Safety & Airspace Regulation Group

Flight Operations: Training Standards & Policy Group

CAA Standards Document 1, Version 12

Instrument Rating (IR) Skill Test (Aeroplanes) and En route Instrument Rating (EIR) Skill Test - Policy and Guidance for Applicants and Examiners

This Standards Document defines UK policy and means of compliance with (UK) Part FCL, Subpart G Instrument Rating, Subpart I En-Route Instrument Rating and the associated Appendices, Guidance Material and Acceptable Means of Compliance

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

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

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Foreword

Version 12 of this document sets out guidance for applicants and examiners for the Instrument Rating Skill Test (IRT) for the issue of a (UK) Part-FCL Instrument Rating (IR) (Aeroplanes). It also contains guidance for the En-Route Instrument Rating (EIR) skill test. The information is designed to assist both the applicant and examiner to prepare for the appropriate test. The information is of a general nature and does not include precise details of each exercise or manoeuvre.

This document is intended as a reference document for pilots, instructors and examiners: to explain the administrative procedures associated with the IR and EIR skill test and to provide guidance so that the manner in which tests are conducted is standardised across the aviation community.

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

The Civil Aviation Authority is the competent authority of the UK for the issue of pilot licences, ratings and certificates in accordance with the UK Aircrew Regulation and for the oversight of their implementation and use. In fulfilling this role, the CAA is required to provide oversight documentation, including standards documents, guidance material and information notices that may be used by relevant personnel and organisations to allow them to perform their tasks, discharge their responsibilities and establish compliance with the UK Basic Regulation.

This document and other Civil Aviation Authority (CAA) Standards and Guidance Documents are available on the CAA website under Publications: Flight crew standards documents | UK Civil Aviation Authority. These may be downloaded without charge.

The CAA Scheme of Charges is also available from the website under Publications at ORS 5 - Schemes of charges | UK Civil Aviation Authority.

Applications and report forms can be found by adding the relevant form number: www.caa.co.uk/SRGXXXX.If, after reading this document, there are any queries or comment, please contact Flight Operations (ATO & FCL).

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Changes to Version 12

The major change to Standards Document 1 V12 is administrative and reflects the fact that the UK is no longer a member of EASA. Information on RNP approaches has also been updated to comply with CAP 2138 and refer to CAP 1926 UK Guidance for Operators/Pilots – RNAV Substitution.

Glossary of Abbreviations and Terms

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

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

Editorial Convention

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

- "Shall" and "Must" are used to indicate a mandatory requirement.
- "Expect" and "Should" are used to indicate strong obligation.
- "May" is used to indicate discretion.
- "Examiner" is used to indicate a person who holds a valid examiner authorisation certificate issued by the UK CAA.
- "Applicant" is used to indicate a person who is seeking the issue or renewal of a pilot's licence or rating.

- A Skill Test is a demonstration of skill for the initial licence issue, licence renewal, rating issue or rating renewal. Such tests include oral examination and flight test as appropriate.
- "He/She". The pronoun 'he' is used throughout for ease of reading.
- “Test” is used in this document to describe licensing skill tests and proficiency checks.

Part 1 - General Information

1.1 If the IRT is taken in a ME aeroplane then no further test is required for SE IR privileges; these are cross-credited in accordance with the table in Appendix 8 to Part-FCL. If the IRT is taken in a SE aeroplane, then further training and a skill test are required for IR privileges in ME aeroplanes.

Note: Applicants for revalidation or renewal of an IR must hold a current class/type rating on the aeroplane being used for the test.

1.2 A pilot who is current in multi-pilot operations may take the IRT in an aeroplane certified for multi-pilot operations. In this case the IR will be restricted to multi-pilot operations only in the aeroplane type used for the test.

1.3 An Instrument Rating (Aeroplanes) or an En-Route Instrument Rating (EIR) is valid for 12 months.

1.4 Part-FCL states that an IR and EIR may be revalidated by proficiency check up to 3 months before the rating expires, without any reduction from the original date of expiry. The EIR may also be revalidated by experience and a training flight with an instructor, but each alternate revalidation shall be by proficiency check. CAA Standards Document 14 provides further guidance on the revalidation and renewal requirements for an IR and EIR, including the cross-crediting arrangements between multi-pilot and single-pilot IRs.

1.5 Applicants for an IR or EIR must hold a night rating in accordance with Part-FCL.810 if the privilege of either rating is to be used at night.

Part 2 - Preparation, Provision of Aeroplanes and Test Booking

2.1 Flight Test Preparation

2.1.1 Requirements

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

2.1.2 Ground theoretical knowledge examinations and training

Applicants on modular training courses shall have passed the associated theoretical knowledge examinations before undergoing the IR skill test. Applicants on integrated training courses may undertake the IR skill test prior to completing the theoretical knowledge examinations. However, all of the relevant theoretical knowledge instruction for the associated examinations shall have been completed. Applicants who have not passed the Part-FCL IR, EIR or ATPL theoretical knowledge examinations (as applicable), but instead are seeking training credit on the basis of holding a valid IR issued in accordance with the requirements of Annex 1 to the Chicago Convention, are required to demonstrate to the examiner during the skill test that they have acquired an adequate level of theoretical knowledge. A theoretical knowledge question bank is provided at Appendix 2 for this purpose.

2.1.3 Flight Training

Unless seeking training credit on the basis of holding a valid IR issued in accordance with the requirements of Annex 1 to the to the Chicago Convention, an applicant for an IR or EIR shall have satisfactorily completed the flight training requirements of Part-FCL and shall have received instruction on the same type/class of aeroplane being used for the flight test.

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

Notwithstanding the previous statement, applicants for an IR or EIR skill test credited in full with the Part-FCL training requirements who have not received training at an ATO, do not require a course completion certificate or recommendation for test.

2.1.5 Experience

(a) An applicant for the issue of an IR(A) shall:

- hold at least a PPL in the appropriate aircraft category and the privileges to fly at night if the privileges of the IR are to be used at night, **or**
- a CPL(A) in the appropriate aircraft category, **and**
- have completed at least 50 hours of cross-country flying time as PIC in aeroplanes, TMGs, helicopters or airships of which at least 10 hours shall be in aeroplanes.

(b) An applicant for the procedural instrument flight module, who does not hold a CPL(A), shall hold a course completion certificate for the basic instrument flight module.

(c) An applicant for a competency based modular IR(A) course, who is seeking credit for prior instrument flight time under instruction, shall complete a pre-entry assessment at an ATO to determine the number of hours credited.

(d) An applicant for a competency based modular IR(A) course, holding a Part-FCL PPL or CPL and a valid IR* issued in compliance with the requirements of Annex 1 to the Chicago Convention by a third country, may be credited in full towards the theoretical knowledge and flight training of a modular IR training course. In order to be issued the IR(A) the applicant shall successfully complete the skill test for the IR(A); demonstrate to the examiner during the skill test that he has acquired an adequate level of theoretical knowledge of air law, meteorology, flight planning and performance; and, have a minimum experience of at least 50 hours of flight time under IFR as PIC on aeroplanes.

(e) An applicant for a ME IR(A) course, who has not held a ME class or type rating, shall have received the ME training specified in Part-FCL Subpart H prior to commencing the flight training for the IR(A).

(f) An applicant for the EIR shall hold at least a PPL(A) and shall have completed at least 20 hours of cross-country flight time as PIC in aeroplanes.

(g) An applicant for a competency-based EIR course, who is seeking credit for prior instrument flight time under instruction, shall complete a pre-entry assessment at an ATO to determine the number of hours credited.

*Valid is taken to mean that the holder is entitled, according to the regulatory requirements of the state of licence and rating issue, to exercise the privileges of the IR on the date of test. So, for an FAA IR for example, the applicant shall meet the requirements of the Code of Federal Regulations, Part 61, § 61.57 (c) for recent instrument flight experience.

2.1.6 Previous tests - SRG 2131, SRG 3107 & SRG 2129

Applicants who have previously attempted the IR or EIR Skill Test must produce to the examiner the previous Examiners Report Forms (SRG 2131 or SRG 3107 and SRG 2129), which shows the items and sections failed and any further training requirement.

2.1.7 **Flight Simulation Training Devices (FSTDs)**
Where a course of training includes the use of an FSTD, it is important to remember that each FSTD must have been approved for the course by the CAA and awarded a qualitative credit that specifies the maximum hours which applicants may claim towards their instrument training.

2.1.8 **Medicals**
Applicants must be in possession of a medical certificate appropriate to their licence type at the time of the test. PPL (IR) applicants require at least a UK Part-MED Class 2 medical certificate plus an audiogram. The medical certificate shall be shown to the examiner. If the certificate is out of date, the examiner may still conduct the test, but the applicant is to be made aware that, regardless of the outcome, the rating will not be issued unless the applicant has a valid medical certificate.

2.1.9 **Flight Radio Telephony Operator's (FRTOL) Licence**
An applicant will be required to hold a FRTOL licence or have passed the required practical and written examinations prior to attempting the IR or EIR Skill Test.

2.2 Provision of Aeroplanes

2.2.1 Applicants must provide an aeroplane for the IR or EIR Skill Test that is airworthy and meets the requirements for flight in accordance with the instrument flight rules in controlled airspace in accordance with (UK) Part-NCO Subpart D and, if the flight takes place within the UK FIR, the UK eAIP Gen 1.5 (Aircraft Instruments, Equipment and Flight Documents).

2.2.2 Where training and testing is undertaken at an ATO, the ATO is responsible for providing an aircraft that meets these requirements and is in fit condition for test. The test fee may be forfeited should the examiner find that the test cannot proceed because of an issue with the aircraft or associated documents and where the issue cannot be resolved in reasonable time. Where the aircraft used for test is privately or group owned, responsibility rests with the applicant. If there is doubt as to the suitability of an aircraft for test, advice may be sought from one of the CAA FOTI (CAA Staff Flight Examiner).

2.2.3 The UK eAIP mandates the carriage of ADF unless "the use of the ADF is not required in any phase of the planned flight". Where an aircraft is used for an IR or EIR skill test and the avionic equipment does not include an ADF and/or DME, the examiner will need to give some examiner is advised to establish at an early stage if the lack of ADF and/or DME will impose limitations on the available procedures and destination airfields or whether the use of RNAV Substitution will allow the planned profile to be flown. Information on the use of RNAV Substitution is given in Section 3.9.

2.2.4 With regard to paragraph 2.2.3 above and the carriage of ADF; the CAA considers it important for all applicants to be trained to competence in the full range of IFR procedures that they are likely to encounter once rated. This includes following instrument departure, arrival, approach, missed approach and holding procedures predicated on ADF. Therefore, ATO must still include training in the operation and use of ADF and NDB and applicants must be competent, at the end of a course of training, to fly any published instrument procedure.

Note: That radio navigation using NDB is a requirement of the basic instrument flight module at AMC2 to Appendix 6 to Part-FCL.

2.2.5 The CAA shall not be responsible for the provision of insurance for the applicant taking the IR or EIR Skill Test. The aeroplane operator must maintain an insurance policy which adequately covers the aeroplane, applicant and the examiner during the conduct of the flight test, and which complies with UK Law.

2.3 Test Bookings

2.3.1 Applications for test must be made on-line through the ATO conducting the training to Flight Test Bookings at Gatwick using SRG2153. An examiner will be designated for each test; some applicants will be tested by CAA authorised examiners and some by CAA FOTI (CAA Staff

Flight Examiner). Once an examiner has been designated, it is assumed and expected that the applicant will be tested by this examiner. In exceptional circumstances, for example following a delayed test due to weather where the examiner is unable to accommodate the re-scheduled test, the CAA may designate a different examiner.

Tests are normally arranged for a date as close as possible to the date of the application for a test, but applicants will be expected to accept a delay where necessary. The fee for the IR skill test is prescribed in the CAA Scheme of Charges which is available on the CAA website. Fees must be paid at the time of the booking. The examiner will receive proof of payment when they receive the test request from the CAA.

Part 3 - Conduct of the Test

3.1 Preview of Events

3.1.1 This section outlines those items that the examiner considers when constructing the flight profile. Section 3.2 will give details of the content of the initial briefing; Section 3.3 and 3.4 describe the planning and weather considerations. Sections 3.5 to 3.7 detail the main briefing, flight and debrief.

3.1.2 The skill test for the grant of the IR or EIR will be conducted by an Instrument Rating Examiner designated by the CAA. The test schedules and tolerances are set by (UK) FCL. The examiner will conduct each test to complete the required schedule and to achieve a meaningful, fair and valid assessment. The flight profile will be determined in order to cover all required sections and items of the test, and the applicant will be expected to conduct the flight in a practical and expeditious manner. Flight profiles may vary depending upon many influences outside the control of the examiner, such as ATC requirements, weather conditions, availability and serviceability of navigation or approach aids, access to controlled airspace etc.

3.1.3 Applicants must remain adaptable and flexible without compromising safety and it is important that they fully understand the briefing before the flight. The examiner will ensure that the applicant is given every opportunity to demonstrate competence by giving clear and unhurried instructions and by checking that the applicant has understood the requirements and responsibilities. The examiner's assessment will consider each section, procedure or manoeuvre of the flight as well as the overall conduct, management, airmanship and general captaincy. Threat and error management should be included during the brief(s) by the examiner to assess the candidate's awareness of the issues associated with the flight and how they intend to mitigate them.

3.1.4 The IR and EIR skill tests are divided into a number of sections:

IR

Section 1	Pre-flight Operations and Departure
Section 2	Airwork
Section 3	En-route IFR Procedures
Section 3a	Arrival Procedures
Section 4	3D Operations
Section 5	2D Operations
Section 6	Flight with One Engine Inoperative

EIR

Section 1	Pre-flight Operations and Departure
Section 2	Airwork
Section 3	En-route IFR Procedures
Section 4	Not used
Section 5	Approach and Arrival Procedures
Section 6	Flight with One Engine Inoperative

3.1.5 All sections of the test must be completed in the course of one flight. The sequence of sections may vary depending on circumstances, and the examiner's briefing will indicate the expected profile. Examiners are responsible for ensuring an efficient test, but applicants must remain flexible, particularly if weather conditions, ATC 'slot' times or availability of approach aids etc subsequently dictate a different scenario during the flight. When deciding the route, the examiner will generally arrange the test profile such that the flight can be completed within approximately 60 - 120 minutes. Applicants should not necessarily expect to fly any of the regular local routes used during training as the test is intended to be a practical exercise to a destination and/or alternate airfield, normally within 150 nm.

3.1.6 A practical example of the IR skill test is as follows:

IFR departure from the base airfield via a Standard Instrument Departure (SID) to join the en-route structure. En-route IFR along a notified route or via published waypoints. At least part of the en-route section of the test should be conducted along a published route in class "A" controlled airspace where possible. If access to class "A" airspace is not possible, flight in class "B", "C" or "D" airspace may be accepted, provided it is associated with an IFR entry and route clearance from ATC and is subject to a radar control service. The flight continues with an arrival at a destination airfield via a Standard Arrival (STAR) or otherwise, for an instrument approach completed in assumed minimum operating weather conditions. This approach generally results in a missed approach during the course of which an engine emergency is simulated (if the test is taken in a ME aeroplane). The aircraft is then flown to a diversion airfield which may be a pre-planned alternate airfield or a return to the airfield of departure for a second approach. In a ME aeroplane, the second approach is flown asymmetric. The test schedule requires one approach to be an RNP approach whilst the other should be procedural at the examiner's discretion. In a ME aeroplane, the applicant is required to fly an asymmetric approach to go-around and an asymmetric approach to land. The latter may be flown from a circling approach, bad weather circuit or a normal circuit. A published holding procedure is required as part of one of the instrument approaches, either before the approach or following the missed approach. The instrument airwork manoeuvres in section 2 of the profile may be completed during the transit between airfields or at the end of the flight.

3.1.7 A practical example of the EIR skill test is as follows:

VFR departure from the base airfield followed by a VFR to IFR transition at a suitable navigation fix. En-route IFR along a notified route or via published waypoints. At least part of the en-route section of the test should be conducted along a published route in class "A" controlled airspace where possible. If access to class "A" airspace is not possible, flight in class "B", "C" or "D" airspace may be accepted provided it is associated with an IFR entry and route clearance from ATC and is subject to a radar control service. At some stage, the examiner will simulate a scenario that requires a diversion to an alternate aerodrome. This may be, for example, deterioration in the weather at the planned destination below VMC criteria, or an aircraft system failure making continuation of the flight to the planned destination inadvisable. In a ME aeroplane, there will also be a simulated engine failure during the en-route phase of flight. The applicant will then carry out a transition from IFR to VFR flight in order to complete an arrival procedure at an airfield in VMC and a visual landing. The airwork manoeuvres in section 2 of the profile will be completed at an appropriate time, for example after the IFR to VFR transition and before the end of the flight.

3.1.8 Instrument rating skill tests can be very demanding. It is appreciated that even the most 'professional' or 'talented' pilots can make mistakes particularly, if attention to accuracy is relaxed for a few moments. This does not necessarily mean that a failure should result.

3.1.9 The following notes reflect the style and sequence of the briefing that the applicant may expect to hear. However, the examiner may make variations in the delivery of the briefing and may have to modify the sequence in which items are briefed and flown.

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

3.2 Initial Briefing

3.2.1 Prior to the initial briefing the examiner should cover any health and safety items appropriate to the venue being used for the test to include building facilities, fire escapes.

3.2.2 The purpose of the initial briefing is to check that the applicant has completed the necessary training and meets the prerequisite experience requirements. Additionally, it establishes the aim of the flight. At this stage examiners should try to generate a sense of purpose, i.e. that the applicant is preparing for an IFR passenger carrying flight with particular departure and/or arrival slot times. The examiner should also check that the applicant has full access to all of the planning resources that will be required. This briefing will normally take about 15 minutes.

3.2.3 At the pre-arranged time, the examiner will meet the applicant in a suitable venue which allows a private briefing area. A check will be made to ensure that the applicant has the necessary equipment and documentation including:

- Pilot licence (unless on an integrated course) and evidence that he either holds a rating for the aircraft in which he will be tested or has completed the training for that rating.
- Personal flying logbook (including evidence of any further training if this is not the first attempt).
- Training Records.
- A UK Class 1 medical certificate (Class 2 with audiogram for PPL holder). This need not be current, but the applicant should be advised that the rating will not be issued without a valid medical certificate.
- A form of photo identity, e.g. a valid passport, or UK photo driving licence.
- A course completion certificate and recommendation for test from the ATO (see paragraph 2.1.4) or report forms from any previous attempt.
- A current copy of the ATO's Operations Manual. Note: a private operator applying for a CB IR or EIR taking full credit for training (i.e. a pilot who has not undertaken any training at an ATO) may not have an Operations Manual.
- Current aeroplane documents as required by Part-NCO.GEN.135.
- Two headsets - most examiners will carry their own headset, but a spare unit should be available for the flight.
- Two copies of the ATO's current aeroplane check list.
- Suitable instrument flying screens or view limiting device(s), such as, screens, foggles, visor, or a hood).
- A cover for the Primary Flight Display (PFD) (or individual covers for the attitude indicator and horizontal situation indicator or direction indicator and repeaters if appropriate) for simulating limited panel.
- Current publications for the routing and airfields.
- Planning material including a blank flight log, airways chart, map and navigation equipment.
- Any relevant CAA correspondence such as a letter of assessment or further training requirements.

3.2.4 The examiner will outline the content of the skill test including the routing required, estimated timings and the airfields where instrument approach procedures are to be flown. He must ensure that the applicant has sufficient time to complete and file a flight plan i.e. at least 60 minutes before estimated off blocks time. Applicants in turn are reminded of their responsibility regarding the filing of flight plans and should not delay doing so, as is often the case, until the very end of their planning.

3.2.5 The examiner will give his weight plus the weight of any bags intended to be taken on board the aircraft so that the applicant may complete mass and balance calculations and performance planning. He should also indicate a callsign to be used, which is normally an "Exam" callsign.

3.2.6 When the applicant is clear about the format for the flight, he will be given time to complete the necessary planning and pre-flight preparation, normally 45 to 60 minutes depending upon the circumstances. The examiner will specify the time to meet for the main briefing.

3.2.7 If circumstances prevent the examiner meeting the applicant early enough before flight to give adequate time to plan, he may text or telephone ahead or leave a written briefing with the required information and indicate where and when to meet for the briefing. If required, the examiner may pass the route to be flown sufficiently in advance to permit submission of the IFR flight plan and brief the exact nature of the approaches to be flown nearer the time.

3.3 Planning

3.3.1 Planning facilities must be made available at the ATO, or aerodrome flight planning facility. The examiner will check that the applicant is aware of where resources are. A quiet briefing room should be used so that the planning can be completed without interruption or distraction.

3.3.2 Planning shall be completed without assistance from other students or instructors and by using routine briefing material.

3.3.3 Current AIS, Met, NOTAM and, for GNSS based navigation and approaches, RAIM prediction tools (such as AUGUR) should be consulted and the information brought to the briefing.

3.3.4 A flight navigation and radio log must be prepared, and the examiner may require a copy. The log should include provision for such items as:

- Route (including alternate aerodrome)
- En-route ATC and Navigation aid frequencies (note that where this information is clearly displayed on planning documents, such as charts and approach plates to be used, it is not appropriate to copy this information to the log)
- Planned cruising levels or operating altitudes
- Timings, ETA, revised ETA and ATA
- MSA, safety height or minimum levels/altitudes
- Fuel Plan (including alternate fuel and contingencies etc.)
- Space for logging clearances, ATIS and other pertinent information.

The overall management of the flight will be assessed as well as the technical aspects of flying the aircraft accurately and completing the procedures correctly. The flight log must be maintained such that the flight can be reconstructed from the information recorded at the end of the test. The examiner is also required to keep a log of the flight for navigation as well as assessment purposes.

3.3.5 Any part of the route which entails flight in airspace where routes or tracks are not specified will require the applicant to consider all the necessary “off airway” planning, for example, VOR/DME offsets, user defined waypoints, tracks, cruising altitudes/levels etc to achieve a safe and efficient flight in accordance with IFR.

3.3.6 Pre-prepared flight logs and bespoke routes and procedures may be used during the IRT if included in the ATO Operations Manual, for example local “standard departure” procedures to access the airway structure. Computer derived flight plans, navigation logs and aeroplane mass and balance calculations may be used. The applicant remains responsible for all pre-flight planning howsoever derived, and the examiner will check by oral questioning that the applicant understands the underlying principles. Diagrams and route maps not depicted on standard publications are discouraged unless drawn during the planning phase.

3.3.7 Applicants will be required to consider the aircraft’s take-off and landing performance for the conditions prevailing at all airfields used for the flight and at any nominated alternates. The minimum requirement is to calculate the take-off and landing performance at the point of departure and the landing performance at the most restrictive of the planned destination and

alternate(s). Performance planning should include any safety factors either as required by the ATO Operations Manual or as published in the Skyway Code.

3.4 Weather Minima

3.4.1 The pre-flight preparation for both the IR and EIR requires the applicant to assess the weather conditions and decide whether to proceed with the flight. However, when extreme conditions of high wind speed, severe turbulence, icing or thunderstorms exist, the examiner may determine that this would make the flight difficult to assess and may override the applicant's willingness to proceed. The flight should not proceed if all planned sections cannot be achieved or if the forecast would prevent a return to base or a suitable alternate aerodrome. For the EIR, the applicant must be able to depart and arrive in accordance with VFR in VMC.

3.4.2 In general it is expected that the more restrictive limit for the aircraft or the privileges of the rating being sought will be used. ATOs are required to specify in their aircraft operating procedures the minimum weather conditions below which training and testing shall not take place. Applicants trained at an ATO are expected to comply with these minima. In all cases, applicants shall comply with the Aerodrome Operating Minima (AOM) referred to in Part-NCO.OP.110.

3.4.3 Applicants are expected to display an awareness of icing conditions by regularly checking the outside air temperature (OAT) and indicating this to the examiner. At some point during the flight the examiner may respond to this by simulating a build-up of ice; the applicant should complete all the necessary precautions for 'removing' the ice. When actual ice is present or likely, anti-icing/de-icing equipment must be operated accordingly. ATO must establish an operating procedure for using aircraft icing equipment particularly with reference to pitot heaters, engine/propeller and airframe/windscreen de-icing or anti-icing systems and all equipment must be checked prior to flight in accordance with the AFM/POH. The aircraft must not be flown into known icing conditions if contrary to the AFM limitations.

3.4.4 It should be assumed that during the flight both the 3D and 2D approaches are to be flown to minima in (simulated or actual) marginal weather conditions, therefore any Decision Altitudes/Heights (DA/H), Derived Decision Altitude/Height (DDA/H) or Minimum Descent Altitude/Height (MDA/H) and the corresponding RVR/visibility limits shall be calculated and agreed with the examiner before flight. The minimum altitude/height for completing a circle to land must also be considered. Having briefed the minima for the expected runways and approaches, applicants should be prepared for any runway change that ATC may direct. For flights in ME aeroplanes, the asymmetric committal altitude/height (ACA/H) must be stated. The applicant is expected to use CDFA techniques unless otherwise stated and calculate procedure minima accordingly. If the 2D approach is notified as a “non-CDFA” approach e.g. NDB/DME or VOR/DME with DME out of service, the applicant must be prepared to fly the modified approach accordingly.

3.4.5 Applicants will be expected to comply with any flight restrictions, such as an "approach ban", that may exist during the course of the flight. Consideration must also be given to the weather conditions at the nominated alternate airfield, particularly if the actual weather at the take-off airfield or the destination is marginal.

3.4.6 Single engine aeroplanes

If the IR or EIR is conducted in a SE aeroplane, consideration must be given to the possibility of partial or complete engine failure during flight over large expanses of water or along a route where the terrain is regarded as inhospitable. If flight over a large conurbation is planned an additional consideration is the requirement of SERA.3105 (Minimum height) to be able to land without due hazard. If engine failure were to occur whilst in IMC or above overcast cloud, there should be sufficient time and visibility below cloud to identify a suitable landing area. It would be imprudent to put the aircraft in a position from which a forced landing had little chance of success. Therefore, the applicant and examiner are strongly advised to consider all factors, including the terrain, weather (cloud base and visibility below cloud) and whether or not the aircraft is equipped with a ballistic recovery system before deciding whether to go ahead with the flight.

3.5 Main Briefing

3.5.1 Once the applicant has completed the flight planning, the examiner will give a comprehensive briefing covering all aspects of the flight. During the briefing, the applicant may ask questions at any time if unclear about any aspect. This briefing normally takes about 30 minutes. The examiner may brief in a different sequence to that listed below but will cover all the relevant items. The examiner will ask questions relevant to the briefed profile and on any area related to planning, the conduct of the flight and IFR procedures in general. If the applicant is a private owner/operator who has not undertaken training at an ATO and therefore is not subject to standardised procedures of an ATO operations manual, the examiner should clarify all relevant aspects of operating techniques before detailed briefing commences.

3.5.2 The briefing will include:

- ***The purpose of the flight***
  The purpose of the flight is for the applicant to demonstrate his ability to plan and conduct an IFR flight with a passenger whilst acting as pilot-in-command and operating as single crew member. The briefed profile shall be conducted in accordance with Instrument Flight Rules (IFR) and will include simulated aeroplane emergencies (ME aeroplanes only).

- ***The applicant's responsibilities***
  The examiner will explain that the applicant is responsible for all the duties and decisions necessary for the safe and practical conduct of the flight. Throughout the flight the applicant will be responsible for ATC liaison and compliance and must comply with all instructions and clearances. Where these differ from the pre-briefed profile, ATC instructions take precedence. Applicants should arrange the flight so that flight plan departure time and any other slot allocation is achieved within the allowable tolerances (-5 minutes/+ 10 minutes in accordance with the Integrated Flight Plan System) and update ATC as necessary. Modern radar and ATC procedures often reduce the need for position reporting. However, the examiner will expect to be informed of ETAs en-route and for the applicant to achieve the ETA or revise the ETA to achieve ±3 minutes. The applicant may be asked to give a standard position report at some stage of the flight. If intervention or restrictions imposed by ATC result in significant changes to the briefed flight profile such that all items cannot be assessed, this may result in the test being assessed as 'incomplete'. Passenger safety and comfort must be considered throughout the flight. The applicant is not to expect any assistance in the operation of the flight and will be briefed on the role of the examiner as a safety pilot when view limiting devices are in place.

- ***Check lists***
  Throughout the flight the applicant will be expected to use an aeroplane checklist. Airborne checks may be completed from memory or from alternative notes but must be in accordance with the checklist. Applicants will be asked to verbalise checks as much as possible, but it is appreciated that at times they may need to complete checks whilst talking on the radio. If the examiner is in any doubt about whether a checklist item has been completed, he will ask. For simulated emergency procedures, all checks should be clearly stated with simultaneous touch-drills of the relevant control, switch or lever as appropriate.

- ***Planning check***
  The examiner will assess the applicant's ability to check the appropriate aeroplane documents before flight. He will expect to be briefed by the applicant on the forecast and actual weather conditions and suitability for flight. He will also expect a brief on NOTAM and other pertinent navigation information such as GNSS outages and advisories. The examiner will check the applicant’s flight navigation log and may require a copy.
  He will question the applicant on various aspects of the planning, for example: choice of operating altitudes/levels, minimum safe altitudes, fuel planning, icing procedures, content of the flight plan etc. The applicant's calculation and understanding of aircraft performance, performance factors and loading will be assessed.

- ***Speeds***
  The aeroplane must be operated in accordance with the AFM or POH as appropriate and, where training has been undertaken at an ATO, the operating procedures in the ATO Operations or Training Manual. The examiner will require confirmation of the various speeds and configurations to be used at each phase of flight. Speeds may be adjusted to meet different conditions or circumstances, but the examiner must be advised of the new target speed or configuration at that time.

- ***Instrument Approach Minima***
  Applicants will be required to give details of the operating minima to be observed throughout including minima for the instrument approaches, i.e. DA/H, MDA/H, circling minima, RVR/visibility minima and MSA. For 2D approaches the applicant will be expected to fly a continuous descent final approach (CDFA) technique in accordance with the published procedures and, where applicable, the ATO operations manual.

- ***The Profile***
  The examiner will go through the flight, item by item explaining to the applicant what is required of him. The examiner will not instruct the applicant on how to operate or manage the flight; he will merely advise what he wants to see the applicant do. Conditions, such as limitations on the use of autopilot, flight director, moving-map displays etc will be covered. During the briefing, the examiner will regularly check whether the applicant has any questions and will ensure that the applicant understands his responsibilities and what is required of him during the test. During the flight, the examiner will not prompt or assist the applicant in any way and will only give instructions if required to manage the sequence of the flight. The lack of conversation in flight should not be interpreted as being unhelpful or hostile but is simply to allow the applicant to conduct the flight without interference.

- ***Airwork on Instruments***
  The examiner will brief the phase of the flight in which the instrument airwork exercises will be conducted. The examiner will be responsible for ATC liaison, lookout and location/navigation during this section, but the applicant will remain in control of the aircraft and be responsible for configuration, limitations and security. The examiner will brief the required items in detail and remind the applicant of each item in the air. After any period where the examiner has taken responsibility for the flight, including navigation and ATC liaison, the applicant will be made aware of the position of the aircraft relative to controlled airspace, airfields etc and the level of ATC service provision before control is handed back. The examiner must ensure that adequate time is available for the applicant to complete any necessary duties prior to the next briefed event, as a guide 10-minute flight time or 20 track miles should be sufficient. If the remaining time/distance is less than this, the examiner should advise the applicant of a suitable heading to fly to remain outside controlled airspace or should request delaying action from ATC.

- ***Emergencies and abnormal conditions***
  The examiner will brief the procedure and requirements for the simulated EFATO and how/when he will respond with follow-up action such as setting the engine/propeller at 'zero' thrust. He will discuss the actions necessary should any actual emergency or abnormal condition occur during the flight. In general, the pilot flying the aircraft at the time is to remain in control and handle the problem but the examiner, as aircraft commander, may elect to take control at any stage.

- ***Oral questioning***
  The examiner will ask practical questions relating to the flight on subjects such as TEM, IFR procedures, aircraft performance, mass and balance, icing procedures, emergency handling and the aircraft documents. For IR and EIR skill tests where the applicant has claimed training credit on the basis of holding a valid IR issued in accordance with the requirements of Annex 1 to the Chicago Convention, the examiner is required to assess an adequate level of theoretical knowledge of Air Law, Meteorology, Flight Planning and Performance. An example theoretical knowledge oral examination question bank is provided at Appendix 2 for this purpose.

- ***View limiting devices - simulating IMC***
  Most of the items in the IR and EIR test schedules must be performed "by sole reference to instruments" and so some form of view limiting device must be used throughout the flight to simulate IMC and obscure external visual reference for the applicant. Acceptable devices include aircraft screening; head-worn devices such as hoods, visors or 'foggles'.

If a head-worn device is to be used, it should be fitted at the holding point shortly before departure but raised in a manner that enable the candidate to see adequately to perform a safe take-off. Once cleared onto the runway for departure the examiner should taxi the aircraft and line-up on the runway. At the previously discussed minimum cloud base the examiner will ask the candidate to lower the view limiting device to simulate instrument flight conditions. The examiner will indicate when view limiting devices can be fully removed for the final approach to land.

If screens are used then some of them may be positioned before departure, but the forward view must be sufficient to allow the applicant to have sufficient visual references for the take-off. The final screens should not be put in place until around 300 feet AGL. Aircraft screening must not restrict the examiner's ability to conduct an effective lookout. The examiner will act as the 'safety pilot' when view limiting devices are being used, but the applicant is expected to operate under an appropriate level of service from ATC as if in IMC throughout. The applicant is expected to retain an air picture of where other conflicting traffic is in relationship to the aircraft and direct the examiner's lookout accordingly. The examiner will indicate when view limiting devices can be fully removed for the final approach to land. Where there is doubt about the efficacy of the view limiting device(s) provided, the matter should be referred to CAA Flight Operations (Training) Inspector (ATO & FCL).

3.6 The Flight

3.6.1 Applicants will be assessed on all aspects of the flight. Sound basic handling skills are essential as well as TEM, navigation, instrument flying, correct R/T phraseology, cockpit and overall flight management. The examiner may elect to evaluate certain aspects by oral questioning.

Departure Procedure (Section 1)

3.6.2 All pre-flight preparation, including checks of the aeroplane equipment, fuel, oil, ballast etc must be made in good time. Any delays, however caused, are a responsibility for the applicant to manage.

3.6.3 The external checks shall be completed using the aircraft checklist. The examiner may observe the external inspection and may ask, at any stage, questions about the aeroplane or procedures. It should be assumed, even during the summer months, that the aircraft has been parked in sub-zero temperatures and may encounter icing conditions at any stage of the flight.

3.6.4 The examiner must be briefed, as a passenger, on the position and method of the use of emergency exits, safety belts, safety harnesses, oxygen equipment, life jackets, and all other devices required by Part-NCO and intended for use by passengers in the case of emergency. The applicant must instruct the examiner in the emergency action which he should take. Passenger briefing cards are acceptable, but the examiner may ask questions.

3.6.5 Where aircraft are fitted with an electric trim system, flight director and/or autopilot, and the equipment is intended to be used during the flight, the applicant will be expected to carry out the necessary pre-flight checks to establish their serviceability.

3.6.6 After engine start and taxiing, the applicant must complete all necessary checks and drills for departure. The instrument flight screens/devices should be positioned before entering the runway (but not any head-worn devices). It may be necessary for the examiner to taxi the aircraft into position for take-off because of the restricted external view but the applicant remains responsible for all checks and ATC liaison and compliance.

3.6.7 The applicant must obtain and read back the ATC IFR departure instructions, revise estimates as necessary and ensure that the radio and navigation equipment is checked and ready for use. If a PBN departure is to be flown, the applicant must ensure that the correct departure procedure has been loaded into the navigation system.

3.6.8 The examiner will expect the applicant to state his intentions in the event of an abnormal situation/emergency during the take-off.

3.6.9 The take-off and departure must comply with ATC instructions and/or published procedures.

En-Route Procedures (Section 3)

3.6.10 The planned route should be accomplished in a practical manner utilising PBN, VOR and/or NDB tracking as appropriate to the classification of airspace. ATC units endeavour to integrate test aircraft into the traffic flow and, on occasion, offer them some priority, but applicants must be prepared to accept re-routings, radar vectoring or holding during busy periods. ATC instructions and clearances must be always complied with, and the applicant will be expected to negotiate for revised clearances if appropriate to achieve the planned routing and profile. The examiner will not normally interfere with imposed changes to the briefed exercise unless these will compromise the requirements of the test.

3.6.11 Radio navigation aids must be tuned and identified before use in accordance with normal operating practice. The examiner will not interfere with any radio or navigation equipment except where it is necessary to 'de-tune' an aid that is not required for that procedure, e.g. ILS de-tuned during the 2D approach or during the holding pattern. Any radio navigation aid de-tuned by the examiner will be restored to their original state at an appropriate time.

3.6.12 The IFR route and profile will be selected by the examiner so that he can see and assess a mixture of PBN, VOR and/or ADF tracking, to and from facilities, and using beam bar (HSI/CDI) and single needle (RMI/RBI) displays. Unless turning at a defined fly-over waypoint, use of fly-by techniques is expected.

3.6.13 IFR approved PBN equipment is a requirement in UK en-route controlled airspace and must be used accordingly. The equipment and installation must be 'approved' for en-route IFR operations and meet the required navigation performance criteria (generally RNAV 5), but RNAV1 on some routes) being used as the primary source of data for aircraft tracking. GNSS equipment must have a current database. Waypoints and flight plan routing should be inserted prior to or during flight. The applicant remains entirely responsible for checking data entries and particular care should be taken if using user defined waypoints.

3.6.14 Execution of an en-route hold, if required by ATC, will be assessed, but does not satisfy the requirement for a terminal hold in Sections 4 or 5.

3.6.15 Where aircraft are fitted with a flight director and/or autopilot, the equipment must be operated in accordance with any limitations in the AFM/POH. Electric trim system may be used as prescribed by the AFM/POH. Altitude alerting systems and speed bugs are permitted. Use of autopilot and flight director is permitted after departure and after achieving straight and level, trimmed, cruise flight en-route at the planned or assigned cruising level to the next waypoint. Permitted modes are Roll, Heading, Altitude, Flight Level Change and Vertical Speed. Tracking by using NAV or APP mode is not permitted. The examiner will indicate when autopilot and FD use is permitted and when it must be discontinued.

Arrival Procedures (Section 3a)

3.6.16 During the arrival, the applicant is expected to confirm that the weather conditions are suitable for commencing and continuing any planned instrument approach. Altimeters must be set and checked appropriately.

3.6.17 Appropriate radio navigation aids must be tuned and identified as required. If a PBN arrival is to be flown, the applicant must ensure that the correct arrival procedure has been loaded into the navigation system.

Terminal Hold (Section 4 and/or Section 5)

3.6.18 A holding pattern will be required in either normal or asymmetric aeroplane configuration. The holding pattern should normally be conducted using a 'single needle' instrument presentation from an NDB, VOR or PBN facility or fix. If a needle presentation is not available, then a beam bar (HSI/CDI) presentation is permitted. The hold shall be based on a published procedure and using a terminal facility; it may be offset from the overhead if so prescribed. Any moving map display will be obscured or removed during the hold and procedural approach, or the range adjusted so that the display provides no useful information. The hold may be executed before the approach or following a missed approach.

3D Operations (Section 4) & 2D Operations (Section 5)

3.6.19 The examiner will have briefed the procedures he wishes to be flown. Procedures must be "notified" procedures i.e. published on the NATS website nats-uk.ead-it.com, eAIP, AIRAC (AD2), UK Military AIP or equivalent non-UK AIP. It is not acceptable under any circumstances for an examiner to brief an applicant to fly a locally produced or designed procedure. The approach must be flown in accordance with the published procedure or as otherwise directed by ATC. One approach must be an RNP approach and the other must be based on terrestrial navigation aids. A RAIM check must be completed prior to any RNP GNSS approach (before or during flight). The applicant must ensure that the correct approach has been loaded into the navigation system. All information required to fly the RNP procedure, including moving map displays, may be used. An RNP approach that provides scaled lateral and vertical guidance (i.e. LPV or LNAV/VNAV approach) is acceptable as a 3D approach. A 2D RNP approach that provides advisory vertical guidance (e.g. LNAV+V) will not be accepted for the purposes of assessing Section 5, the 2D approach, unless the vertical guidance is inhibited either by de-selecting SBAS or by obscuring the glidepath information.
In order to assess the applicant's spatial awareness, the examiner will remove useful access to the MFD moving map by selecting a different page or by adjusting the range scale during the non-RNP approach which should be flown procedurally rather than using radar vectors. Acceptable 2D approaches using terrestrial navigation aids are: NDB, VOR, Localiser only. GNSS derived wind vectors may be displayed throughout the approaches.

3.6.20 Each approach is to be flown with the aeroplane correctly configured and in trim such that a stable approach path is maintained to DA/H (actual or derived) or MDA/H as declared. The examiner will expect the applicant to brief ATC on the intentions after the approach and subsequent manoeuvres. The requirement from the approach may be to land, go-around, depart under IFR or manoeuvre visually to the appropriate runway. A non-aligned approach (not within 30°) will terminate at the MDA/H, DA/H, or circling minima, whichever is the higher. A go-around may then be required after visually manoeuvring to the landing runway. Irrespective of whether the intention is to land or go-around, the applicant will be expected to arrive at DA/H or MDA/H with the aircraft configured and at a speed from which a successful landing could be made at the designated touchdown point without excessive manoeuvring or speed/power/configuration changes. The examiner may ask to the applicant to land from any approach.

3.6.21 ATC may ask for higher or lower than normal pattern speeds and applicants will be expected to demonstrate flexibility to assist with traffic separation if aircraft performance permits. Any deviation from standard approach speed and configuration is expected to be "normalised" by 3nm or 1000' AAL so that a normal landing can be made at the designated touchdown point. The examiner may intervene in the interest of the applicant if compliance with ATC would compromise the assessment of the test.

Simulated Asymmetric Flight (Section 6)

3.6.22 Applicants attempting the Skill Test in a ME aeroplane will be required to fly the exercises in Section 6. The EFATO may be combined with Sections 4 or 5. Correct touch drills are to be used where appropriate during any simulated emergency and the overall safety of the aeroplane and occupants must be maintained throughout. Throughout this section, if the test is carried out in a centreline-thrust ME aeroplane, the 'asymmetric' items are replaced by 'single-engine' items.

3.6.23 At a safe height after take-off or go-around the examiner will simulate an engine failure by closing one of the throttles/power levers.

The applicant will be expected to retain control of the aeroplane, identify the 'failed' engine and carry out the appropriate engine shutdown and propeller feathering procedures using touch drills where necessary, the examiner will be responsible for setting zero thrust and for the management of the (simulated) failed engine. The applicant should ask the examiner whether an engine fire has been simulated. Emergency radio calls should be made aloud to the examiner but not transmitted. Nevertheless, the applicant is expected to state to the examiner, word for word, what would have been transmitted in the real case and not paraphrase. If climb performance or the ability to manoeuvre is restricted, it may be prudent to advise ATC before the approach as this may affect traffic departing behind. Applicants should not assume that any practice emergency is complete until told so by the examiner. On completion of the drills, and when asymmetric handling has been assessed, the examiner will be responsible for restoring power as appropriate.

3.6.24 The applicant will be required to carry out an approach to go-around under asymmetric power and an asymmetric approach to land. The go-around should be flown by reference to instruments, but where the DA/H or MDA/H is higher than ACA/H examiners may, at their discretion, simulate cloud break and the acquisition of visual references by removing all view limiting devices at or just before DA/H or MDA/H. In this case, the applicant will be expected to continue the approach visually as if to land but then initiate a go-around at ACA/H simulating, for example, that the runway was blocked.

Airwork (Section 2)

3.6.25 The examiner will brief his intentions to complete this section either after flying all of the other sections or at a convenient time during transit between airfields. With the view limiting screening/devices in place, the examiner will be responsible for navigation, location, lookout and ATC liaison. The applicant will be responsible for internal security, configuration changes and observance of limitations, etc. On completion of the section the examiner will ensure that the applicant is aware of his location, the navigation aids in use, the level of ATC service and his next task, before handing back control.

Full Panel: Flight by reference to full panel instruments will include:

- Level flight at various speeds, trim.
- Level turns at rate 1.
- Climbing and descending turns at rate 1.

Note: Most of the items above will usually be assessed during the departure, en-route and approach sections of the flight.

- Recoveries from unusual attitudes, including sustained 45° bank turns and steep descending turns.
- Recovery from incipient stalls in level flight, climbing/descending turns and in the landing configuration, with minimum height loss, using the Standard Stall Recovery, recovering to the best rate of climb (V_Y) and back to any heading designated by the examiner when appropriate.

Limited Panel: Flight by reference to limited panel will include:

- Straight and level flight and stabilised climb or descent at a given speed in straight flight.
- Level turns onto given headings at rate 1 using timed or compass turn methods.
- Recovery from unusual attitudes, including climbing, descending and level steep turns.
- Recovery should be made in reasonable time to trimmed straight and level flight at the nominated speed with minimum loss of height.

Note: If the aircraft used for test is not equipped with rate gyro instruments (turn co-ordinator or turn indicator), the standby attitude indicator is to be used with the Primary Flight Display covered, dimmed or otherwise denied. In this case, applicants who have undertaken approved training at an ATO must have been trained and demonstrated competence in flight on limited panel instruments during the basic instrument module (AMC2 to Appendix 6 modular training course for the IR) or equivalent part of an integrated course. When inspecting an applicant's training records prior to test, examiners will look for evidence that the applicant is competent to perform item 2e of the IR skill test schedule using limited panel instruments (no gyro attitude or heading information). Evidence is considered to be a certificate in the applicant's logbook, training records or recommendation for test, signed by an IRE, CRE/IRR, FI or IRI

confirming that the applicant is competent to operate an aircraft by sole reference to limited panel instruments including turns on given headings, level change and recovery from unusual attitudes with simulated failure of the artificial horizon and directional gyro.

3.7 Post Flight Action

3.7.1 At the conclusion of the flight, the examiner may ask questions in order to clarify certain items or actions. The applicant will then be informed of the result and will be given a brief reason for any failed item. The examiner will state the requirements for any retest and indicate any mandatory or recommended further training. Written notification of the result and any further training will be given on the test report form SRG 2131 (IR) or SRG 3107 (EIR) and notice of failure, SRG 2129 (if required). The applicant will be required to sign the form(s) as having understood the result. The form/s will be given to the applicant and copies forwarded to the CAA for administrative action. The examiner will also retain a copy of the appropriate forms for 5 years and in accordance with the General Data Protection Regulation.

3.7.2 Should any test item not have been completed or deemed not assessable by the examiner, then that item will need to be completed on a subsequent flight before the overall test result can be determined.

3.7.3 Should the result be a Partial Pass or Fail, the examiner will offer to debrief the applicant more fully and give advice on any aspect of the test which the applicant may find useful during any subsequent attempt.

3.7.4 Should the result be a Pass, the examiner will also offer a debrief giving advice on any aspect of the test relevant to the applicant's future flying career.

3.7.5 Should an applicant have cause for concern about the **conduct** of the flight test then such comment should be made in writing to Flight Operations (ATO & FCL). Details of the appeal procedure are given in Part 4. Additionally, comments should be entered on the reverse of Form SRG 2129 and signed by both the examiner and the applicant.

3.8 RNP Approach Availability

3.8.1 (UK) Part-FCL requires that an RNP approach be flown on every instrument rating test or check. However, it is recognised that there are reasons that may preclude this from happening, for example:

- Onboard equipment unserviceability;
- RAIM outage or similar affecting planned destination;
- ATC contingency preventing planned approach from being flown;
- Non-availability of an RNP approach within a reasonable distance of departure airfield.

3.8.2 The IR skill test should normally be planned with the expectation of being able to fly an RNP approach during the test, and every effort should be made to achieve this. If, on the day, circumstances mean that an RNP approach is not available, the test may go ahead, if agreed by both the applicant and the examiner, and 2 approaches using terrestrial aids (NDB, VOR, ILS) should be flown. Form SRG 2131 should be annotated by the examiner to indicate that the test is incomplete.

3.8.3 The IR skill test can subsequently be completed to include PBN privileges following a successful test in an SP aeroplane, FFS or FNPT2 with an IRE (normally the same IRE) within 30 days of the original test, during which an RNP approach is flown to either go around or land. In this case, a new form SRG 2131 should be completed, marked to indicate that it is for the completion of the original incomplete test, and submitted to the Authority. The expiry date of the IR will be calculated from the date that the RNP approach is flown.

3.8.4 If 2 approaches using terrestrial aids are flown on an initial IR skill test, then consideration must be given to the consequences of a failure of one of those approaches or of the RNP approach.

- If one of the approaches using terrestrial aids was unsatisfactory, then the applicant has gained a partial pass. The retest could comprise an RNP approach (2D or 3D as appropriate) in order to gain PBN privileges but, in this case, it must be flown in an aeroplane. If the retest comprises a terrestrial approach, then the requirement to fly an RNP approach in an aeroplane, FSTD or FFS must also be satisfied.
- If the 2 approaches using terrestrial aids have been flown satisfactorily, but the subsequent RNP approach was unsatisfactory then the applicant has gained a partial pass. The retest must comprise an RNP approach and should be flown in an aeroplane unless no RNP approaches are available.
- If 2 sections of the initial test are failed, then the applicant moves to the Second Series.
- If one section of the initial test and the RNP approach are failed, then the applicant moves to the Second Series.

3.8.5 Any test for the initial award of PBN privileges must also comply with the requirements of CAP 2138.

3.9 RNAV Substitution

3.9.1 CAP 1926 includes the procedure for the use of RNAV Substitution in UK Airspace: RNAV Substitution may be used in all phases of flight in UK Airspace, except to provide lateral guidance in the final approach segment of an Instrument Approach Procedure (IAP).

3.9.2 CAP 1926 requires operators/pilots to establish and document:

- A policy for the use of RNAV Substitution.
- Standard operating procedures to be used by flight crew when utilizing, the FMS/Area navigation system for substitution, complying with any procedures and/or limitations developed by the aircraft manufacturer in its documentation.
- Training for the use of RNAV Substitution. The training programme shall, as a minimum, include limitations, operational criteria, and operating procedures.

ATO's will therefore need to amend their Operations and Training Manuals before they can introduce the use of RNAV Substitution into their syllabi.

3.9.3 The following guidance explains how RNAV Substitution may be used by the applicant when undertaking a Skills Test for the initial issue of an Instrument Rating. During the test, the examiner will deny or limit the use of some of the systems and displays in order to properly assess a wider range of skills relevant to the privileges being granted. Throughout this guidance, 'conventional' indicates a ground-based navigation aid such as NDB, DME, VOR and ILS.

3.9.4 Whilst the operating procedures described in CAP 1926 may be incorporated into the departure, enroute, and arrival sections of the test without limitation, there need to be some limitations on the Substitution during the hold and approach in order to properly assess the skills relevant to the privileges being granted:

- Holding must be carried out using manual heading adjustment in order to achieve a normal timed hold (or as required on the approach plate), having temporarily halted automatic waypoint sequencing when approaching the holding fix. RNAV guidance may be used to achieve and maintain the inbound holding course, but FS steering (by selecting 'Hold at Waypoint' for example) to achieve a normal 'racetrack' hold is not acceptable. If the aircraft is so equipped, entry to and maintenance of the hold should be carried out using single-needle navigation information rather than by using a CDI display.
- GNSS map information should be denied during the hold entry and maintenance in order to assess the applicant's situational awareness.

- Any approach flown must be coded in the GNSS database. Examiners and applicants should check the inclusion of the planned approach before the flight.

- The initial approach segment of a non-RNP procedural approach may be flown using RNAV Substitution, but a conventional lateral navigation mode must be selected and used once the base turn has been entered.

- RNAV Substitution may be used from the missed approach point onwards.

Use of RNAV Substitution during an approach which is based on conventional aids does not satisfy the requirement that one approach during the IR ST must be an RNP approach.

Part 4 - Assessment Criteria and Administrative Procedures

4.1 Assessment Criteria

4.1.1 The flight will be assessed as if the applicant was operating under IFR with a passenger. The safety, comfort and briefing of passengers must be considered. The applicant shall demonstrate ability to:

- Operate the aeroplane within its limitations
- Complete all manoeuvres with smoothness and accuracy
- Exercise good judgement and airmanship
- Apply aeronautical knowledge of procedures and regulations as currently apply
- Maintain control of the aeroplane at all times in such a manner that the successful outcome of a procedure or manoeuvre is never in doubt.

4.1.2 It is impossible to list all the errors which may constitute a failure of an item or section of the test, but some more common errors and omissions are shown at Appendix 4.

4.1.3 Throughout the flight, the aeroplane should be flown as accurately as possible, but not at the expense of smooth, co-ordinated control inputs and correct technique. The limits or tolerances specified in Part-FCL are reproduced at Appendix 3. They are for guidance and applicants should strive to achieve these throughout the flight, but momentary excursions do not necessarily indicate that a 'failure' will result. The examiner will be looking for the applicant to recognise the error promptly and make smooth and timely corrections.

4.1.4 The examiner will make allowance for adverse weather conditions such as turbulence and the handling qualities and performance of the aeroplane used.

4.2 Administrative Procedures

4.2.1 Each time an applicant undertakes an IR Skill Test it is known as an "Attempt". "Attempts" are grouped into "Series". There are up to two Attempts in each Series. There is no limit to the number of series that may be taken.

4.2.2 A PASS will be awarded when all sections of the test are passed.

4.2.3 An applicant failing only one section at the first attempt in a series shall have gained a PARTIAL PASS. The second attempt will always require the applicant to retake the previously failed section. Additionally, the applicant will be expected to carry out the actions necessary to put the aircraft in a position from which the failed section can be retested. The examiner may require or recommend further training to be completed before applying for the next attempt.

4.2.4 A FAIL will be awarded if more than one section is failed at the first attempt in a series or if any item is failed at the second attempt of a series.

4.2.5 A free retest may be awarded if the applicant discontinues the flight and the reasons for doing so are agreed by the examiner or if the examiner deems any part of the flight un-assessable.

The free retest will require only those sections or items not previously flown to be completed; these items must be completed before the result of the flight can be determined. If the applicant chooses to terminate a skill test for reasons considered inadequate by the examiner, the applicant shall retake the entire test. This will attract a further fee.

4.2.6 A FAIL as defined at 4.2.4 above will conclude that Series. After a failure of the first attempt, the examiner may require or recommend further training. After a failure of the second attempt, further training will be required. Any required training must be completed before applying for a further attempt.

4.2.7 Should an applicant fail the second or subsequent series, CAA Flight Test Bookings may designate a CAA FO(T)I (Staff Flight Examiner) to conduct the next test.

4.2.8 After achieving a partial pass or failing a test with a particular examiner, the applicant may elect not to fly any re-test with the same examiner.

4.2.9 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 2 attempts will require further training. A new recommendation for test is required if all sections have not been completed within 6 months. Notwithstanding the previous statement, applicants for an IR or EIR skill test credited with the Part-FCL training requirements that have not received training at an ATO, do not require a course completion certificate or recommendation for test.

4.3 Applicant's Appeal Procedure

4.3.1 Form SRG 2129 and the reverse of Form SRG 2131 and contain an extract from the Civil Aviation Authority Regulations 1991, which is reproduced below:

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

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

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

General Counsel and Secretary to the CAA

5th Floor Westferry

11 Westferry Circus

London

E14 4HD

Appendix 1 – IR Skill Test Schedule and Standard

Applicants' Notes

These notes are intended to give applicants a detailed account of the exercises that may, at the discretion of the examiner, be required in each section. The headings used relate directly to those in Appendix 7 to Part-FCL and on form SRG 2131. In the interests of openness, the standards to which they are assessed have also been included and these are shown in *italics*.

It is emphasised that during the skill test applicants should concern themselves only with flying and operating of the aircraft and managing the flight to the best of their ability. Test standards are the sole responsibility of the examiner.

Examiners' Notes

These guidance notes are published by the CAA to establish the standards required for a Part-FCL IR or EIR (Aeroplane) skill test. Any flight test can only provide a 'snapshot' of a pilot's ability and therefore, to ensure overall pilot competence, instructors at ATO are expected and encouraged to use these standards when preparing applicants for the test. The examiner must apply the standards evenly and fairly and without prejudice.

Section 1 – Departure

a. ***Use of flight manual (or equivalent)***
Use of the AFM or POH and Operations Manual to determine aeroplane performance; mass and balance and aeroplane documents to determine acceptability for the flight; Aircraft Technical Log.

- *Determines that the aeroplane is correctly fuelled, loaded and legal for the flight.*
- *Considers usage of de-icing fluid if carried.*
- *Confirms any aeroplane performance criteria and limitations applicable in relation to runway and weather conditions.*
- *Applies the correct performance factors in accordance with the ATO Operations Manual or other relevant document.*

b. ***Use of Air Traffic Services document and weather document***
Use of the correct documents, including maps; charts and approach procedure plates to prepare flight plan and flight log; collating and interpreting the weather documents to determine the route weather.

- *Ensures that all maps, charts and plates are current and amended where necessary.*

c. ***Preparation of ATC flight plan and IFR flight log***
Preparation of the ATC IFR flight plan for the route, including any off-airways sectors, and preparation of navigation flight log.

- *Completes an appropriate flight navigation log.*
- *Completes the required ATC flight plan(s) and ensures that all required airfields are addressed.*
- *Demonstrates sufficient knowledge of the regulatory requirements relating to instrument flight.*
- *Checks NOTAM and where applicable completes a RAIM check (using AUGUR or equivalent).*

d. ***Identification of required navaids***
Identification of the required navaids for departure, arrival and approach procedures.

- *Considers promulgated range and aid serviceability.*

e. ***Pre-flight Inspection***
Full initial pre-flight inspection in accordance with the approved check list assuming the risk of 'icing conditions'.

- *Performs all elements of the aeroplane pre-flight inspections as detailed and applicable to the actual or simulated weather conditions.*
- *Confirms that the aeroplane is in a serviceable and safe condition for flight.*
- *Checks and completes all necessary documentation.*

- *Takes appropriate action with respect to any identified unsatisfactory conditions.*
- *Confirms that any planned PBN routes are programmed and desired RNP approaches are available.*

f. ***Weather Minima***

An assessment of the weather affecting the departure, route, destination and alternate airfields. Determination of the expected instrument approach minimum heights/altitudes. Applicants trained at an ATO will be expected to operate to the minimum weather conditions stated in the organisation's operations manual.

- *Obtains and assesses all elements of the prevailing and forecast weather conditions for the route.*

g. ***Taxying***

Passenger briefing; correct taxying technique, procedures and checks. Compliance with aerodrome markings and indicators including marshalling instructions and signals.

h. ***PBN departure (if applicable)***

Check that the correct procedure has been loaded in the navigation system. Cross-check between the navigation system display and the departure chart.

- *Checks that the departure is in the correct sequence on the system flight plan.*
- *Ensures that waypoints, tracks, distances and altitudes on the system and on the chart(s) are the same.*

i. ***Pre take-off briefing, take-off***

Obtaining ATC departure clearance, flight deck preparation, confirmation of departure and passenger emergency briefing. Actions to be taken regarding the aeroplane if an emergency occurs during departure should be covered in the pre-flight Main Briefing.

- *Completes all recommended taxying checks and procedures.*
- *Complies with airport markings and signals.*
- *Completes all departure checks and drills including engine operations.*
- *Obtains ATC clearance.*
- *Completes an appropriate passenger briefing. (Emergency handling details should be discussed in the pre-flight brief).*
- *Confirms any performance criteria including crosswind condition.*
- *Actions any anti-icing procedures.*
- *Positions the aeroplane correctly for take-off and advances the throttles to take off power with appropriate checks.*
- *Conforms to the correct take off technique using the recommended speeds for rotation (V_R) and initial climb.*
- *Ensures a safe climb and departure adjusting power and aeroplane configuration as appropriate.*
- *Completes all necessary after take-off checks.*

j. ***Transition to instrument flight***

Take-off in accordance with the performance calculations using the correct techniques. Establish the climb, complete a smooth transition to instrument flight and complete the after take-off checks and drills.

k. ***Instrument departure procedures***

Complete the Standard Instrument Departure procedure (SID) using PBN or conventional navaids or follow the ATC departure instructions to join controlled airspace; use of correct altimeter setting procedure; maintaining aeroplane control, speed, heading and level.

- *Maintains directional control and drift corrections within acceptable limits of speed, heading, height and track.*
- *Identifies any navigation aids used.*
- *Follows any noise routing or departure procedures and ATC clearances.*
- *Completes all necessary climb checks including altimeter setting procedures and ice precautions.*
- *Correctly re-programs the system in the event of re-routing.*

Section 2 – Airwork

Control of the aeroplane by sole reference to instruments including:

a. ***Full Panel – straight and level flight***
Straight and level flight at various speeds maintaining balance and trim.

b. ***Full Panel – climbing and descending***
Climbing and descending turns at Rate 1.

c. ***Full Panel – recoveries from unusual attitudes***

Recoveries from unusual attitudes, including sustained 45° bank turns and steep descending turns.

- *Recovers from unusual attitudes including sustained 45° bank turns and steep descending turns using the correct technique to minimise height lost.*

d. ***Full Panel – incipient stall recoveries ****
Recoveries from the approach to the stall in level flight, climbing/descending turns and in the landing configuration.
Note: the test schedule permits these manoeuvres to be performed in a Flight Simulator or FNPT II but it is NOT CAA policy to do so.

- *Recovers from stalls in the appropriate configuration in the base to final turn and on the final approach at the first signs of the stall, on their own initiative, with minimum height loss, using the Standard Stall Recovery, recovering to the best, clean rate of climb (V_Y) and back to any heading designated by the examiner when appropriate.*

e. ***Limited Panel***
Manoeuvres including straight and level flight and stabilised climbing and descending at a given speed. Level turns at Rate 1 onto given headings. Recoveries from unusual attitudes.

- *Controls the aeroplane without use of primary instrument display within the nominated limits (due consideration will be given for turbulence).*
- *Completes flight in straight and level, and climbing and descending, at nominated speeds. Turns flown at Rate 1 onto nominated headings, using the correct technique and demonstrating correct instrument scan and interpretation.*
- *Recovers from unusual attitudes including sustained 45° bank turns and steep descending and climbing turns using the correct technique to minimise height lost or gained.*

Note: If no rate gyroscopic instruments are fitted, the standby instrument display is to be used with the primary display covered or otherwise denied.

Section 3 - En-Route IFR Procedures

a. ***Tracking***
Tracking, including interception, e.g. NDB, VOR, PBN.

- *Intercepts and maintains the route or amended route including tracking to and from an NDB or VOR or PBN waypoint.*
- *When given "radar vectors", remains on the vectored heading until told to resume own navigation.*
  ***Note**: PBN equipment (at least RNAV 5) is now mandatory for use in in UK en-route controlled airspace and must meet certification requirements and, where applicable, have a current database.*

b. ***Use of navigation systems and radio aids***
Correct use of radio aids with regard to promulgated range, identification and interpretation. Use of ATIS/VOLMET where applicable.

c. ***Level flight control***

- *Smooth control of heading, altitude, speed, power, trim and ancillary controls.*
- *Correct use of autopilot and flight director where appropriate and permitted by the examiner.*

d. ***Altimeter settings***

- *Correct altimeter setting procedure and cross-checking, monitoring of en-route MSA.*

e. ***Timing and ETAs***

- *Timing and revision of ETAs including en-route hold procedures if required.*

f. ***Monitoring flight progress***

- *Completion of the flight log to monitor flight progress, provide position reports and manage the fuel system and usage; management of the other aeroplane systems. Use of check list.*

f. ***Ice protection procedures***

- *Monitoring of OAT, icing risk and ice accretion rate (simulated if necessary); correct use of anti-icing and de-icing procedures.*

g. ***ATC Liaison***

ATC Liaison – compliance, RTF procedures.

- *Follows the flight planned route or complies with any other ATC route requirements within the operating limits specified.*
- *Uses the correct RTF procedures and phraseology.*

Section 3a – Arrival Procedure

a. ***Setting and checking of navaids***

Correct use of radio aids with regard to promulgated range, identification and interpretation.

b. ***Arrival procedures, altimeter checks***

Use of ATIS/VOLMET where available. Completion of the published arrival procedure or as instructed by ATC including altimeter setting.

- *Uses correct altimeter setting procedure and cross-checking, monitoring of arrival MSA.*

c. ***Altitude and speed constraints***

- *Smooth control of heading, altitude, speed, power, trim and ancillary controls to achieve published level-off altitudes.*

d. ***PBN arrival (if applicable)***

Check that the correct procedure has been loaded in the navigation system. Cross-check between the navigation system display and the departure chart.

- *Checks that the arrival is in the correct sequence on the system flight plan.*
- *Ensures that waypoints, tracks, distances and altitudes on the system and on the chart(s) are the same.*

Section 4 – 3D Operations

a. ***Navigation Aids***

Setting and checking of navigational aids, checking vertical path angle, identification of facilities.

- *Correct use of navigation aids with regard to promulgated range, identification procedures, failure monitoring and interpretation.*

For RNP approach. Check that the correct procedure has been loaded in the navigation system. Cross-check between the navigation system display and the departure chart.

- *Checks that the approach is in the correct sequence on the system flight plan.*
- *Ensures that waypoints, tracks, distances and altitudes on the system and on the chart(s) are the same.*

b. ***Approach and Landing Briefing***

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 +***

Complete appropriate entry procedure followed by a standard ICAO hold (or as published) using a needle pointer presentation (where available).

- *Makes the appropriate corrections to heading and time for the known wind.*
- *Revises corrections as necessary for any subsequent holds.*

d. ***Published Approach Procedure***

Complies with the published 3D approach procedure, vertical and horizontal profile to the nominated minima.

- *Completes the intermediate approach as required to establish the final approach segment within the specified flight tolerances.*
- *Establishes the final approach segment and maintains the approach path in horizontal and vertical profile (max 1/2 scale deflection) to Decision Height/Altitude.*
- *Controls the aircraft as necessary to make adjustment to and achieve a stable and trimmed final approach path.*

  For RNP approach, confirms correct sequencing of waypoints and system modes during the approach.

e. ***Approach timing***

Monitors or controls the approach procedure using timing as necessary.

f. ***Altitude, speed and heading control***

- *Establishes a stabilised approach, in-trim for the aeroplane configuration and speed, using the correct techniques for attitude, heading and power control.*

  Correctly assesses drift and rate of descent.

g. ***Go-around +***

At the minima, or as directed by ATC, transition to a climb at the correct speed and complete the checks.

- *Initiates a missed approach at Decision Height/Altitude DH/A (or transitions to land if so required).*

  For RNP go-around, transitions from 'SUSP' mode correctly, confirms correct sequencing of waypoints and system modes.

h. ***Missed approach procedure/landing +***

Follow the missed approach procedure or continue for visual landing or circle for landing. (If flown first, following the 3D approach, a go-around and missed approach procedure will normally be required.)

Missed Approach:

- *Demonstrates knowledge of missed approach procedure.*
- *Establishes aeroplane in a safe climb out and initiates aeroplane configuration changes as required to achieve as least the performance climb segments.*
- *Follows designated missed approach procedure or as required by ATC.*

Landing:

- *Selects and achieves the appropriate touchdown area.*
- *Adjusts descent and round-out (flare) to achieve a safe landing with little or no float with appropriate drift and crosswind correction.*

  Maintains control and applies aeroplane brakes for a safe roll out.

i. ***ATC liaison***

ATC liaison using the correct RTF procedures and phraseology, and compliance with procedures and clearances.

- *Complies with all ATC instructions and clearances.*
- *Uses correct RTF procedures.*

Section 5 – 2D Operations

a. ***Navigation Aids***

Setting and checking of navigational aids, identification of facilities.

- *Correct use of navigation aids with regard to promulgated range, identification procedures, failure monitoring and interpretation.*

For RNP approach. Check that the correct procedure has been loaded in the navigation system. Cross-check between the navigation system display and the departure chart.

- *Checks that the approach is in the correct sequence on the system flight plan.*

- *Ensures that waypoints, tracks, distances and altitudes on the system and on the chart(s) are the same.*

b. ***Approach and landing briefing***

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 +***

Complete appropriate entry procedure followed by a standard ICAO hold (or as published) using a needle pointer presentation (where available).

- *Makes the appropriate corrections to heading and time for the known wind.*

  Revises corrections as necessary for any subsequent holds.

d. ***Published approach procedure***

Complies with the published 2D approach procedure, vertical and horizontal profile to the nominated minima.

- *Completes the intermediate approach as required to establish the final approach segment within the specified flight tolerances.*
- *Establishes the final approach segment and maintains the approach path in horizontal profile (max 1/2 scale deflection or ±5°) to Derived Decision Height/Altitude (CDFA) or MDH/A.*

  For RNP approach, confirms correct sequencing of waypoints and system modes during the approach.

e. ***Approach timing***

Monitors or controls the approach procedure using timing as necessary.

f. ***Control of the aeroplane***

Altitude/distance to MAPt, speed, heading control (stabilised approach), step down fixes if applicable

- *Establishes a stabilised approach, in-trim for the aircraft configuration and speed, using correct techniques for attitude, heading and power control. Correct assessments of drift and rate of descent.*

  For CDFA controls the vertical flightpath to achieve and maintain the published descent profile. Is in a position to make a safe landing at derived DH/A.

g. ***Go-around +***

At the minima, or as directed by ATC, transition to a climb at the correct speed and complete the checks.

- *For CDFA initiates the missed approach procedure upon reaching Derived Decision Height/Altitude if the required visual references for landing are not obtained.*
- *For CDFA does not descend below the published MDH/A during the go-around.*
- *For non-CDFA continues towards the Missed Approach Point until visual flight conditions are established so as to complete transition to a visual approach or manoeuvre for landing; execute the Missed Approach if not visual.*

  For RNP go-around, transitions from 'SUSP' mode correctly, confirms correct sequencing of waypoints and system modes.

h. ***Missed approach procedure/landing +***

Follow the missed approach procedure or continue for visual landing or circle for landing. (If flown first, following the 2D approach, a go-around and missed approach procedure will normally be required.)

Missed Approach:

- *Demonstrates knowledge of missed approach procedure.*
- *Establishes aeroplane in a safe climb out and initiates aeroplane configuration changes as required to achieve as least the performance climb segments.*
- *Follows designated missed approach procedure or as required by ATC.*

Landing:

- *Selects and achieves the appropriate touchdown area.*
- *Adjusts descent and round-out (flare) to achieve a safe landing with little or no float with appropriate drift and crosswind correction.*

  Maintains control and applies aeroplane brakes for a safe roll out.

i. ***ATC Liaison***

ATC liaison using the correct RTF procedures and phraseology, and compliance with procedures and clearances.

- *Complies with all ATC instructions and clearances.*
- *Uses correct RTF procedures.*

Note: + items may be performed in Section 4 or 5.

2D Operations

- *Selects and complies with the appropriate VOR/NDB/LOCALISER-only/RNP instrument approach procedure.*
- *Setting and checking of navigational aids, identification of facilities.*
- *Establishes the appropriate aeroplane configuration and airspeed for all phases of the approach.*
- *Completes the necessary aeroplane checks and drills.*
- *Establishes the final approach segment and maintains the approach track and vertical profile to MDH/A or circling minima. If CDFA techniques are being used, executes the Missed Approach at the nominated derived DA/H if not visual, otherwise continues towards the Missed Approach Point until visual flight conditions are established so as to complete transition to a visual approach or manoeuvre for landing; execute the Missed Approach if not visual.*

Section 6 - Simulated Asymmetric Flight

a. ***Simulated Engine Failure After Take Off or on go-round***

Following a simulated engine failure after take-off or on go-round, maintain control by sole reference to instruments and complete the emergency drills (correct touch drills where required).

- *Maintains control following a simulated engine failure after take-off.*
- *Checks for signs of fire.*
- *Completes the necessary checks and drills maintains the correct speed and continues to follow ATC instructions.*
- *Makes appropriate urgency/emergency R/T call (in-cockpit).*
- *Trims.*

Note: Engine failure will be simulated only after the aeroplane is at a safe altitude or, for Commercial Air Transport (Part-CAT), has achieved at least the take-off safety speed or V1 decision speed appropriate to aeroplane type/class.

b. ***Asymmetric approach, go around and procedural missed approach***

One approach, normally the second, will be flown to a procedural missed approach or as directed by ATC whilst maintaining the climb schedule for the (simulated) asymmetric condition. When an asymmetric 2D approach is flown, the examiner may require the applicant to make a visual transition to the landing runway prior to the asymmetric go around at ACA/H.

- *Completes an asymmetric go-around into a circling approach or other appropriate manoeuvre maintaining control at safe speeds.*
- *Plans and follows the circling approach or circuit pattern and orientation with the landing runway.*
- *From the circling approach or visual circuit establishes the recommended aeroplane approach configuration, adjusting speed and rate of descent to maintain a stabilised approach pattern.*

  Where necessary completes a further asymmetric instrument approach to land.

c. ***Asymmetric approach and full stop landing***

Following the asymmetric go around and, when the required visual references have been established, continue into the circling approach procedure or appropriate visual circuit to land. If weather conditions preclude a visual manoeuvre, the final asymmetric approach to land may, if circumstances permit, be made from another instrument approach.

- *Considers the actual weather and wind conditions, landing surface and obstructions.*
- *Selects and achieves the appropriate touchdown area.*

- *Adjusts descent and round-out (flare) to achieve a safe landing with little or no float with appropriate drift and crosswind correction.*
- *Maintains control and applies aeroplane brakes for a safe roll out.*
- *Completes necessary checks and drills.*

Observes ACA/H and satisfies criteria for safe landing before committing below ACA/H.

d. ***ATC Liaison***

Compliance – RTF Procedure, Airmanship

- *Complies with ATC instructions and maintains satisfactory lookout to avoid other circuit traffic.*

Appendix 2 – Conversion of a Third Country Instrument Rating – Practicalities for the IR ST and theoretical knowledge oral exam

1. ***Introduction***

The holder of a valid third country (non-UK) IR can gain full credit for theoretical knowledge (TK) and flight training and for the TK examinations. Accordingly, the applicant may not have undertaken any training at an ATO prior to test. This will require a different approach from the examiner when conducting an IR ST for an applicant holding a valid* IR issued in accordance with the requirements of Annex 1 to the Chicago Convention.

The IRE is strongly advised to contact the applicant as soon as designated to conduct the test. This is important because the applicant may well be using his own aircraft and the examiner must ensure that they are able to fly both legally (in the case of foreign registration) and practically in terms of differences training and familiarity with the systems, instruments and avionics fitted.

There has been considerable work to establish a fair and accessible entry route for qualified private owner/operators into the UK system which allows the applicant to request an IR skill test through CAA Flight Test Bookings without the intervention of an ATO. Applicants following this route may not have been assessed by instructors at an ATO and may not be in possession of a recommendation for test. Similarly, the aircraft might not be operated in accordance with an operations manual and standardised procedures. Therefore, the IRE may be required to play a greater role in establishing that the applicant understands and meets the requirements of and is adequately prepared for the test.

It may be prudent to contact the applicant a day or two before the day of test and allow more time on the day to meet and greet the applicant, check documents (licence, logbook, aircraft documents etc), establish operating methods such as use of avionics, autopilot, engine management etc and discuss aircraft configurations, power settings, speeds, and limitations.

2. ***Conditions***

The applicant must hold a Part-FCL PPL or CPL and a valid* IR(A) issued in compliance with the requirements of Annex 1 to the Chicago Convention by a third country. The applicant must produce logbook evidence showing a minimum experience of at least 50 hours of flight time under IFR as PIC on aeroplanes.

3. ***Skill Test Conduct***

The conduct of the flight portion of the IR skill test is no different to any other IR in terms of schedule, tolerances and assessment and should be conducted in accordance with Appendix 7 to Part-FCL and this Standards Document. In certain cases, the applicant will present for test with a privately owned or group owned aircraft, possibly foreign registered. In some instances, the equipment levels required by Part-NCO may not be met CAP1926 allows for the substitution of GNSS for terrestrial aids, such as, VOR, ADF and DME. However, any approach flown using RNAV substitution must be coded in the aircraft database and the final approach segment must be flown using conventional lateral guidance.

4. ***Theoretical knowledge***

The applicant's theoretical knowledge associated with IFR operations and procedures will have been assessed by another ICAO contracting state. The applicant is credited with the normal Part-FCL requirements for IR theoretical knowledge training at an ATO and written examinations. However, the amended Aircrew Regulation requires that applicants claiming full credit demonstrate, during the IR skill test, that they have acquired an adequate level of knowledge of Air Law, Meteorology, Flight Planning and Performance. Appendix 2 has been included in this Standards Document to provide examiners with an example bank of suitable questions to ask in order to satisfy themselves that the applicant has acquired an adequate level of knowledge. It also indicates to prospective applicants the likely nature and scope of the theoretical knowledge oral exam. It is based on the learning objectives associated with the Part-FCL IR theoretical knowledge examination at AMC1 FCL.615(b).

This question bank is provided for guidance only and examiners should strive to frame any questioning within the context of the planned route and profile and the applicant's pre-flight planning and preparation; as well as checking knowledge and understanding in more general areas.

5. ***Theoretical Knowledge Assessment***

As a guide the theoretical knowledge assessment should take between 60 to 90 minutes. Examiners are **strongly** advised to keep a record of the subject areas covered by the theoretical knowledge oral exam in the same way they keep a record of the flight exercises. In the event that the applicant fails to demonstrate an adequate level of theoretical knowledge of Air Law, Meteorology, Flight Planning and Performance, the examiner must assess the skill test as failed. The Examiner's Report Forms for the IR (SRG 2131) and EIR (SRG 3107) include a box to tick to indicate*, "I have assessed the applicant's level of IR knowledge and found it to be adequate".*

*Valid is taken to mean that the holder is entitled, according to the regulatory requirements of the state of licence issue, to exercise the privileges of the ICAO compliant IR on the date of test. So, for an FAA IR for example, the applicant shall meet the requirements of the Code of Federal Regulations, Part 61, § 61.57 (c) for recent instrument flight experience.

References: Parts FCL, NCO, SERA, UK ANO, UK eAIP, ICAO Pans-OPS

Air Law and Flight Planning

Indicate to the examiner, with appropriate reference material if required, how your ICAO compliant IR is rendered valid and demonstrate that those requirements have been met.
Demonstrate how to find in Part-FCL:

- the privileges of the holder of an UK IR/EIR (as applicable)
- the validity period of an UK IR/EIR (as applicable)
- the revalidation/renewal requirements for an UK IR/EIR (as applicable)

Demonstrate how to find in the eAIP information related to:

- requirements for the carriage of radio and radio navigation equipment
- requirements for PBN
- the instrument flight rules and requirements for IFR flight in controlled and uncontrolled airspace
- explanatory information for the decode of meteorological charts, forecasts and observations
- airway designations and frequencies
- information on airspace restrictions such as danger and restricted areas
- information regarding radio navigation aid frequencies and coverage
- runway declared distances for a specified airfield
- facilities available (e.g. fuel) at a specific airfield
- calculation of official nighttime

Aerodromes, markings, signs and lighting

Describe the meaning of various airfield markings, signs and lights including:

- taxiway centre and edge lights
- surface location and direction markings and signs
- guard lights and stop bars
- runway taxi holding position markings and signs
  (Note: this can be done whilst taxying back at the end of the flight)

Departureprocedures

With reference to a published standard instrument departure chart, describe the departure procedure including radio frequencies and navigation aids to be used, expected clearances, headings, tracks,

altitudes and level restrictions, any other restrictions such as noise abatement procedures, sector safe altitudes and climb performance requirements.

En-route procedures

With reference to an en-route chart describe the structure and classification of various notified airspace including airways, control areas and control zones including route or airspace designators, upper, lower and lateral limits, controlling frequencies, cruising levels, tracks and distances between significant reporting and waypoints, PBN fly-over and fly-by waypoints.

- With regard to cruising levels – describe the IFR semi-circular rules.
- For a routing that is planned outside of CA, describe how do to determine a suitable altitude or level to fly.
- For a routing that is planned outside of CA, list the various services available from ATC and describe the “contract” between controller and pilot for each; state who is responsible for traffic and terrain separation with each level of service.
- What is your understanding of minimum en-route altitude (MEA) and minimum safe altitude (MSA) for an IFR flight?
- How did you calculate the MEA and/or MSA for today’s flight?
- How would you plan to enter/cross this airspace IFR (examiner indicates MATZ/ATZ/CTR/CTA)
- What actions would you take if a clearance was not obtained before reaching the boundary of the indicated airspace?
- Describe the procedure and simulate an appropriate radio call to ATC to leave an airway (laterally or by descent) in order to continue to a destination outside controlled airspace.
- Describe how to activate a previously filed IFR flight plan.
- Describe how to close an IFR flight plan, for example to continue en-route VFR.

Arrival procedures

With reference to a published standard arrival chart (STAR), describe the arrival procedure including frequencies and navigation aids to be used, expected clearances, headings, tracks, level and altitude restrictions, any other restrictions such as speed limits, sector safe altitudes and descent requirements.

Approach procedures

With reference to a published instrument approach procedure, describe the approach procedure from initial approach to missed approach including frequencies and navigation aids to be used, sector safe altitudes, the lateral and vertical profile, IAF/IF/FAF/MAPt, aerodrome operating minima, approach lighting system, the effect of system failure (e.g. glideslope, DME, SBAS, approach lights) on the way in which the approach is flown and any adjustments to minima, missed approach procedure and holding procedure.

- Discuss the relationship between the terms DA, DH, OCA, OCH, MDA, MDH
- Explain what is meant by the term, “approach ban” with regard to commencing and continuing an instrument approach.
- What is the legal basis for the approach ban?
- Discuss the differences between RVR, reported met visibility and calculated met visibility and the significance of each with regard to commencing and continuing an instrument approach.
- What is the significance of operating single-pilot when calculating approach minima?
- State the required visual references before continuing an approach below DA/H or MDA/H.
- Discuss what is meant by term, “constant descent final approach” (CDFA) and explain how to fly a CDFA approach in your aircraft.
- Explain what is meant by the term, “Pressure (or position) error correction” and indicate what (if any) PEC should be applied for your aircraft.
- Discuss the differences between LNAV, LNAV/VNAV and LPV approaches.

- Discuss to what extent GNSS can be substituted for conventional (VOR, ADF.DME) navigational aids.

Circling approach procedures

- Explain what is meant by the term, “Visual manoeuvring (circling)”.
- Describe how to calculate circling minima for a specific approach.
- State the conditions to be fulfilled before descending below MDA/H from a circling approach.
- Describe how to fly a missed approach procedure if visual reference is lost during a circling approach procedure.

Holding procedure

- Describe the three heading entry procedures for a hold.
- Explain how to make appropriate adjustments to heading and time to compensate for the effect of wind in a hold.
- Describe what a pilot is expected to do when a clearance is received with an expected approach time.

Altimeter setting procedures

- Describe the relationship between QFE, QNH, RPS and SPS.
- Describe the relationship between height, elevation, altitude, transition altitude, transition level and flight level.
- For a typical IFR flight, explain when the vertical position of the aircraft should be referenced to height, altitude and level and which altimeter setting should be used.

Transponder procedures

- Explain the differences between modes A, C and S.
- Explain what is meant by the terms, “squawk charlie”, “squawk ident” and “squawk standby”
- What action should be taken when asked to “squawk conspicuity”?
- What are the transponder codes to indicate radio failure and emergency?

Air Traffic Services and Procedures

- In the UK, what are the air traffic services available outside of controlled airspace and the
- “contract” between pilot and ATCO for each level of service?
- What is the format of the message to obtain a clearance to enter or cross controlled airspace?
- In relation to the planned flight today, what would be the “lost comms” procedure if 2-way radio contact was lost [examiner indicates a position] at this point of the flight?

Fuel planning

- How did you calculate the required fuel for this IFR fight?
- What are the requirements for calculating the amount of fuel to be carried for an IFR flight? (trip fuel, reserve fuel, contingency fuel, holding fuel etc)
- How have you determined the expected fuel consumption for this flight?
- How will you monitor actual fuel usage in flight?

Pre-flight preparation

- What are the maintenance requirements for this aircraft?
- Explain what is meant by the term, “minimum equipment list” Is there an MEL for your aircraft?
- How are deferred defects recorded and cleared? Are there any outstanding deferred defects for your aircraft?
- When planning a route – what are the requirements for the selection of alternates?
- What are the minimum meteorological conditions (forecast and actual) required for departure?
- En-route? At the destination airfield? At the alternate airfield?
- What procedures do you have for managing ice and other contaminants on the airframe before dispatch?
- What procedures do you have for managing ice and other contaminants on the airframe during flight?
- What procedures do you have for monitoring and clearing engine (induction system) ice during flight?
- What documents are required to be carried:
    - a) for a flight beginning and ending at the same aerodrome?
    - b) for a flight beginning at one aerodrome and landing at another aerodrome?
    - c) for an international flight?
- With reference to a suitable document show me when you must file an MOR and how to do so.
- How did you determine MEA or MSA for a given sector of your flight, e.g. the diversion?
- How do you access the NOTAM service and check for any NOTAM activity?
- Are there any NOTAM affecting your planned flight today?
- Complete a flight plan for the flight and explain the meaning of (a selection of) items in your ATS Flight Plan (select Items from boxes 7 to 18).
- If you are planning to make a GNSS based instrument approach, what additional pre-flight actions are required/recommended?
- What consideration have you given to en-route diversion airfields in the event, for example, of a rough running engine?
- If the expected landing runway at the destination is not aligned with the instrument approach procedure, what additional considerations are there?

Meteorology

- How have you obtained the Met information for this flight?
- Using the synoptic chart for today, identify the air masses present and explain any associated hazards.
- Identify the symbols used on the synoptic chart.
- What conditions are conducive for the formation of airframe ice in flight?
- What conditions are conducive for the formation of engine (induction) ice in flight?
- What actions would you consider to mitigate the risks of encountering airframe or engine icing?
- What are the conditions for the formation and dispersal of radiation fog?
- What are the conditions for the formation and dispersal of advection fog?
- Indicate how would select an alternate if the forecast for the planned destination was for radiation or advection fog.
- What are the conditions for the formation of towering cumulus, cumulonimbus and thunderstorm activity?
- How will you plan to avoid known/forecast areas of Cb or thunderstorm activity?
- What radio or navigation aids might be affected by thunderstorm activity?

- How could you obtain weather information for XXXX aerodrome when en route? (e.g. VOLMET, ATIS, VOR broadcast, FIS)
- Decode METAR, TAF and SIGMET information.
- What conditions would be conducive to the presence of wind shear?
- What actions would you consider following a wind shear report?

Performance

- How have you calculated the mass and balance for the aircraft today?
- What would be the effect of adding an additional passenger?
- How does the weight and balance change as a result of burning fuel/using de-icing fluid?
- What are the regulatory requirements for aircraft performance (T/O, climb, landing etc) for this flight today?
- How have you determined take-off and landing performance (TORR/TODR, LRR/LDR) and what have you compared these figures to (TORA/TODA/ASDA/LRA/LDA)?
- What configuration and speed are assumed when using the performance tables/graphs in the AFM/POH?
- Are any additional factors a) mandatory b) advisory, and what additional factors, if any, have you used?
- What is your Asymmetric Committal Height/Altitude? What factors have you considered to determine this value?
- What actions would you take on an asymmetric approach if the runway becomes obstructed after you have passed ACH/A?
- If you have not received a landing clearance at/by ACA/H what will you do?

Appendix 3 – Instrument Rating Skill Test Tolerances

The following table is based on the one in the Flight Examiners Handbook.

PROFILE	EIR Skill Test	IR Skill Test
Altitude or Height		
Normal Flight	± 100 ft	± 100 ft
With simulated engine failure (ME only)	*± 100 ft*	± 100 ft
Limited or partial panel	*± 200 ft*	*± 200 ft*
Starting go-around at decision alt/ht		+ 50 ft / - 0 ft *(Asym + 100 ft / - 0 ft)*
Minimum descent altitude / height		+ 50 ft / - 0 ft *(Asym + 100 ft / - 0 ft)*
'Not below' minima (from FAF altitude down to MDA/H)		*- 0 ft*
Circling minima		*+ 100 ft / - 0 ft*
Asymmetric committal height/altitude		*- 0 ft*
Tracking		
On radio aids	± 10°	± 5°
For angular deviations		Half scale deflection azimuth and glidepath
2D (LNAV) and 3D (LNAV/VNAV) "linear" lateral deviations		Cross-track error/deviation normally limited to ± ½ the RNP value associated with the procedure. Brief deviations from this up to a maximum of 1 time the RNP value are allowable
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.
DME arcing		*± 1nm*
Heading		
All engines operating	± 10°	± 5°
With simulated engine failure	± 15°	± 10°
Limited or Partial panel	± 20°	*± 15°*
Speed		
Take-off / V_R	*+ 5 / - 0 kt*	*+ 5 / - 0 kt*
Climb and approach	± 10 kt	± 5 kt
V_{AT} / V_{REF}	*+ 5 kt / - 0 kt*	*+ 5 kt / - 0 kt*
Cruise	+ 10 kt / - 5 kt	± 5 kt
Limited or Partial Panel	*± 15 kt*	*± 10 kt*
With simulated engine failure	+ 15 kt / - 5 kt	+ 10 / - 5 kt
Blue Line speed or V_{YSE} / V_2	*± 10 kt*	*± 5 kt*
Maximum airspeed error at any time	*± 15 kt*	*± 10 kt*

Note:

- Asymmetric limits also apply to centreline thrust ME aeroplanes operating on one engine.

Appendix 4 – Instrument Rating Test – Common Reasons for Failure

The following is a list of the more usual errors or omissions which constitute a failure point:

1. Failure to comply with any aeroplane speed limitation e.g. flap or undercarriage extension /retraction.
2. Failure to apply the correct altimeter settings at any phase of the flight.
3. Failure to check before flight any one of the flight instruments including the compasses (gyro and magnetic).
4. Failure to check before flight any one of the flying, trimmer or stabiliser controls for range and freedom of movement and operation in the correct sense.
5. Failure to check any of the following items during the pre-flight aeroplane inspection: pitot head(s) and static heaters; static vents; all de-icing and anti-icing equipment for serviceability; fuel and oil; electrical system.
6. Failure to use any of the above equipment correctly and as appropriate.
7. Failure to check on the ground, as far as possible, any item of radio and navigation equipment which is to be used during the flight.
8. Failure to complete any checks and drills as prescribed in the approved check list including taxi, engine and pre-take off checks.
9. Failure to obtain ATC clearance whenever necessary.
10. Failure to comply with ATC clearances or use correct R/T phraseology and reporting procedures, including use of the transponder.
11. Jeopardising the safety of the aeroplane at any time by lack of control such that the examiner is caused to take over.
12. Exceeding the tolerances of speed, height, heading/track indicated at Appendix 3 and maintaining the error for an unreasonable period of time.
13. Failure to correctly identify any radio navigation aid before use and failure to monitor such aids when in use.
14. Failure to maintain the tracking required within ± 5° specified when a good signal is being received at a suitable distance from the transmitter.
15. Correcting track by turning in the wrong direction and maintaining the error for an unreasonable time.
16. Failure to adjust ETAs such that ATA differs from ETA by more than three minutes.
17. Failure to calculate the correct minimum safe obstacle clearances.
18. Failure to apply the correct joining procedure and timing during the holding pattern or to establish the inbound track.
19. Failure to observe the instrument approach minima during an approach to land.
20. Failure to maintain published tracks and reference heights/altitudes for a given instrument procedure.
21. Failure to intercept and maintain the NDB/VOR inbound track before the intermediate descent and final approach fix or facility or maintain the final approach track and height reference.
22. Failure to maintain within half scale deflection the published glide path and final approach track or to establish the aeroplane on a stabilised approach.
23. Exceeding the limits applicable to DH/A or MDH/A for the instrument approach.
24. Failure to comply with the cleared go around and missed approach procedure.
25. Failure to carry out correctly any simulated emergency procedure and maintain the control of aeroplane within the prescribed limits.

26. Failure to trim the aeroplane in all axes including during asymmetric flight.
27. Failure to achieve departure ATC slot time within acceptable tolerances necessitating a delay and re-filing of the flight plan.
28. Failure to maintain the aeroplane on a stable approach path during the instrument approach procedures.
29. Failure to recognise any equipment malfunction within a reasonable period of time.
30. Failure to demonstrate sufficient skill or technique with instrument flying such that excessive aeroplane control inputs are required.
31. Failure to maintain an adequate record of the flight.
32. Failure to check and use A/C documents correctly including the technical log.
33. Entering Controlled Airspace without clearance.
34. Failure to fly an approach so that a safe landing could, when permitted, be made.
35. Demonstrated lack of understanding of airspace and altimetry.
36. Failure to obtain a satisfactory RAIM check or confirm space-based augmentation prior to commencing a GNSS based approach.
37. Continuing an RNP approach without the equipment operating in the correct mode.

Appendix 5 - Skill Tests – Managing Stress

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

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

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

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

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

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

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

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

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

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