declaration of CAA Inspector or Examiner: Examiner to complete after satisfying the applicant has met all the necessary requirements for the privilege being exercised.

A8.4 Instructor Assessment Content and Assessment Criteria

The assessment of competence examiner record contains the required assessment criteria from Part FCL.920 and AMC3 FCL.935. Behavioural markers are identified for each of these criteria and annotated in the table below for reference by the examiner. A PASS is awarded for each of the criteria when the applicant demonstrates the behavioural markers to an acceptable standard. Examiners must be familiar with FCL.920 competencies and the require performance and knowledge.

Assessment criteria	Acceptable Behavioural Markers
Visual Presentation	Consistent use of colour; clarity; layout; 'must knows' are clear.
Technical Accuracy	Technically accurate; up to date; standardised.
Clarity of Explanation	Logical order; Use of enabling objectives; 'simple to complex'; 'known to unknown'; 'parts to whole'.
Clarity of Speech	Clear voice; varies tone and speed; correct phraseology.
Instructional Technique	Habits; 'chalk and talk'; eye contact; manner; uses a learning model.
Use of Models and Aids	Used where appropriate; correct models; correct orientation for the student.
Student Participation (ground)	Follows a 'Lesson' technique; uses appropriate questions to test for base knowledge, understanding and application; uses open questions were appropriate; reiterates student answers; gives praise.
Facilitation	Uses facilitation techniques where appropriate.
Arrangement of Demonstration	Logical sequencing.
Synchronisation of Speech	Speech is in synchronisation with demonstrations including aircraft movement.
Correction of Faults	Faults are identified; prioritised; appropriate corrective action given.
Aircraft Handling	Accurate to at least CPL(H) parameters.
General Airmanship and Safety	All exercise airmanship points are covered; is cognisant of student's airmanship; demonstrates a high level of personal airmanship and safety awareness.
Positioning and use of Airspace	Appropriate use of heights and locations relative to the flight exercise.
Student Participation (flight)	Includes the student in all phases of the flight exercise; encourages student practice and improvement; gives praise.
Preparation of resources	Has appropriate, complete and standardised exercise and TK notes; has planned the training session and required equipment.
Creating a climate conducive to learning	Has considered the training environment and adapts as required.
Presenting Knowledge	Has demonstrated the behavioural markers identified in each assessment section
Integration of Threat and Error Management (TEM) and CRM	Understands the concept and demonstrates application of TEM integration. Uses TEM phraseology
Management of time to achieve training objectives	Adapts the training session to adhere to appropriate time scales; is aware of indications of
Facilitating Learning	Use facilitation techniques were appropriate
Assessing Trainee Performance	Can accurately assess student performance and faults; categorises and prioritises student faults; corrects faults in manageable 'chunks'
Monitoring and Reviewing Progress	Recognises adequate performance to progress through a lesson; adapts to student's capabilities
Evaluation of Training Sessions	Can accurately de brief training sessions; understands the importance of immediate feedback; can complete training records

When debriefing the examiner should break it down into the following sections with each debriefed at the end of the section, where possible:

1) Pre-flight briefing
2) Flight exercise
3) Post flight debrief
4) Lecture

General examiner guidance for each of these sections is given below:

1) Pre-flight briefing assessment:

The purpose of the pre-flight briefing is to ensure that the student is prepared for the airborne instruction he/she is about to receive. This should not be the time to introduce new concepts to the student – all the theory underpinning the practical lesson should have been learnt previously from a long briefing and by directed self-study. The pre-flight briefing should take approximately 40 minutes and ideally be given shortly before the airborne lesson, so that it is fresh in the student's mind.

Generally, examiners look at pre-flight briefing as a whole and assess it in three main areas: overall presentation, instructional technique and technical content. In addition to the competencies above the following bullet points are indicators of sound instructor competence:

(a) Overall presentation:

- The brief is presented in a location conducive to learning, for example an enclosed briefing room or private area with low ambient noise level.
- The temperature and lighting are adjusted to make the environment comfortable.
- The instructor is fully prepared for the briefing and prepares the room and training aids before the arrival of the student.
- The instructor utilises training aids in an appropriate and effective manner to enhance the impact of verbal briefing.
- Where a whiteboard, flip sheet or OHP is used, the layout is logical and uncluttered, colour is used consistently and effectively (e.g. red to indicate importance or danger); handwriting and diagrams are neat and clear.
- Where an OHP or digital media is used, the instructor uses a "gradual reveal" technique to focus the student's attention on the part of the lesson being discussed.
- Where training aids such as model aircraft or sectioned instruments are used, the instructor indicates movement or operation in the correct sense and from the perspective of the student.

(b) Instructional technique:

- The instructor's manner and attitude encourage a relaxed but effective and professional learning environment.
- The instructor recognises the trainee's needs and ability and adapts his/her teaching style accordingly.
- The instructor displays enthusiasm, patience, honesty, flexibility, self-confidence and where appropriate, humour; overall giving the impression that they have a vested interest in the student pilot's progress.
- The instructor does not exhibit any distracting mannerisms or display any negative personality traits such as sarcasm, disinterest, impatience, an overbearing or demeaning manner.
- The instructor uses appropriate question technique to establish the student's existing level of knowledge and personal preparation.
- Explanations given are clear, concise, technically correct and illustrated with appropriate use of visual aids.
- Throughout the brief the instructor makes it quite clear who will be in control of the aeroplane by using phrases such as, "I will teach.....,You will practise...., " rather than the less specific, "We will have a look at...."
- The student is encouraged to participate fully in the brief and the instructor regularly checks understanding by posing appropriate and relevant questions.

(c) Technical content:

- The instructor is familiar with the briefed material and demonstrates adequate knowledge for the role.
- The brief includes a clearly defined, relevant and achievable aim.
- The instructor builds upon previous lessons and indicates, in a logical sequence, how the lesson will progress; which skills will be revised from previous lessons, which new skills will be learnt and how the aim will be achieved.
- It is assumed that the lesson is part of a structured syllabus, in which case the instructor briefs all items within the syllabus lesson plan without omission.
- Where the instructor refers to specifics, for example engine and airframe limitations, these are technically correct.
- In addition to briefing the main exercise, the instructor incorporates practical guidance and training in airmanship, resource management and threat and error management, and indicates to the student why this is relevant and how it will be achieved.
- The instructor is able to provide clear, concise and technically correct answers to student questions or concerns related to but not necessarily part of the briefed exercise.

2) Flight Exercise Assessment

For the airborne exercise instructors will be assessed on their personal flying ability, flight management skills and ability to present a coherent and effective instructional lesson.

The flight lesson begins with pre-flight preparation. All instructors must be able to determine, without error, that they, their students and the aircraft they are about to fly are suitable prepared for flight. Pre-flight preparation includes (but is not limited to) the following items:

- Personal preparation, for example by using the “I’M SAFE” (Illness, Medication, Stress, Alcohol, Fatigue, Eating) mnemonic.
- Aircraft performance planning. The instructor calculates the aircraft performance for the prevailing conditions and ascertains that the take-off and landing distances available, after considering any additional factors, are sufficient for the flight to be conducted safely.
- Mass and Balance. The instructor calculates the aircraft mass and balance and confirms that it will remain within limits throughout the flight.
- Pilot Operating Handbook or Aircraft Flight Manual and Checklist. The instructor is thoroughly familiar with the POH/AFM & Checklist and is able to obtain information regarding the aircraft specifications, limitations, normal and abnormal operation, performance, loading, handling and systems without error.
- Fuel planning. The instructor completes a fuel plan and confirms that the fuel has been checked to ensure that the intended flight may be conducted safely and completed with sufficient reserve and contingency fuel.
- NOTAM and Weather Data. The instructor checks and correctly interprets NOTAM and weather information and ensures that the intended flight can be conducted safely and effectively with a high likelihood of achieving the aim.
- Use of AIP and AIC. The instructor has a working familiarity with the relevant parts of the AIP and associated AIC and is able to obtain information relevant to the airfields, airspace and aeronautical facilities likely to be used on the intended flight.

Although instructors must complete thorough pre-flight planning and preparation for all flights, for the sake of expediency examiners may select only one or two items to formally assess on an assessment or check. This may be conducted either as a teaching exercise or as a demonstration.

For the main airborne exercise, and any additional exercises, the assessment /check schedule lists the following items for assessment:

- Arrangement of demonstration;
- Synchronisation of speech/demo;
- Correction of faults;
- Aircraft handling;
- Instructional technique;

- General airmanship/Safety;
- Position and use of airspace.

As with the pre-flight brief, the examiner generally looks at the overall picture to assess whether the instructor gives an effective lesson and demonstrates satisfactory standards of aircraft handling and flight management. The following are reliable indicators of competence for an airborne instructional lesson:

- The instructor selects an appropriate operating area and altitude band in which to present the exercise. For example, for early training exercises an area with a distinct horizon and minimal turbulence and an altitude that ensures satisfactory aircraft performance.
- The instructor ensures that the student is comfortable, and that communication is unhindered (radio and intercom volume and squelch are correctly set). Where possible, a “quiet” frequency is selected so that the lesson is not interrupted with background radio chatter.
- The instructor uses clear, concise and unambiguous phrases with correct and appropriate aviation phraseology.
- Hand-over and take-over protocol is exemplary. There is never any doubt about who has control of the aircraft.
- The instructor refrains from making control inputs (riding the controls) when the student is flying. If corrective action is necessary, the instructor takes control from the student.
- When skills involving control inputs are being taught, the student is invited to “follow through” whilst the instructor manipulates the controls. Upon completion of the demonstration the student is instructed to “relax”.
- The instructor briefs the student on the exercise to be flown, hands over control, then monitors in silence as the student practises the manoeuvre. Upon completion, the instructor takes back control before debriefing/re-briefing. Note: This is in contrast to the instructor handing over control then giving the brief or debriefing whilst the student is still in control of the aeroplane. The latter is poor instructional technique because the student must concentrate both on controlling the aircraft and listening to the instructor.
- Generally, it is poor practise to coach a student through a manoeuvre. Occasional words of encouragement are perfectly acceptable such as, “Good”, “That’s nice”, “Well done” etc. However, the instructor should avoid providing further guidance, for example: “Add more power”, “Raise the nose slightly”, etc. An instructor who tends to do this should ask themselves the question, “How will my student perform when I’m not here?”
- When the instructor is flying, they keep the student mentally alert and engaged in the conduct of the flight, for example by asking for routine cruise checks.
- The instructor highlights where skills or procedures involve the practical application of previously acquired theoretical knowledge.
- The student is never put in a position where he/she is flying a manoeuvre or practising a skill that has not previously been taught.
- Once a manoeuvre or skill has been taught, the student is given every opportunity to practise that manoeuvre or skill, for example by configuring the aircraft for the next event.
- The instructor always adopts the same techniques as those taught to and expected of the student. For example, if students are taught and expected to perform a thorough lookout prior to commencing each manoeuvre (which they should be), then the instructor must set an exemplary example by doing likewise. It is all too easy to give the impression that there are two ways of flying, one when learning and another when qualified and experienced.
- All demonstrations are convincing and accurately flown with smooth, co-ordinated control inputs. When quoting speed, altitude, heading, power settings and other parameters the instructor ensures that they correspond with the actual aircraft performance and configuration.
- The instructor does not attempt to gloss over or bluster his/her way out of poor demonstrations. The instructor admits the error and repeats the demonstration, where appropriate making a teaching point out of it.
- Where appropriate, the instructor introduces “deliberate errors”. For example, when first teaching how to regain level flight the instructor deliberately selects an attitude that is slightly too high or too low. He/she then indicates that the attitude selected is incorrect because the altimeter indicates a gradual climb/descent and shows how an adjustment is necessary to refine level flight.
- The instructor’s “patter” is co-ordinated with the demonstration such that the aircraft can be seen to be responding in the manner described.

- The lesson is developed in the same sequence and with the same content as the pre-flight brief.
- The instructor is attuned to the student's ability and progress and adjusts the pace of the lesson accordingly.
- The instructor maintains a high level of situational awareness and uses the airspace efficiently such that the lesson is not prolonged unnecessarily with re-positioning.
- The instructor continues to prosecute an effective lookout throughout the lesson and avoids becoming engrossed in events within the aircraft.
- The instructor recognises and corrects significant student-handling errors in a sympathetic and efficient manner and at the earliest appropriate moment.
- The instructor is not overly fussy about minor student handling errors to the detriment to the flow and continuity of the airborne exercise.
- The instructor encourages critical self-analysis.
- The instructor provides appropriate positive comment and praise to reinforce correct technique, effective flight management and sound decision-making by the student.
- The instructor incorporates or highlights practical examples of "airmanship", threat avoidance, resource management, aeronautical decision-making and error management into the air exercise.

3) Post Flight Debrief Assessment

The post-flight debriefing is an often overlooked but vital part of pilot training. It provides an opportunity for the student to consolidate his/her thoughts whilst the preceding lesson is still fresh in the mind and for the instructor to reinforce important teaching points and clear up any misunderstandings. Additionally, the instructor can focus attention and direct any self-study for the next lesson or part of the syllabus.

The following are indicators of competent debriefing skills:

- The instructor correctly identifies and states whether or not the student achieved the aim of the lesson.
- The instructor correctly identifies any critical handling errors and/or fundamental gaps in the student's knowledge, skills and understanding and specifies appropriate remedial training.
- The instructor correctly identifies any minor handling errors and/or any minor gaps in the student's knowledge, skills and understanding and corrects these by de-briefing and directed self study.
- The instructor correctly identifies and praises examples of student progress and achievement and developing competence, and skill.
- The instructor reinforces examples of sound decision-making and effective threat avoidance, resource and error management.
- Where appropriate, the instructor makes reference to a suitable behavioural marker system (e.g. NOTECH) to reinforce the debriefing of non-technical skills.
- The debrief focuses on significant aspects of the lesson, rather than simply following a chronological order of events.
- The instructor encourages student participation and uses facilitative techniques where appropriate to check comprehension and enhance the learning process.
- The instructor provides clear, concise and technically correct answers in response to direct student questions.
- The instructor provides directed self-study in anticipation of the next lesson or part of the syllabus.
- The instructor completes the student's training record with clear, concise notes and objective assessment.
- Inadequate student progress or critical errors and omissions are recorded and highlighted for attention and remedial action.

4) Lecture Assessment

The applicant is required to give a lecture under test condition to other 'students', one of whom will be the examiner. The test lecture is to be selected from the items of Section 1. The amount of time for the

preparation of the test lecture is agreed upon beforehand with the examiner (normally not more than 5 days). Appropriate literature may be used by the applicant. The test lecture should not exceed 45 minutes.

APPENDIX 9 EXAMINER (H) CERTIFICATE AOC INITIAL/REVALIDATION/RENEWAL

A9.1 Examiner Certificate AoC Initial/Revalidation/Renewal Administration

	EXAMINER CERTIFICATE INITIAL/RENEWAL/REVALIDATION (H)
UK reference:	Part-FCL.1025
Standards Doc:	Standards Document 21H,
Validity:	Valid 3 years, (can be revalidated within 12 months of expiry)
Who can test:	CAA Inspector or Senior Examiner specifically allocated for the EAoC
Form used:	Form TS10, SRG 1100A: Temporary Licensing Certificate for Examiner Privileges.
Test Parameters	The test parameters for the appropriate test/check/AoC being observed should apply.
Pass/Partial/Fail Criteria	The criteria for examiner competence gradings are listed on the TS10. Any section awarded '1 - Requiring Improvement', must be considered a fail of that section which will require to be retaken before a pass can be awarded. If an applicant only fails the Regulation section, then a 'Partial Pass' can be awarded and only that section is required to be retested. However, if the SE deems that the underlying knowledge of the Regulations is insufficient for the examiner to undertake their role then the EAoC should be terminated, and the whole EAoC is to be retested. A fail in the flight element (Brief, Aircraft/Simulator Operation, Debrief sections) will require the applicant to retake all 3 of the elements again.
Test Format	**Initial Issue** • The applicant shall have completed a course of training provided by the CAA or an ATO approved by the CAA for the examiner privileges sought. • The initial AoC may either be an observed flight by the SE/FOTI of the applicant conducting a ST/PC/AoC on a live applicant or with the SE/FOTI acting as a dummy applicant for the ST/PC/AoC. **Revalidation** The applicant shall have: • Conducted a minimum of 6 ST/PC/AoC within validity period. • One of the ST/PC/AoC conducted in accordance with point (1) shall take place in the period of 12 months immediately preceding the expiry date of the examiner certificate and shall have been assessed by a CAA inspector or by a SE specifically authorised to do so. Alternatively undergo an EAoC. • Attended an examiner refresher course in the 12 months preceding the expiry date of the certificate. • Complied with current standardisation requirements specified in Part FCL 1020 **Renewal** If the certificate has expired, before resuming the exercise of the privileges, the applicants shall attend an examiner refresher course and undergo an EAoC in the period of 12 months immediately preceding the application for the renewal. (Note: Depending on the period since the certificate lapsed, the CAA may specify additional refresher training). **Use of Dummy Applicant** For an EAoC, it may be necessary to use a dummy applicant. In exceptional circumstances where a dummy applicant is not available the SE/FOTI may act as the dummy applicant.

	The dummy applicant should have available appropriate documentation for the examiner to inspect. During the flight the dummy applicant should make errors for the examiner to observe in order to exercise judgment, debrief and facilitation skills including any administration for further appropriate training/testing. A 'PASS' with no errors would preclude assessment of these competencies. The mistakes should not be too subtle nor set any traps for the examiner; they should replicate typical flight errors from a marginal applicant. Therefore, the person acting as the dummy applicant requires to be an experienced instructor/examiner. Where a dummy is used, the examiner must be briefed that they should conduct the test as though they had a genuine applicant and take appropriate actions, including terminating the test if an appropriate course of action (however it should be explained that the SE may interject to continue the test for completion of the EAoC).
Form guidance:	Send TS10 and examiner course certificate examiners@caa.co.uk
Notes:	• Examiners are to make available their records of tests conducted in the validity period to the Inspector/SE carrying out the EAoC. • If applicants for the revalidation hold privileges for more than one category of examiner, all examiner privileges (with the exception of Senior Examiner) may be revalidated if applicants comply with the revalidation requirements specified above for one of the categories of examiner certificates held when agreed with the CAA. • For extension of an examiner certificate to further types (as required for TRE), further practical training on the new type may be required, consisting of the conduct of at least one test or check profile in the role of examiner on the new type, including briefing, conduct of the skill test and proficiency check, assessment of the Candidate to whom the test or check is given, debriefing and recording or documentation under the supervision of an examiner of the appropriate category on the applicable type. A further examiner check on the new type will be required, which may be supervised by an inspector of the competent authority or a suitably authorised senior examiner. • Extension of an examiner certificate to further types will require a further Examiner Assessment of Competence (EAoC) when first adding any of the following to the examiner certificate: 1) Single Pilot type or Multi-Pilot type; 2) Instrument Rating revalidation/renewal; 3) Single Engine or Multi-Engine; 4) Simulator or Aircraft; 5) Single Engine Turbine or Single Engine Piston. • An examiner certificate shall only be revalidated or renewed if applicants demonstrate continued compliance with the requirements laid down in points FCL.1010 and FCL.1030: FCL 1010: Applicants for an examiner certificate shall demonstrate: (a) relevant knowledge, background and appropriate experience related to the privileges of an examiner; (b) that they have not been subject to any sanctions, including the suspension, limitation or revocation of any of their licences, ratings or certificates issued in accordance with this Part, for non-compliance with the Basic Regulation and its Implementing Rules during the last 3 years. (Note: When evaluating the applicant's background, the CAA should evaluate the personality and character of the applicant, and his/her cooperation with the CAA. The CAA may also consider whether the applicant has been convicted of any relevant criminal or other offenses, taking into account national law and principles of non-discrimination). FCL 1030: Conduct of skill tests, proficiency checks and assessments of competence (refer to Part FCL for details).

A9.2 Examiner AoC Briefing

Introduction

I will now brief you on the conduct of the EAoC. The assessment will consist of an observation with you as the examiner conducting the briefing, flight, debrief, and administration of a check, test or AoC on an applicant. As I am also required to assess your theoretical knowledge there will be an oral question and answer session where you will be asked questions pertinent to your role.

Purpose of the Flight

The purpose of the flight is for me to assess your competence as an examiner in accordance with Part FCL 1025. If successful it may be possible to also revalidate your other examining privileges.
You will be assessed against the following TS10 criteria:

(a) Briefing
(b) Aircraft and FSTD Operation as applicable
(c) Remedial Instruction (where appropriate e.g. in an OPC)
(d) Assessment of the Applicant
(e) Debrief of the Applicant
(f) Knowledge of the Regulations

Responsibilities

You will be responsible for:

(a) Checking your applicant's documentation
(b) Briefing the applicant for the check/test/AoC (including any Health and Safety items)
(c) Ensuring that aircraft/FSTD is suitable for the test
(d) Checking that the applicants planning is adequate
(e) The conduct of the flight test
(f) The debrief, assessment and associated administration for the test.

I will be responsible for (with a live/dummy applicant):

(a) Checking your documentation
(b) Introducing myself to the applicant and explain my role today
(c) Reviewing the applicant's documentation and aircraft/FSTD documentation
(d) Listening to you brief the applicant and the applicants pre-flight 'out brief' to you
(e) Observing the aircraft preflight inspection
(f) Observing the flight from the jump or rear seat.
(g) Discussing with you your assessment of the applicant
(h) Observing the debrief and completion of the administration
(i) Conducting the oral examination of your knowledge of the regulations

I will be responsible for (with SE/FOTI acting as a dummy applicant):

(a) Checking your documentation
(b) Acting as the applicant for the test
(c) Receiving the 'applicant' brief from you
(d) Delivering the 'applicants' pre-flight 'out brief' to you
(e) Conducting the aircraft preflight inspection as a 'applicant'
(f) Flying the test under your instruction as the 'applicant'
(g) Receiving the 'applicants' debrief and completion of the administration
(h) Conducting the oral examination of your knowledge of the regulations

Format

Please can you confirm any time constraints on the day with regards to aircraft, FSTD and applicant availability, the weather, NOTAM's, etc. There is some flexibility for the conduct of the EAoC, however, the standard format for the day will be; I will carry out an oral Question and Answer assessment of your regulatory knowledge pertaining to the role and privileges of your examiner certificate, followed by my observation of your conduct of the test. I will debrief you on your performance at the end of the day.

I will brief the applicant as appropriate to put them at ease and assuring them that I am only here to assess you in your role as an examiner and that this will be conducted as a normal check flight. I will then observe you conduct the pre-flight brief to the applicant including any pre-flight oral examination that you would normally conduct.

I will check your (and applicants where applicable) licence, medical, ratings etc. I am also required to see your Examiner Refresher Course certificate and previous records of tests that you have conducted in the last 3 years. I will then conduct the assessment of your regulatory knowledge pertaining to the role and privileges of your examiner certificate through an 'open books' Question and Answer session.

I shall observe you receive the applicant's pre-flight brief, monitor the applicant aircraft pre-flight inspection and conduct the flight test. With a live/dummy applicant I will play no active part in the EAoC, however, I can assist with lookout duties and I will I interject if I consider flight safety may be compromised.

On completion of the test you should review your notes. Prior to you debriefing the applicant you will inform me of the intended result and your reasoning. I will then observe the debriefing of the applicant including any post flight oral examination you would conduct and your completion of the test administration.

I will complete any further TK Q&A that I may have and then debrief you on the day's activities before completing the EAoC administration.

Any questions….

A9.3 Examiner AoC Completion of Report Form TS10 and Course Certificate

Refer to the guidance notes attached to the SRG1845 (TS10) report form and assessment criteria in A9.4 below.

A9.4 Examiner AoC Content and Assessment Criteria

Competence	1 - Requiring Improvement	2 - Basic Standard	3 - Good	4 - Very Good
Briefing	• Lack of preparation • Starts briefing without introduction • Lack of engagement with the crew • Little or no interaction with crew • Little or no reference to H&S • Makes no reference to the company behavioural markers scheme • Omits important safety elements • Let personal opinion deflect from training objectives • Didn't support the value of CRM training	• Invites questions • Generates a relaxed atmosphere • Creates a climate conducive to learning • Briefs all items required by Standards Documents • Provides all required documentation • Refers to NOTECHS or company behavioural markers scheme • Identifies H&S requirements	• Good introduction • Identifies the needs of the crew • Delivers the SD technical and non-technical elements, without change of style • Uses facilitation appropriately • Clear structure and clarity for all visual aid work • Includes NOTECHS in all areas including company behavioural markers	• Generates a high level of engagement with crew • Responds appropriately to the needs of the crew • Defines clearly what is expected of the crew • Very responsive to questions • All visual aids support and enhance the briefing and teaching points • Manages potential barriers to learning including awareness of cross-cultural differences
Aircraft Operation	• Limited familiarity with ac systems, operation, limitations • Poor observation/note taking of crew missing debrief/failure /repeat points • Inappropriate/inefficient use of time/airspace • Difficulty managing flight in the prevailing weather conditions • Poor ATC liaison and/or failure to comply with ATC clearances and airspace restrictions. • Inadequate situational awareness/no appreciation of events outside own aircraft • Unrealistic or unsafe setting of simulated ac abnormal/ emergencies/failures • Poor terminology when issuing instructions • No scenario context to test items • Failure to address TEM elements	• Familiar with ac systems, operation, limitations • Adequate observation/note taking of crew identifying majority of the debrief/ failure/repeat points • Acceptable efficient use of time/ airspace • Completes the all the test/check schedule • Appropriate level of service from ATC and complies with clearances and airspace restrictions • Generally aware of other traffic/airspace etc • Adequate and safe setting of simulated ac abnormal/emergencies/failures • Adequate terminology when issuing instructions • Limited use of scenario based testing • Identification of TEM elements •	• Good depth knowledge of the ac systems, limitations • Uses scenario based testing • Introduces scenario based setting of simulated ac abnormal/ emergencies/failures. • Adjusts 'running sequence' to optimize time management • Optimum use of airspace in prevailing weather conditions • Close liaison with ATC to enhance SA and mitigate threat of airborne conflict and airspace infringement • Good clear unambiguous instructions • Observes accurately, identifying appropriate behavioural markers • Introduces TEM scenarios	• Very realistic scenarios • Clarity of examiner, role • Comprehensive observation/unobtrusive note taking • Takes advantage of prevailing weather conditions to enhance scenario • Uses all available aids and external assistance to mitigate threats of airborne conflict, airspace infringement and nuisance to the general public • High level of flexibility to the checking plan • Identifies root cause for all activity • Is cognisant of the effect on the crew of any input from the Instructor/examiner
Simulator Operation	• Limited familiarity with IOS • Irregular observation of crew • Incorrect R/T • Distracted by IOS at key observing moments • Limited note taking • Inappropriate use of freezes and repositions • Overloading of failures • Poor radar vectoring	• Checks simulator log and approvals • Efficient use of IOS • Presents repositions to crew correctly • Correctly sequences failures • Observes all failure/repeat items • Effective note taking	• Crew enters the simulator with the correct scene set • Introduces failures appropriate to crew actions • Adjusts 'running sequence' to optimize time management • Observes accurately identifying appropriate behavioural markers • Identifies crew or individual fatigue	• Very realistic scenarios • Role play of other agents responsive to crew's actions • Clarity of examiner, instructor role • Comprehensive observation/notes • High level of flexibility to the training, checking plan • Identifies root cause for all activity • cognisant of the effect on the crew of any input from the Instructor/examiner

Competence	1 - Requiring Improvement	2 - Basic Standard	3 - Good	4 - Very Good
Remedial Instruction (where applicable e.g. TRE conducting OPC)	• Unaware of the root cause of the fault • Emphasis on the 'What' rather than the 'How' • Inappropriate style • Mixing of instruction and examining • No reference made to (any relevant) Non-Technical Skills • Did not demonstrate empathy for the crew	• Crew made aware when acting as an instructor or examiner • Correct observation of faults • Provides correct technical input • Makes mention of relevant NOTECH category or element	• Clear identification of root cause/behavioural markers • Facilitates error analysis where appropriate • Identifies teaching points with key words and concise phrases • Seamlessly integrates technical and non-technical skills with pointers • Continuously monitors progress of the session and responds accordingly	• Generates a high level of engagement with the crew. • Increases the confidence and skills of the crew throughout the training event • Facilitates crew learning especially regarding behavioural markers • Assists the crew with the assessment of their own performance
Assessment	• Standard not correctly applied • Lack of evidence to support assessment • Many important items missed	• Correct assessment • Identifies good performance • Identifies poor performance • Makes technical and non-technical assessment	• Skilled use of Repeats and Retests for maximum value to crew • Assesses cause behind good/poor performance	• Fully at ease with assessing the required standard and identifying this to the crew • Comprehensive knowledge of behavioural markers when making an assessment • Clear understanding of root causes to all actions • Keeps abreast of HF developments from ICAO, Part FCL and the CAA
De-brief	• Result not clearly stated • Chronological • No prioritisation of faults • Little opportunity for crew to review their own performance • Nitpicking • No reference to company behavioural markers scheme or NOTECHs • Displayed limited knowledge of the core Part FCL CRM subjects	• Clear statement of result and use of 5Rs • Clear prioritisation of faults • Holds the agenda • Some use of facilitation • Encourages crew to provide their views • Integration of NOTECHS • Supports company SOPs • The ability to focus on main issues • Written report supports the result offered	• Starts with an introduction • At ease with facilitation to move the de-brief in the required direction • Draws common faults together • Links NOTECHS or company behavioural markers into the result of the check • Balances praise and criticism • Generation of summary • Ability to listen to crew feedback • Offers tips and advice • Identifies missing skills (technical and non-technical	• Allows the crew to drive the agenda with the examiner controlling the agenda • Achieves agreement of crew • Seamless integration of the NOTECHS or company behavioural markers into all aspects of the operation • Crew leave with clear and concise learning points • Checks understanding and summarises learning points covered
Regulation (Theoretical Knowledge)	• Insufficient knowledge of STDS Doc 14 and Part FCL / Part OPS • Poor understanding of privileges held	• Adequate knowledge and application of STDS Doc 14 / Part FCL / Part OPS • Understands Privileges held	• Thorough working knowledge of applicable regulations and documentation	• Clear and detailed knowledge of all relevant Part FCL regulations and UK documentation

APPENDIX 10 SENIOR EXAMINER (H) CERTIFICATE AOC INITIAL/REVALIDATION/RENEWAL

A10.1 Senior Examiner Certificate AoC Administration

	SENIOR EXAMINER CERTIFICATE INITIAL/REVALIDATION/RENEWAL
UK reference:	Part-FCL Subpart K, Section 2, AMC1 FCL.1020; FCL.1025
Standards Doc	Standards Document 22
Who can test:	CAA Inspector
Validity	The validity of the authorisation should not exceed the validity of the examiners certificate, and in any case should not exceed 3 years
Form used:	Form TS10, SRG F1100A: Temporary Licensing Certificate for Examiner Privileges.
Test format:	Be observed by a CAA Inspector conducting an EAoC
Form guidance:	Send to examiners@caa.co.uk
Notes:	**Initial** The applicant shall have successfully completed a Senior Examiner course of training delivered by the CAA. The SE EAoC will be conducted by the CAA Inspector observing the SE conduct an EAoC on an examiner conducting a ST/PC/AoC on an applicant. **Revalidation** * Conduct a minimum of 6 EAoC within validity period. * One of the EAoC shall take place in the period of 12 months immediately preceding the expiry date of the examiner certificate and shall have been assessed by a CAA inspector. * Attend an Senior Examiner refresher course in the 12 months preceding the expiry date of the certificate. * Continue to comply with current standardisation requirements specified in Part FCL 1020 **Renewal** If the certificate has expired, before resuming the exercise of the privileges, the applicants shall attend an examiner refresher course and undergo an EAoC in the period of 12 months immediately preceding the application for the renewal. (Note: Depending on the period since the certificate lapsed, the CAA may specify additional refresher training).

A10.2 Examiner AoC Briefing

Introduction

I will now brief you on the conduct of the SE EAoC. The assessment will consist of an observation with you as the SE conducting the briefing, flight, debrief, and administration of an EAoC on an examiner conducting a test/check/AoC on applicant. As I am also required to assess your theoretical knowledge there will be an oral Q&A session where you will be asked questions pertinent to your role.

Purpose of the Flight

The purpose of the flight is for me to assess your competence as an SE in accordance with Part FCL 1025 and you will be assessed against the following TS10 criteria:

(a) Briefing
(b) Aircraft and FSTD Operation as applicable
(c) Remedial Instruction (where appropriate e.g. in an OPC)
(d) Assessment of the Applicant
(e) Debrief of the Applicant
(f) Knowledge of the Regulations

Responsibilities

You will be responsible for:

(a) Checking the examiners and the applicant's documentation
(b) Briefing the examiner for the check, test or AoC (including any Health and Safety items)
(c) Ensuring that aircraft/FSTD is suitable for the test
(d) Checking that the examiners planning is adequate
(e) Listening to the examiners brief and the applicants pre-flight 'out brief' to the examiner
(f) Observing the aircraft pre-flight inspection
(g) Observing the flight from the jump or rear seat.
(h) Discussing with the examiner the assessment of the applicant
(i) Observing the examiners debrief and completion of the administration
(j) The conducting an oral examination of the examiner's knowledge of the regulations

I will be responsible for:

Observing the conduct of the applicant, the examiner and your conduct and assessment of the EAoC.

Format

Please can you confirm when everybody is available and any time constraints on the day with regards to aircraft or FSTD availability, the weather, NOTAM's, etc. There is some flexibility for the conduct of the EAoC, however, the standard format for the day will be; an assessment of your regulatory knowledge, an observation your conduct of the EAoC and finally I will debrief you on your performance at the end of the day.

Once you have introduced me to the examiner and the applicant, I will brief them, putting them at ease and assuring them that I am only here to assess you in your role as an SE and that this will be a normal check flight. I will then observe you conduct the initial brief of the examiner for the test including the pre-flight oral examination that you would normally conduct.

Whilst the test flight planning is being conducted, I will also check all participants documentation (e.g. licences, medical, ratings, Examiner Refresher Course certificates etc). I will then conduct the assessment of your regulatory knowledge pertaining to the role and privileges the SE certificate through an 'open books' Q and A session.

I shall be observing, but taking no part, in the briefings, aircraft pre-flight checks and the flight. However, I can assist with lookout duties and I will I interject if I consider flight safety may be compromised.

On completion of the EAoC you should review your notes and then prior to you debriefing the examiner you will inform me of the intended result and reasoning. I will then monitor you debriefing the examiner including any post flight oral examination before observing your complete the test administration.

On completion and the release of the applicant I will complete any further TK Q&A that I may have and then debrief you on the day's activities before completing the EAoC administration.

Any questions….

A10.3 Senior Examiner AoC Completion of Report Form TS10 and Course Certificate

Refer to the guidance notes attached to the SRG1845 (TS10).

A10.4 Senior Examiner AoC Content and Assessment Criteria

Refer to the guidance notes at A9.4.