
**Safety Regulation Group
Personnel Licensing Department**



Standards Document 25, Version 2

**Civil Aviation Authority
Flight Crew Licensing**

**Notes for the Guidance of Applicants taking the Initial Skill Test or
Revalidating the UK Instrument Meteorological Conditions (IMC)
Rating (Aeroplanes)**

**Please note that this document is for guidance purposes only. The latest version
of this document can be viewed on the Personnel Licensing Department website**

**SAFETY REGULATION GROUP
PERSONNEL LICENSING DEPARTMENT
FLIGHT CREW**



**NOTES FOR THE GUIDANCE OF APPLICANTS
TAKING THE INITIAL SKILL TEST OR REVALIDATING
THE UK INSTRUMENT METEOROLOGICAL CONDITIONS (IMC)
RATING (AEROPLANES)**

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FOREWORD

These guidance notes are intended to provide applicants for the grant of a UK National Instrument Meteorological Conditions (IMC) Rating (Aeroplanes) with background information regarding the Personnel Licensing Department policy for that rating. The information will help applicants prepare for this flight test, but it must be remembered that aspects mentioned here are of a general nature only and do not give precise details of each exercise or manoeuvre. More information regarding the IMC Rating can be found in LASORS.

Nothing in the document is intended to conflict with the Air Navigation Order or other legislation, which remains the primary authority. Whilst every effort is made to ensure that all guidance in this document is correct the CAA reserves the right to amend this document as required to reflect changes in practice required for the effectiveness of the test.

This document is available for all those engaged in training and testing for the initial issue of the IMC Rating. This, and other Standards Documents, are also available on the SRG web site (www.caa.co.uk) and shall be distributed to users without charge.

If, after reading this document, you still have queries about the IMC Rating, please contact the Personnel Licensing Department, or one of the Regional Flight Test Centres.

Civil Aviation Authority
Personnel Licensing Department
Approvals Support
Aviation House
South Area
Gatwick Airport
West Sussex RH6 0YR

Tel 01293 573700 (on menu - Flight Test Bookings, 1)

Fax 01293 573996

Regional Flight Test Centres

Bournemouth	01202 576621
Bristol	01275 475226
Cranfield	01234 750111 Ext 5586
Leeds	0113 2506625
Oxford	01865 841199

PART 1 GENERAL INFORMATION

- 1.1 The IMC Rating is a UK National aeroplane rating, not a JAA rating. It is only valid for flight in UK territorial airspace, the Channel Islands and Isle of Man airspace. The IMC Rating may only be appended to a UK issued JAA licence, a CAA PPL or BCPL; it cannot be added to a NPPL.
- 1.2 An IMC Rating (Aeroplanes) is valid in both single engine and multi-engine aeroplanes. If the IMC Rating test is flown in a multi-engine aeroplane then some aspects of asymmetric flight will be tested.
- 1.3 An IMC Rating (Aeroplanes) is valid for 25 months. Any revalidation or renewal of the rating will be valid for 25 months from the date of the revalidation or renewal flight test.
- 1.4 The IMC rating is designed to qualify holders to exercise privileges that are prohibited in the UK CAA PPL, BCPL and certain JAA pilot licences (notably prohibiting flight in accordance with the IFR). The UK CAA CPL and ATPL do not contain the same restrictions and so holders of such licences may exercise the same privileges as an IMC rating holder without the need to hold a separate (IMC) rating, or to require revalidation of the privileges other than to hold a valid Class or Type rating for the aeroplane to be flown.
- 1.5 Throughout these notes the following editorial practices and definitions shall apply:
- "Shall" and "Must" are used to indicate a mandatory requirement.
 - "Expect" and "Should" are used to indicate strong obligation.
 - "May" is used to indicate discretion.
 - "Examiner" is used to indicate a person who is authorised by the CAA to conduct the appropriate skill test.
 - "Applicant" is used to indicate a person who is seeking the issue or renewal of a pilots 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.

PART 2 PREPARATION, PROVISION OF AEROPLANES

2.1 FLIGHT TEST PREPARATION

2.1.1 Flight Test and Ground Examination validity period

The Flight Test and Ground Examinations required for the issue of an IMC Rating must be completed within the period of time shown preceding the date of application for the rating:

a. Ground Examination	-	12 months
b. Flight Test	-	9 months

Ground examinations are conducted by the Registered Facility or Flying Training Organisation running the IMC course.

2.1.2 Flight training

Applicants for the IMC rating must have satisfactorily completed all flight training necessary in an aeroplane suitably equipped for dual control. Flight training for the initial issue of the IMC Rating shall include a minimum of 15 hours training in instrument flying. Not less than 10 hours of the 15 must be flight by sole reference to the instruments.

2.1.3 Flight Synthetic Training Devices (FSTDs)

Up to 5 of the 15 hours training may be given in a JAR-STD device qualified Flight Navigation Procedure Trainer (FNPT) or Basic Instrument Training Device (BITD); alternatively up to 2 hours of the training may be given in any other Flight Synthetic Training Device recognised by the Authority as being suitable for the training. The remaining training must be completed in a suitably equipped dual control aeroplane.

2.1.4 Instrument Approach training

Applicants are to be trained in at least 2 instrument approach procedures using VOR, ADF, ILS, GPS, Radar or VDF (of which at least one must be pilot interpreted). Completion of a notified, recognised civil, or military, instrument approach procedure during training must be certified in the applicant's flying logbook. In this context, 'notified' means that the approach procedure is notified by the Authority in the AIP or by the UK Military or the appropriate aviation authority (if not in the UK) in their equivalent publication. Note that GPS approaches are defined as those notified as above and flown using equipment certified for the conduct of such approaches in the aeroplane's Pilots Operating Handbook or Flight Manual; overlay approaches or privately designed approaches are not acceptable.

- 2.1.5 **Medicals**
Applicants should be in possession of a valid JAA Class 1 or Class 2 medical certificate at the time of the test. The medical certificate shall be shown to the Examiner. If the certificate is out of date the Examiner may still conduct the test, but the applicant is to be aware that, regardless of the outcome, he will not be permitted to use his licence or rating until the certificate is revalidated.
- 2.1.6 **Flight Radiotelephony Operator's Licence (FRTOL)**
An applicant will be required to hold an FRTOL or have passed the theoretical and practical examinations prior to undertaking the IMC rating course.
- 2.1.7 **Flight Test Booking**
Application for test must be made to an FE(PPL) or FIE with applied IF instructional privileges, a CRE (Class Rating Examiner with Instrument Rating Revalidation privileges), or an IRE, authorised to conduct tests on Single Pilot Aeroplanes (SPA).
- 2.2 PROVISION OF AEROPLANES**
- 2.2.1 Applicants must provide an aeroplane for the IMC rating that is suitable for the test to be conducted. Examiners will ensure that the aeroplane is properly documented and carries the following minimum flight instruments and radio equipment:
- (a) Airspeed Indicator
 - (b) Altimeter
 - (c) Gyro Direction Indicator
 - (d) Magnetic Compass
 - (e) Artificial Horizon / Attitude Indicator
 - (f) Turn and Slip Indicator / Turn Co-ordinator
 - (g) Vertical Speed Indicator
 - (h) Radio Navigation Instruments. A minimum of 1 ADF or 1 VOR
 - (i) VHF Radio
 - (j) Stopwatch (can be hand-held)
- If the flight test is conducted in an aeroplane without a separate turn coordinator or turn needle then the limited panel items on the test schedule must be carried out on a separate flight in a suitably equipped aeroplane, or in a JAR-STD device qualified FNPT 1 or FNPT 2. This flight will count as part of one of the three allowable test flights.
- 2.2.2 The applicant's forward view shall be denied between 30° left and right of the ahead position for the approach items of the test and between 60° left and right during the general handling items. The preferred method of visual reference denial is aircraft screening, although the use of goggles or visors is acceptable. Covers must also be provided to obscure those instruments denied to the applicant for the limited panel items of the test.
- 2.2.3 The CAA shall not be responsible for the provision of insurance for the applicant or examiner taking the IMC rating. The aircraft operator must maintain an insurance policy which adequately covers the flight test.

PART 3 CONDUCT OF THE TEST

- 3.1 PREVIEW OF EVENTS**
- 3.1.1 This section will preview those items that the Examiner considers as he constructs the profile. Section 3.2 will give detail of the contents of the Initial Briefing; Section 3.3 and 3.4 describe the Planning and Weather considerations that are required. Sections 3.5 to 3.7 detail the Main Briefing, Flight and Debrief.
- 3.1.2 A Flight Examiner authorised by the CAA will conduct the skill test for the grant of the IMC Rating. The Examiner will conduct each test to meet the schedule and achieve a meaningful and valid assessment. He will determine the flight profile in order to cover all required sections of the test and will expect the applicant to conduct the flight in a realistic manner. Flight profiles may vary depending upon many influences outside the control of the Examiner such as ATC, weather conditions, serviceability of navigation or approach aids etc. However, the Examiner will ensure that the applicant is given every opportunity by giving clear and unhurried instructions and will check that the applicant has understood what he has been asked to do. When deciding the content the Examiner will generally arrange the test profile such that the flight can be completed within approximately 90 minutes.
- 3.1.3 Applicants must remain adaptable and flexible without compromising safety and it is important that they clearly understand the briefing before the flight. The Examiner's assessment will take into account each section, procedure and manoeuvre of the flight, as well as the overall conduct, management, airmanship and general captaincy skills.
- 3.1.4 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.
- 3.1.5 Initial and revalidation flight tests may be completed in more than one flight but no more than 3 and must be completed within a period of 28 days. Failure in any part of the test will require the applicant to take the **full test**

again, not just the failed item and any other outstanding items. Where an applicant chooses not to continue with a test for reasons considered inadequate by the examiner, that test will be regarded as a failure.

3.2 INITIAL BRIEFING

3.2.1 The purpose of the initial briefing is to check that the applicant has completed the necessary training and experience requirements to establish the aim of the flight test and check that he has access to any planning resources that he will require. This briefing will normally take about 10 minutes.

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

- A current, valid UK CAA PPL, BCPL or UK issued JAR-FCL Pilot licence containing a valid aeroplane rating and an FRTOL (or evidence that the requirements for issue of an FRTOL have been met). If the licence or aeroplane rating is not current then the applicant will be advised that he cannot exercise the privileges of his licence or rating until it has been renewed.
- A JAA medical certificate. This need not be current (see 2.1.5) but the applicant will be advised that a current medical is mandatory if he is to use his ratings.
- Personal flying logbook.
- A form of identity; e.g. a valid passport or ID card.
- Form SRG 1124 (FCL 99), showing the training completed in preparation for the test.
- The aircraft documents and Technical Log or equivalent.
- Two headsets - most Examiners will have their own headset, but a spare unit should be available for the flight.
- Two copies of the aircraft check list.
- Suitable instrument flying screens, goggles or a visor plus covers for limited panel flight.
- Current publications for any required routing and airfields.
- Planning material including navigation equipment.

3.2.3 The Examiner will outline the content of the skill test including any routing required and the airfields where instrument approach procedures are to be flown.

3.2.4 The applicant will be given the Examiner's weight for his mass and balance calculations and performance planning.

3.2.5 When the applicant is clear about the format for the flight he will be given time to complete any necessary planning and pre-flight preparation. The Examiner will specify the time to meet for the main briefing.

3.3 PLANNING

3.3.1 The Examiner will check that the applicant can access his required planning resources. A quiet briefing room should be used so that the planning can be completed without interruption, distraction or the assistance of other students or instructors.

3.3.2 Current ATC and Met information should be obtained from the aerodrome flight planning facility or other aeronautical sources.

3.4 WEATHER MINIMA

3.4.1 The pre-flight preparation of the IMC rating requires the applicant to assess the weather conditions and make his decision whether to proceed with the flight. The flight should not proceed if all planned sections cannot be achieved or the forecast would prevent a return to base or a suitable alternate aerodrome.

3.4.2 The applicant must demonstrate 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 indicate all the necessary precautions either for 'removing' the ice or his options for avoiding icing conditions. The aircraft must not be flown into icing conditions contrary to the aeroplane flight manual.

3.4.3 Applicants will be expected to comply with the IMC rating weather minima published in the UK AIP. Consideration must also be given to the weather conditions at any nominated alternate airfield if the actual weather at the planned destination is marginal.

3.4.4 If the IMC rating is to be conducted in a single engine aeroplane more stringent weather limits must be applied such that, in the event of an engine failure during flight, the actual cloud base and visibility is sufficient to enable a forced landing to be achieved. Therefore, the cloud base must generally not be lower than 1500 feet AGL with 'few' cloud not below 1100 feet AGL along the route where the terrain is regarded as hospitable. If flight over a large

conurbation is planned, then, notwithstanding the above, an additional allowance must be included to comply with the requirements of ANO Rule 5. Ideally IMC ratings should not be conducted in single engine aeroplanes over large areas of water or beyond gliding distance from a suitable landing area.

3.5 MAIN BRIEFING

3.5.1 When the applicant has completed his 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 he is unclear about any aspect. This briefing would normally take 20 minutes. The Examiner may not brief in the sequence below, but will cover all the relevant items.

3.5.2 The briefing will include:

(a) **The purpose of the flight**

The purpose of the flight is for the applicant to demonstrate his ability to plan and conduct an IFR flight in IMC with a passenger whilst acting as pilot-in-command and operating as single crewmember. The briefed profile shall be conducted in accordance with Instrument Flight Rules (IFR) and will include simulated aeroplane emergencies. Passenger safety, comfort and reassurance must be considered throughout the flight. The applicant is not to expect any assistance but will be briefed on the role of the Examiner as a safety pilot when instrument screens, visor or goggles are in place.

(b) **The applicant's responsibilities**

The Examiner will explain that all the duties and decisions necessary for the safe and practical conduct of the flight, in accordance with current legislation, will be the responsibility of the applicant. Throughout the flight the applicant must liaise with ATC. Amended flight clearances and instructions from ATC must take priority over the pre-briefed flight profile. The Examiner will only discuss ATC instructions if he considers this necessary. Any significant change to the briefed exercise imposed by ATC may require the flight to be terminated and assessed as 'incomplete'.

(c) **Check lists**

Throughout the flight the applicant will be expected to use the aeroplane checklist; checks may be completed from memory, or from alternative notes, but must be in accordance with the checklist.

(d) **Planning check**

The Examiner will expect to be briefed by the applicant as to the weather suitability. The Examiner may question the applicant on any aspect of the Rules and Procedures relevant to the IMC rated pilot.

(e) **Speeds**

The aeroplane must be operated in accordance with the Flight Manual or Pilots Operating Handbook, as appropriate. The Examiner will require confirmation of the various speeds and configurations to be used at each phase of flight. In flight, speeds may be adjusted to meet different conditions or circumstances and the Examiner must be advised of the new target speed at that time.

(f) **Instrument Approach Minima**

It should be assumed that during the flight the instrument approach is to be flown in IMC, therefore the Decision Height/Altitude (DH/A) and Minimum Descent Height/Altitude (MDH/A) should be calculated in accordance with the guidance in the UK AIP and agreed with the Examiner before flight. The minimum height for completing a circle to land must also be calculated. Applicants should be prepared for any runway change that ATC may direct.

(g) **The profile**

The Examiner will brief the profile, item by item, explaining to the applicant what is required of him. (To avoid repetition of the briefed items these are expanded at para. 3.6 The Flight). During the briefing he will check if the applicant has any questions and finally the Examiner will ask the applicant if he is quite clear 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 when necessary and as previously briefed. 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.

(h) **IF screens - simulating IMC**

Instrument flying screens, goggles or visors will be used as required to simulate IMC. Screens will usually be placed in position before departure but the forward opening should be sufficient to allow visual flight for the take off. At a suitable height/altitude after take off the forward panel of the screens will be closed to simulate entry into cloud. The Examiner will act as the 'safety pilot' when the screens are being used and will remove the screens at the appropriate time to allow for visual manoeuvring and landing.

(i) **General handling on instruments**

The Examiner will brief in which phase of the flight he will conduct this section of the test. He will advise that he will take control of the radio, lookout and navigation during this section. The applicant has only to fly the required items which the Examiner will brief in detail on the ground and remind the applicant of as each item is to be flown. When the section is complete the Examiner will ensure that the applicant is comfortable with his location and the aircraft configuration before handing back control. The examiner may be able to assess some of the general handling items, such as straight and level flight, climbing, turning and descending, during other phases of the flight.

(k) **Emergencies and abnormal conditions**

The Examiner will discuss the actions necessary should any actual emergency or abnormal condition occur during the flight. In general, the pilot flying the aircraft (applicant) should control and handle any actual aircraft emergency but the Examiner, as aircraft commander, may elect to take control at any stage. The Examiner will brief his procedure and requirements for the multi-engine practise of EFATO and when he will respond with follow-up action such as setting the engine/propeller at 'zero' thrust or resetting two engines.

(l) Oral questioning

The Examiner may ask practical questions relating to the flight on subjects such as IFR procedures, aircraft performance, Weight and balance, icing procedures, emergency handling and the aircraft documents.

3.6 THE FLIGHT

This section will describe the manoeuvres required by the Examiner, guidance to the standards to which manoeuvres are assessed is given in *Italics*. Note that the examiner will only brief the required manoeuvres, not the assessment standards.

Before take-off, the Examiner will check the effectiveness of the means used to simulate instrument flight conditions and ensure that during the test the applicant will have a clear view of all the instruments, but no access to visual references to be denied under simulated IMC. During flight the Examiner will ensure that there is adequate space to safely conduct all the prescribed manoeuvres without interruption. The applicant will be required to conduct each test item following instruction from the Examiner, the instructions will be given clearly and in such a manner that the items which are to remain unchanged are mentioned first, and the operative instruction last. For example:

'Maintaining your speed of 100 knots and a height of 2000 ft, turn on to 180°.'

A reasonable time will be given for the applicant to settle down before passing the next instructions. The Examiner will not interfere by unnecessary word or action during the test.

3.6.1 Test Exercises - Full Panel

Full Panel flying will be assessed throughout the flight. Most of the full panel items can be assessed during the departure, tracking and approach phases rather than their being flown as 'stand alone' items.

- *Particular attention should be paid to the ability to maintain a continuous cross-reference between flight instruments to achieve the required accuracy with smoothness and co-ordination of control and freedom from tension.*

(a) Straight and Level flight

A check of the applicant's ability to maintain a constant specified height, heading and IAS at normal cruising speed within the limits specified.

- *The examiner should watch for any undue jerkiness of control, incorrect balance, or unsteadiness of lateral level, or pitch control, even though they may not result in the tolerances being exceeded. Attention should be paid to the applicant's effective and correct trimming of the aircraft.*

(b) Turns at a given Rate

The applicant should be checked for his ability to perform accurate and level turns at a specified height and at rate of turn specified by the examiner. Rate 1 need not be exceeded.

- *Check the ability of the applicant to relate AH indications of bank angle and IAS to produce a Rate 1 turn, rather than a constant reference to the turn needle, which can cause general unsteadiness of control. Assessment should be related to height keeping within the prescribed tolerances, balance, and the maintenance of a safe IAS at any higher rates of turn.*

(c) Turns on to given headings

Turns should be specified, at approximately Rate 1, to a given heading.

- *Turns should be in the shortest direction to the given heading. Check also his ability to turn in either direction on to a given heading. Check his ability to maintain height, rate of turn, and a safe airspeed during the turns.*

(d) Climbing and descending - including turns on to given headings

The applicant should be checked on his ability to enter straight climbs and descents and then revert to straight and level flight.

- *The technique shall include adjustment of power and trim settings etc. Climbing and descending turns should be made on to given headings with the assessment also related to the maintenance of a specified IAS.*

(e) Recovery from unusual attitudes

The Examiner is to take control and brief the applicant that he will put the aircraft into some unusual attitudes. The applicant may follow through on the controls and is not required to look away from the instruments. On the instruction 'recover', he is to take control and should regain straight and level flight at cruise speed without undue delay. Recovery to any specific altitude or heading is not required. There are two basic attitudes for test and they should both be covered as follows:

1. Recovery from a steep descending turn.

- *Correct throttle, aileron and elevator control are required to recover from the attitude with minimum height loss, and establish to Straight and Level.*
2. Recovery from a steep climbing turn.
 - *Correct throttle, aileron and elevator control are required to recover from the attitude, and establish to Straight and Level.*

3.6.2 Test Exercises - Limited Panel

Only the following flight instruments should be used by the applicant for this part of the test:

- (a) Airspeed Indicator
- (b) Altimeter
- (c) Turn and Slip Indicator or Turn Co-ordinator
- (d) Vertical Speed Indicator
- (e) Magnetic Compass

All other attitude and heading references should be covered.

(a) ***Straight and Level flight***

After covering those flight instruments to be denied for Limited Panel work, specify a heading and altitude to be maintained for about 1 minute. Depending upon the type of compass it may be desirable to specify a heading on one of the cardinal points.

- *Check particularly for any tendency to 'chase' the compass without allowing adequate time for it to settle down between corrections.*

(b) ***Turns on to given headings***

Either the timing method or the compass error method is acceptable; it is usually adequate to specify cardinal points as the required heading. After completion of the initial turn, allow up to 60 seconds for further corrections, after which the heading should be within 15° of that specified. Level flight and cruise speed should be maintained within tolerances throughout the turn.

- *Check for steadiness during the turn and when refining the heading. Check that altitude and speed references are scanned during the turn and that errors are corrected.*

(c) ***Recovery from unusual attitudes***

The Examiner is to take control and brief the applicant that he will put the aircraft into some unusual attitudes. The examiner will not disturb the aircraft trim setting. The applicant may follow through on the controls and is not required to look away from the instruments. On the instruction 'recover', he is to take control and should regain straight and level flight at cruise speed without undue delay. Recovery to any specific altitude or heading is not required. There are three basic attitudes for test and they should all be covered as follows:

1. Recovery from a sustained 45° banked turn.
 - *The turn should be maintained accurately for sufficient time for the applicant to lose the sensation of turning - at least 360° - before he is asked to recover*
 - *During recovery watch for any tendency to re-enter the original turn. Check his ability to maintain Straight and Level flight after recovery*
2. Recovery from a steep descending turn.
 - *Correct throttle, aileron and elevator control are required to recover from the attitude, and establish to Straight and Level*
3. Recovery from the Approach to the Stall

The Examiner should conduct this exercise whilst the aircraft is on a straight heading and with partially reduced power. The nose of the aircraft should be raised progressively and a nose high attitude held until the first symptoms of the approach to the stall become apparent. At this time the applicant should be asked to recover.

- *Watch for quick identification of the condition, evidenced by immediate application of the standard stall recovery. Watch also for a prolonged nose down attitude during recovery leading to excessive loss of height*

3.6.3 Test Exercise - Radio Navigation Aids

Position-fixings using one or more aids. Either a VOR or ADF must be used as at least one of the aids; in addition, DME, VDF or GPS may be used as the second aid. Maintenance of a given track based on a pilot-interpreted aid for 10 minutes. Interception of a given radial and tracking to overhead a beacon or GPS/RNAV waypoint.

- *The applicant must fly within the required tolerances*
- *Checking, selection, identification and operation of radio aids for the establishment of planned track*
- *Track keeping by interception and maintenance of pre-selected bearings/radials to and from a facility*
- *Use of bearing information from off-track radio aids for position finding*
- *Compliance with RT procedures, use of lower airspace radar services as required*

3.6.4 Test Exercise - Instrument Let-Down and Approach

This part of the test shall include:

1. Let-down and approach to an active airfield using a notified, recognised civil or military procedure to the agreed DA/H or MDA/H using pilot-interpreted aids
2. A missed approach procedure

- *Compliance with ATC instructions and flight within the required tolerances*
- *Use and understanding of approach chart information*
- *Decision Height/Minimum Descent Height calculations using the recommended minima for the IMC Rated pilot given in the UK AIP*
- *Forming a mental picture of the approach*
- *Achieving the overhead/approach fix with minimum delay*
- *Achieving the horizontal and vertical profile*
- *Realistic calculation and use of rate of descent*
- *Go-around and missed approach procedure managed in accordance with ATC instructions*

Note: Holding is not an IMC Rating Test requirement. However, if holding is required by ATC then the examiner will assess it.

3.6.5 Test Exercise - Bad Weather Circuits

This part of the test should follow on from the go-around into a missed approach procedure. The applicant is required to fly a bad weather circuit and landing within either simulated cloud base and visibility conditions described by the examiner or the published figures for circling minima.

- *The aircraft should be positioned in the circuit as required by the Examiner. The applicant should carry out a bad weather circuit and landing with simulated IMC minima.*

3.6.6 Test Exercise - Flight with Asymmetric Power

When the applicant wishes to be tested for an IMC Rating on a multi-engine aeroplane, he must be able to:

1. Maintain stable flight following the failure of one engine at climbing power
2. Identify the failed engine and complete all essential drills and checks
3. Climb at the recommended speed
4. Carry out normal flight manoeuvres during asymmetric flight in simulated IMC

Feathering will be simulated by the Examiner (as briefed by him pre-flight) on completion of the correct touch drills by the applicant.

- *Correct drills in accordance with the checklist procedure*
- *The applicant must fly within the required speed and heading tolerances*

3.7 POST FLIGHT ACTION

At the conclusion of the flight the Examiner will assess and debrief the flight, see Part 5.

PART 4 REVALIDATION FLIGHT TEST

4.1 An IMC Rating (Aeroplanes) is valid for 25 months.

4.2 Before taking the revalidation flight test the applicant is to show logbook evidence that, in the period between initial and/or revalidation flight tests, he has successfully completed a let-down and notified, recognised approach to DH/MDH, a go-around and a missed approach procedure, using an aid of a different type from that to be used during his revalidation test. This shall have been accomplished to the satisfaction of an instructor qualified to give applied instrument flying instruction and countersigned by the FI/IRI as such. Alternatively the applicant may carry out two approach procedures using different aids during the revalidation flight test.

- 4.3 The Flight Test required for the purpose of revalidating the IMC Rating will comprise only the following items from the Initial IMC Rating Skill Tests Described in Part 3:
1. Limited Panel exercises (3.6.2)
 2. Let Down and Approach (3.6.4) (see 4.2)
 3. Bad weather circuit (3.6.5)
 4. Flight with Asymmetric Power* (3.6.6)
- * Only when the revalidation flight is the first IMC Rating Test on a multi-engine aircraft.
- 4.4 At the conclusion of the flight the Examiner shall assess and debrief the flight, see Part 5.
- 4.5 Post flight, the type of approach aid/s used must be entered in the applicant's logbook.

PART 5 ASSESSMENT CRITERIA AND DEBRIEFING

5.1 ASSESSMENT CRITERIA

- 5.1.1 The flight will be assessed as if operating a passenger carrying flight, on instruments in much reduced visibility, perhaps in cloud and in areas of high traffic density. The safety and comfort as well as reassurance and briefing of passengers and crew must be considered. The applicant shall demonstrate ability to:
- (a) operate the aeroplane within its limitations
 - (b) complete all manoeuvres with smoothness and accuracy
 - (c) exercise good judgement and airmanship
 - (d) apply aeronautical knowledge of procedures and regulations as currently apply
 - (e) maintain control of the aeroplane at all times in a manner that the successful outcome of a procedure or manoeuvre is never seriously in doubt
- 5.1.2 It is impossible to list all those errors which would constitute a failure of the test, but some common errors and omissions are shown at Appendix 2.
- 5.1.3 Throughout the flight the aeroplane should be flown as accurately as possible. Test Tolerances are shown at Appendix 3 for the guidance of applicants, but do not necessarily indicate that a 'failure' will result if any boundary is exceeded. Similarly, flight within the tolerances should not be achieved at the expense of smoothness and co-ordination and the examiner will take account of turbulence in his overall assessment.

5.2 DEBRIEFING

- 5.2.1 On completion of the flight the Examiner will conduct a debriefing. He may first ask questions in order to clarify certain items or actions. Any circumstances that were beyond the applicant's control, such as unserviceable equipment, will be considered, and may not be recorded as a 'fail'. The overall final result will not be given until all items of the tests are completed.
- A PASS will be awarded when all items of the test are passed in an attempt.
 - A FAIL will be awarded if the examiner identifies that the applicant did not demonstrate that he has the knowledge and ability to fly the aircraft, on instruments and in simulated reduced visibility conditions, with absolute safety.
- 5.2.2 The applicant will be informed of any items he has failed. The Examiner may then discuss the applicant's performance in greater detail.
- 5.2.3 After a test for the initial issue of an IMC Rating, notification of the result will be indicated on the test result form FCL99 (see Appendix 1). The result form will be given to the applicant and copies forwarded to PLD, Licensing Operations.
- 5.2.4 In the case of successful rating renewals where the IMC rating has expired for less than 5 years, the examiner will sign the applicant's licence renewing the IMC Rating having confirmed that the applicant's licence and aeroplane rating are themselves current and valid.
- 5.2.5 In the case of an unsuccessful rating renewal test, the examiner will complete a form FCL252 (SRG\1159) explaining that the applicant cannot exercise the privileges of an IMC Rating until he has passed a further IMC Rating test. The applicant will be given a copy of the F252.
- 5.2.6 Test applicants should be aware of the following 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 IMC RATING TEST he should write to the Chief Flight Examiner who will provide guidance on the Appeal Procedure.

APPENDIX 1 FLIGHT TEST FORM SRG\1125 (FCL 99)

UK Civil Aviation Authority



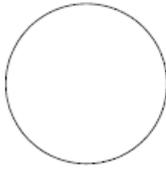
PRIVATE PILOT'S LICENCE (AEROPLANES) INSTRUMENT METEOROLOGICAL CONDITIONS RATING APPLICATION

Please complete the form in BLOCK CAPITALS using black or dark blue ink after reading the following.

- **PAYMENT METHODS.** Please complete form SRG\1187.
- The requirements for the IMC Rating are set out in LASORS.
- A UK Flight Radiotelephony Operator's licence must be held before an IMC rating is granted.
- If exemptions are claimed (Section 6) then Section 5 need not be completed.

1. PERSONAL DETAILS	
CAA Personal reference number (if known) <input type="text"/>	PPL No.
Surname	Forename(s)
Title	Date of birth (dd/mm/yyyy)
Nationality	Town and Country of birth
Permanent address	Postcode
Telephone Number	Alternative Telephone
E mail address	Fax Number
Address for correspondence (if different from above)	Postcode

2. RATINGS (Current or lapsed)	
Instrument Rating	Civil: Date of expiry: Military: Type Service Date of expiry
Night Rating	Date of Issue
Radiotelephony Operator's Licence Number	Date of Issue

3. CAA USE ONLY	
Date	Enclosures
Receipt No.	
Cheque/PO/Cash Access/Visa/Maestro £	
Exempt initial flight test	 Despatch: logbooks(s) Licence Rating Page C of T Page
Valid	
Test date	
Aircraft type	
Prepared by Date	
Signed by Date	
Date of issue	

4. FLYING EXPERIENCE - Logbooks must be submitted			
	Hours claimed	Qualifying Minima	CAA use only
(a) Total experience as pilot of aeroplanes (following valid application for issue of PPL)		25	
(b) Experience as pilot in command of aeroplanes		10	
(c) Experience as pilot in command on cross country flights		5	
(d) Experience as pilot undergoing instrument flying training under a flying instructor in a dual controlled aeroplane (IMC course of training)		15	
(e) Total flight time by sole reference to Instruments (during IMC course of training)		10	
(f) Experience in a synthetic flight trainer. (A maximum of 2 hours of (d) may be carried out in a synthetic flight trainer)			
(g) Experience as pilot of aeroplanes at night			

5. CERTIFICATE OF FLYING TRAINING, FLIGHT TEST AND EXAMINATION (*delete as appropriate)	
The Certificate must be signed by an authorised PPL Examiner.	
I hereby certify that the applicant:	
*Has received hours instrument flying instruction to a recognised IMC Syllabus	
*Has completed a recognised syllabus of instrument flying training for the IMC Rating	
or	
*Is the holder of a Night Rating, and has completed a recognised syllabus of instrument flying training for the IMC Rating less 3 hours of the basic stage	
*Is the holder of the AOPA Radio Navigation Certificate and has completed a recognised syllabus of instrument flying training for the IMC Rating, less 5 hours of the applied stage	
*Has Logbook evidence showing successful completion on an approach and let down using an aid of a different type from that used during the test	
*Passed on the date specified below, the flight test and examination for the issue of an IMC Rating conducted by me to the standards laid down	
*Flight test date	Aircraft Type
*Let down aid used	
Signature	CAA Authorisation No.
Date	
Name and Initials (block capitals)	
Flying Club or other Organisation	
.....	
Note: The Chief Flying Instructor must certify the applicants logbook as a true record of the tuition given.	

6. APPLICATION FOR EXEMPTION FROM THE COURSE OF TRAINING AND/OR TEST AND EXAMINATION FOR THE IMC RATING				
I apply for exemption under the terms specified in CAP 53 and supplements				
*(i) The course of instrument flying training				
*(ii) The initial flight test and ground examination				
*(iii) Ground examination				
*delete as appropriate				
7. EXAMINATION				
Type	Set No.	Result	Examiner's Name and Number	Date
IMC Ground Examination		Pass/Fail %		
8. PAYMENT METHODS				
Please complete form SRG\1187.				
9. DECLARATION (* delete as appropriate)				
I declare that the information provided on this form is correct.				
I agree to receive Flight Crew Safety material from the CAA only*/Safety material from authorised sources*. I do not wish to receive Safety material*.				
Signature Date				
It is an offence to make, with intent to deceive, any false representations for the purpose of procuring the grant, issue, renewal or variation of any certificate, licence, approval, permission or other document. Persons doing so render themselves liable, on summary conviction, to a fine not exceeding the statutory maximum (currently £5000, or in Northern Ireland £2000) and on conviction on indictment to an unlimited fine or imprisonment for a term not exceeding two years or both.				
10. SUBMISSION INSTRUCTIONS				
Send your completed application form to:				
Civil Aviation Authority, Personnel Licensing Department, Aviation House, Gatwick Airport South, West Sussex RH6 0YR.				
together with:				
<ul style="list-style-type: none"> • your actual flying logbook(s) • UK pilots licence (if the licence was issued before 1 July 1990) and any non UK licences if claiming exemptions (see Section 6 of this form). 				

APPENDIX 2**IMC RATING TEST - COMMON REASONS FOR FAILURE**

The following is a list of the more usual errors or omissions which constitute a fail 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 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 (if fitted) for serviceability; fuel and oil; electrical system.
5. Failure to use any of the above equipment correctly and as appropriate.
6. 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.
7. Failure to complete any checks and drills as prescribed in the aircraft checklist including taxi checks; engine checks; and pre take off checks.
8. Failure to obtain ATC clearance whenever necessary.
9. Failure to comply with ATC clearances or use correct R/T phraseology and reporting procedures, including use of the transponder.
10. Jeopardising the safety of the aeroplane at any time by lack of control such that the Examiner is caused to take over.
11. Exceeding the tolerances of speed, height, heading/track and maintaining the error for an unreasonable period of time.
12. Failure to identify radio navigation aids before use.
13. Failure to maintain the tracking required within the tolerances specified when a good signal is being received at a suitable distance from the transmitter.
14. Correcting track by turning in the wrong direction and maintaining the error for an unreasonable time.
15. Failure to calculate the correct MSA/SSA.
16. Failure to check the airfield minima before commencing an approach.
17. Failure to maintain published tracks and reference heights/altitudes for a given instrument procedure.
18. Failure to intercept and maintain the NDB/VOR inbound track before the intermediate decent and final approach fix or facility, or maintain the final approach track and height reference.
19. Failure to maintain within half scale deflection the published glide path and final approach track or to establish the aeroplane on a stabilised approach.
20. Exceeding the limits applicable to DH/A or MDH/A for the instrument approach.
21. Failure to comply with the cleared go around and missed approach procedure.
22. Failure to carry out correctly any simulated emergency procedure and maintain the control of aeroplane within the prescribed tolerances.
23. Failure to trim the aeroplane in all axes including during asymmetric flight.
24. Failure to maintain the aeroplane on a stable approach path during the instrument approach procedures.
25. Failure to recognise any equipment malfunction within a reasonable period of time.
26. Failure to demonstrate sufficient skill or technique with instrument flying such that excessive aeroplane control inputs are required.

APPENDIX 3 IMC RATING SKILL TEST- TOLERANCES

Applicants must demonstrate the ability to fly safely within the tolerances specified in the following table. These tolerances should not be achieved at the expense of smoothness and good co-ordination: due allowance will be made by the examiner for turbulent conditions.

PROFILE	IMC Rating Skill Test, Revalidation and Renewals
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Altitude or Height

Normal Flight	± 100 ft
With simulated engine failure	± 200 ft
Limited or partial panel	± 200 ft
Starting go-around at decision alt/ht	+ 50 ft / - 0 ft
Minimum descent altitude / height	+ 50 ft / - 0 ft
Circling minima	+100ft/-0ft

Radio Aids Tracking

VOR	± 5°
ADF	± 10°
GPS	half scale deflection in the appropriate mode
ILS	half scale deflection azimuth and glide path

Heading

All engines operating	± 10°
With simulated engine failure	± 10°
Limited or Partial panel	± 15°

Speed

Normal flight	± 10 kt
Limited or partial panel	± 20 kt
With simulated engine failure	± 10 kt
Threshold speed	+10 kt / -0 kt

APPENDIX 4 SKILL TEST – EXAMINER’S RECORD SRG 1176



UK IMC RATING SKILL TEST - EXAMINER’S RECORD



Please complete the form in BLOCK CAPITALS using black or dark blue ink after reading the attached guidance.

1. FLIGHT DETAILS (tick appropriate boxes)

Applicant's Name UK Licence No.

Aircraft Type & Regn Class SE ME

Date Block Times Flight Time

Initial Revalidation/Renewal Pass Fail Incomplete

Examiner's Name Examiner No.

2. SECTION 1 FULL PANEL INSTRUMENT FLYING (Note 2)

		I/R/O (Note 1)	PASS/ FAIL
1.1	Straight and level flight at given IAS	I	
1.2	Turns at given rate	I	
1.3	Turns onto given headings	I	
1.4	Climbing and descending (including turns)	I	
1.5	Recovery from unusual attitudes	I	
	1.5.1 Recovery from a steep descending turn		
	1.5.2 Recovery from a steep climbing turn		

3. SECTION 2 LIMITED PANEL INSTRUMENT FLYING (Note 3)

2.1	Straight and level flight	I/R	
2.2	Climbing and descending	I/R	
2.3	Turns onto given headings	I/R	
2.4	Recovery from unusual attitudes	I/R	
	2.4.1 Recovery from a sustained 45 degree banked turn		
	2.4.2 Recovery from a steep descending turn		
	2.4.3 Recovery from the approach to the stall		

SECTION 3 RADIO NAVIGATION AIDS

3.1	Position Fixing (to include VOR or ADF)	I	
3.2	Interception of given radial	I	
3.3	Maintenance of given radial for 10 minutes	I	

SECTION 4 LET-DOWN AND APPROACH PROCEDURES

4.1	Let down and approach to DH/MDH using pilot interpreted aid (Note 4)	Aid used	I/R	
4.2	Holding (Note 5)		I/R - O	
4.3	Missed approach procedure		I/R	
4.4	Second approach to DH/MDH using a different aid from Section 4.1 (Note 6)	Aid used	R - O	

SECTION 5 BAD WEATHER CIRCUIT

5.1	Bad weather visual circuit	I/R	
5.2	Landing	I/R	

SECTION 6 FLIGHT WITH ASYMMETRIC POWER (Note 7)

6.1	Control of the aeroplane following failure of one engine in the climb	I - O	
6.2	Identification of the failed engine and completion of failure drills	I - O	
6.3	Climbing and level turns in asymmetric flight	I - O	


UK IMC RATING SKILL TEST - EXAMINER'S RECORD
GUIDANCE
Notes

- 1) The following legend is used:
 - I Initial IMC Rating Test
 - R Revalidation/Renewal
 - O Optional
- 2) Items 1 to 4 can be assessed during the other sections of the test rather than as stand-alone items.
- 3) Tests flown in an aeroplane without a turn co-ordinator or turn indicator will require a further test flight in an aeroplane so equipped in order to assess the limited panel items.
- 4) Decision Height/Altitude, Minimum Descent Height/Altitude and Missed Approach Point for each procedure should be determined by the applicant.
- 5) Holding is not a required test item on the IMC Rating Test. However, if the applicant is required to hold by ATC then the hold should be assessed.
- 6) A second approach is required on a Revalidation/Renewal Test unless an approach has been completed satisfactorily during current rating validity under the supervision of an instructor qualified to give IF instruction who must also have signed the pilot's log book accordingly. This approach must have been of a different type to that tested at Item 4.1.
- 7) Section 6 is only required on the first occasion that the IMC Rating Test is flown in a multi-engine aeroplane.

Examiner Guidance (full guidance is contained in Standards Doc. 25, LASORS and the Flight Examiner's Handbook)

- a) The IMC Rating Test may be completed in more than one flight but not more than three and must be completed within a period of 28 days.
- b) Failure of any item of the test will require the applicant to take the full test again. There is no option of a partial pass.
- c) Mark passed items with a tick or 'PASS'. Mark failed items with 'FAIL'. Mark items not flown as 'N/F'. Strike out any items not required.
- d) Should an applicant choose to terminate a skill test for reasons considered inadequate by the examiner the applicant shall retake the entire skill test. If the test is terminated for reasons considered adequate by the examiner, only those items not completed shall be tested in a further flight.
- e) After a successful initial IMC Rating test, or the renewal of a rating that has lapsed by more than 5 years, complete Form FCL 99 (SRG\1125) for submission to PLD; do not sign the applicant's licence. Otherwise, after a successful IMC Rating revalidation/renewal test enter the details in the applicant's licence and sign the entry.
- f) This form, when completed, is subject to the provisions of the UK Data Protection Act 1998. It should be kept in a secure place for 3 years and then destroyed.