***Appendix 7.*  IR Skill Test**

***GENERAL***

**1.** An applicant for an IR shall have received instruction on the same class or type of aircraft to be used in the test.

**2.** An applicant shall pass all the relevant sections of the Skill Test. If any item in a section is failed, that section is failed.

Failure in more than one section will require the applicant to take the entire test again. An applicant failing only one section shall only repeat the failed section.

Failure in any section of the ***retest***, including those sections that have been passed on a previous attempt, will require the applicant to take the entire test again.

All relevant sections of the Skill Test shall be completed *within* ***6*** *months*.

Failure to achieve a pass in all relevant sections of the test *in* ***2*** *( two )* *attempts* will require further training.

**3.** Further training may be required following a failed Skill Test.

There is no limit to the number of Skill Tests that may be attempted.

***CONDUCT of the IR SKILL TEST***

**4.** The test is intended to simulate a practical flight. The route to be flown shall be chosen by the examiner. An essential element is the ability of the applicant to plan and conduct the flight from routine briefing material. The applicant shall undertake the flight planning and shall ensure that all equipment and documentation for the execution of the flight are on board. The duration of the flight shall be *at least* ***1*** *hour.*

**5.** Should the 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 sections not completed shall be tested in a further flight.

**6.** At the discretion of the examiner, any maneuver or procedure of the test may be repeated once by the applicant.

The examiner may stop the test at any stage if it is considered that the applicant’s demonstration of flying skill requires a complete retest.

**7.** An applicant shall fly the aircraft from a position where the PIC functions can be performed and to carry out the test as if there is no other crew member. The examiner shall take no part in the operation of the aircraft, except when intervention is necessary in the interests of safety or to avoid unacceptable delay to other traffic. Responsibility for the flight shall be allocated in accordance with national regulations.

**8.** Decision heights / altitude *( DH / DA ),* minimum descent heights / altitudes *( MDH / MDA )* and missed approach point shall be determined by the applicant and agreed by the examiner.

**9.** An applicant for an IR shall indicate to the examiner the checks and duties carried out, including the identification of radio facilities. Checks shall be completed in accordance with the authorized Checklist for the aircraft on which the test is being taken. During pre-flight preparation for the test the applicant is required to determine power settings and speeds. Performance data for take-off, approach and landing shall be calculated by the applicant in compliance with the operations manual or flight manual for the aircraft used.

***FLIGHT TEST TOLERANCES***

**10.** The applicant shall demonstrate the ability to :

- operate the aircraft within its limitations ;

- complete all maneuvers with smoothness and accuracy ;

- exercise good judgment and airmanship ;

- apply aeronautical knowledge ; *and*

- maintain control of the aircraft at all times in such a manner that the successful outcome of a procedure or maneuver is never seriously in doubt.

**11.** The following limits shall apply, corrected to make allowance for turbulent conditions and the handling qualities and performance of the aircraft used :

*Height :*

Generally ± **100** *feet*

Starting a Go - around at Decision Height / Altitude + **50** *feet* / – **0** *feet*

Minimum Descent Height / Altitude / MAP + **50** *feet* / – **0** *feet*

*Tracking :*

On radio aids ± **5** °

Precision approach - **half** scale deflection,

*azimuth and glide path*

*Heading :*

all engines operating ± **5** °

with simulated engine failure ± **10** °

*Speed :*

all engines operating ± **5** *knots*

with simulated engine failure + **10** *knots* / – **5** *knots*

**A. *CONTENT of the IR SKILL TEST for the AEROPLANE***

|  |  |
| --- | --- |
| ***SECTION 1*** **— PRE - FLIGHT OPERATIONS and DEPARTURE** | |
| *Use of Checklist, airmanship, anti - icing / de - icing procedures, etc., apply in all sections* | |
| **a** | Use of Flight Manual *( or equivalent )* especially A / C performance calculation, mass and balance |
| **b** | Use of Air Traffic Services document, weather document |
| **c** | Preparation of ATC Flight Plan, IFR Flight Plan / log |
| **d** | Pre-flight inspection |
| **e** | Weather Minima |
| **f** | Taxiing |
| **g** | Pre - Take-off briefing, Take-off |
| **h** ( o ) | Transition to instrument flight |
| **i** ( o ) | Instrument departure procedures, altimeter setting |
| **j** ( o ) | ATC liaison — compliance, R / T procedures |
| ***SECTION 2*  — GENERAL HANDLING ( o )** | |
| **a** | Control of the aeroplane by reference solely to instruments, including : *level flight at various speeds, trim* |
| **b** | Climbing and descending turns with sustained Rate 1 turn |
| **c** | Recoveries from unusual attitudes, including sustained 45° bank turns and steep descending turns |
| **d** ( o ) | Recovery from approach to stall in level flight, climbing/ descending turns and in landing configuration  — *only applicable to aeroplanes* |
| **e** | Limited panel : stabilised climb or descent, level turns at Rate 1 onto given headings, recovery from unusual attitudes — *only applicable to aeroplanes* |
| ***SECTION 3*** — **EN - ROUTE IFR PROCEDURES ( o )** | |
| **a** | Tracking, including interception, e. g. NDB, VOR, RNAV |
| **b** | Use of radio aids |
| **c** | Level flight, control of heading, altitude and airspeed, power setting, trim technique |
| **d** | Altimeter settings |
| **e** | Timing and revision of ETAs *( en - route hold, if required )* |
| **f** | Monitoring of flight progress, flight log, fuel usage, systems’ management |
| **g** | Ice protection procedures, simulated if necessary |
| **h** | ATC liaison — compliance, R / T procedures |
| ***SECTION 4*** — **PRECISION APPROACH PROCEDURES ( o )** | |
| **a** | Setting and checking of navigational aids, identification of facilities |
| **b** | Arrival procedures, altimeter checks |
| **c** | Approach and landing briefing, including descent / approach / landing checks |
| **d** ( **+** ) | Holding procedure |
| **e** | Compce with published approach procedure |
| **f** | Approach timing |
| **g** | Altitude, speed heading control *( stabilised approach )* |
| **h** ( **+** ) | Go - around action |
| **i** ( **+** ) | Missed approach procedure / landing |
| **j** | ATC liaison — compliance, R / T procedures |

**Aeroplanes** *( cont’d )*

|  |  |
| --- | --- |
| ***SECTION 5*** **— NON-PRECISION APPROACH PROCEDURES ( o )** | |
| **a** | Setting and checking of navigational aids, identification of facilities |
| **b** | Arrival procedures, altimeter settings |
| **c** | Approach and landing briefing, including descent / approach / landing checks |
| **d** ( **+** ) | Holding procedure |
| **e** | Compliance with published approach procedure |
| **f** | Approach timing |
| **g** | Altitude, speed heading control *( stabilised approach )* |
| **h** ( **+** ) | Go - around action |
| **i** ( **+** ) | Missed approach procedure / landing |
| **j** ( o ) | ATC liaison — compliance, R / T procedures |
| ***SECTION 6*** —  **FLIGHT with ONE ENGINE INOPERATIVE *( multi - engine aeroplanes only )*  ( o )** | |
| **a** | Simulated engine failure after Take-off or on Go-around |
| **b** | Approach, Go-around and procedural missed approach with one engine inoperative |
| **c** | Approach and landing with one engine inoperative |
| **d** | ATC liaison — compliance, R / T procedures |
|  |  |
| ( \* ) May be performed in an FFS, FTD 2 / 3 *or*  FNPT II. | |
| ( **+** ) May be performed in either ***section 4*** *or*  ***section 5.*** | |
| ( **o** ) Must be performed by sole reference to instruments. | |

***B. CONTENT of the IR SKILL TEST for the HELICOPTER***

|  |  |
| --- | --- |
| ***SECTION 1*** **— DEPARTURE** | |
| *Use of Checklist, airmanship, anti - icing / de - icing procedures, etc., apply in all sections* | |
| **a** | Use of Flight Manual *( or equivalent )* especially A / C performance calculation, mass and balance |
| **b** | Use of Air Traffic Services document, weather document |
| **c** | Preparation of ATC Flight Plan, IFR Flight Plan / log |
| **d** | Pre-flight inspection |
| **e** | Weather Minima |
| **f** | Taxiing / Air taxy in compliance with ATC or instructions of instructor |
| **g** | Pre - Take-off briefing, procedures and checks |
| **h** | Transition to instrument flight |
| **i** | Instrument departure procedures. |
| ***SECTION 2***  — **GENERAL HANDLING** | |
| **a** | Control of the helicopter by reference solely to instruments, including : *level flight at various speeds, trim* |
| **b** | Climbing and descending turns with sustained Rate 1 turn |
| **c** | Recoveries from unusual attitudes, including sustained 30 ° bank turns and steep descending turns |
| **d** ( o ) | Recovery from approach to stall in level flight, climbing/ descending turns and in landing configuration  — *only applicable to aeroplanes* |
| **e** | Limited panel : stabilised climb or descent, level turns at Rate 1 onto given headings, recovery from unusual attitudes — *only applicable to aeroplanes* |
| ***SECTION 3*** — **EN - ROUTE IFR PROCEDURES** | |
| **a** | Tracking, including interception, e. g. NDB, VOR, RNAV |
| **b** | Use of radio aids |
| **c** | Level flight, control of heading, altitude and airspeed, power setting. |
| **d** | Altimeter settings |
| **e** | Timing and revision of ETAs. |
| **f** | Monitoring of flight progress, flight log, fuel usage, systems’ management |
| **g** | Ice protection procedures, simulated if necessary and if applicable |
| **h** | ATC liaison — compliance, R / T procedures |
| ***SECTION 4*** — **PRECISION APPROACH PROCEDURES** | |
| **a** | Setting and checking of navigational aids, identification of facilities |
| **b** | Arrival procedures, altimeter checks |
| **c** | Approach and landing briefing, including descent / approach / landing checks |
| **d** ( **\*** ) | Holding procedure |
| **e** | Compce with published approach procedure |
| **f** | Approach timing |
| **g** | Altitude, speed, heading control *( stabilised approach )* |
| **h** ( **\*** ) | Go - around action |
| **i** ( **\*** ) | Missed approach procedure / landing |
| **j** | ATC liaison — compliance, R / T procedures |

***Helicopters***  *( cont’d )*

|  |  |
| --- | --- |
| ***SECTION 5*** **— NON - PRECISION APPROACH PROCEDURES ( o )** | |
| **a** | Setting and checking of navigational aids, identification of facilities |
| **b** | Arrival procedures, altimeter settings and check’s |
| **c** | Approach and landing briefing, including descent / approach / landing checks |
| **d** ( **\*** ) | Holding procedure |
| **e** | Compliance with published approach procedure |
| **f** | Approach timing |
| **g** | Altitude, speed heading control *( stabilised approach )* |
| **h** ( **\*** ) | Go - around action |
| **i** ( **\*** ) | Missed approach procedure ( **\*** ) / landing |
| **j** | ATC liaison — compliance, R / T procedures |
| ***SECTION 6*** —  **ABNORMAL and EMERGENCY PROCEDURES** | |
| This section may be combined with ***sections 1*** through ***5.*** The test shall have regard to control of the helicopter, identification of the failed engine, immediate actions *( touch drills ),* follow-up actions and checks and flying accuracy, in the following situations : | |
| **a** | Simulated engine failure after Take-off and on /during approach ( \*\* ) *( at a safe altitude unless carried out in an FFS or FNPT II / III, FTD 2, 3 )* |
| **b** | Failure of stability augmentation devices / hydraulic system *( if applicable )* |
| **c** | Limited panel Approach and landing with one engine inoperative |
| **d** | Autorotation and recovery to a pre-set altitude |
| **e** | Precision approach manually without *( FD )*  flight director ( \*\*\* )  Precision approach manually with *( FD )*  flight director ( \*\*\* ) |
|  |  |
| ( \* ) To be performed in ***section 4*** *or*  ***section 5.*** | |
| ( \*\* ) Multi - engine helicopter only. | |
| ( \*\*\* ) Only one item to be tested. | |
|  | |

***C. CONTENT of the IR SKILL TEST for the AIRSHIP***

***( reserved )***

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