UK Aircrew Regulation

UK Regulation (EU) No. 1178/2011

The text of the amendment is arranged to show deleted text, new or amended text as shown below:

(a) ~~Text to be deleted is shown struck through~~;

(b) New text is highlighted in grey;

Article 4d Transitional measures for single-engine instrument rating privileges for helicopters

Without prejudice to point FCL.630.H of Annex I (Part-FCL) to this Regulation, all of the following shall apply:

1. instrument ratings for helicopters (IR(H)) issued in accordance with Annex I (Part-FCL) to this Regulation before 31 November 2023 shall be deemed as IR(H) for both single-engine and multi-engine helicopters and shall be reissued as such IR(H), when reissuing a helicopter pilot licence for administrative reasons.

2. Applicants who before 31 November 2023 commenced training for an IR(H) for either single-engine or multi-engine helicopters shall be allowed to complete that training and, in such a case, be issued with an IR(H) for both single-engine and multi-engine helicopters.'

Article 4e Transitional measures for training, testing and checking related to multi-pilot operations in single-pilot helicopter

1. The CAA may issue specific privileges for conducting training, skill tests and proficiency checks in multi-pilot operation in single-pilot helicopters to applicants who meet all of the following conditions:

(a) hold an instructor or examiner certificate, as applicable, issued in accordance with Annex I (Part-FCL) to this Regulation, including the privileges to instruct or to examine, as applicable, in the relevant type of helicopter;

(b) have completed the training specified in point FCL.735.H of Part-FCL;

(c) have experience in multi-pilot operation in helicopters at a level that is acceptable to the [CAA] .

2. The privileges issued in accordance with paragraph 1 shall be valid until 31 November 2026. In order to revalidate the privileges, applicants shall comply with the experience requirements for instructor and examiner privileges related to multi-pilot operation in single-pilot helicopters as set out in Part-FCL.

Article 10a Pilot training organisations

1. Organisations shall, in accordance with Article 24(2) of Regulation (EU) 2018/1139, be entitled to provide training to pilots involved in the operation of aircraft referred to in points (b)(i) and (ii) of Article (2)(1) of Regulation (EU) 2018/1139 only where those organisations have been issued by the CAA with an approval confirming that they comply with the essential requirements set out in Annex IV to Regulation (EU) 2018/1139 and with the requirements of Annex VII to this Regulation.

However, having regard to Article 24(6) of Regulation (EU) 2018/1139, organisations having their principal place of business in the United Kingdom shall be entitled to provide the training referred to in point DTO.GEN.110 of Annex VIII to this Regulation without such approval [...] where they have made a declaration to the CAA in accordance with the requirements laid down in point DTO.GEN.115 of that Annex and, where so required pursuant to point DTO.GEN.230(c) of that Annex, the CAA has approved the training programme.

2. Provision repealed before document was retained.

3. Provision repealed before document was retained.

4. Provision repealed before document was retained.

5. Pilot training organisations shall ensure that the IR training course they offer include training for PBN privileges compliant with the requirements of Annex I (Part-FCL) by 25 August 2020 at the latest.

6. Pilot training organisations that provide training for the IR(H) shall adapt their training programme to be compliant with Annex I by 31 November 2024.

Annex I PART-FCL Subpart A - GENERAL REQUIREMENTS

FCL.010 Definitions

For the purposes of this Annex (Part-FCL), the following definitions shall apply:

- ‘Accessible’ means that a device can be used by:
  - — the approved training organisation (ATO) under whose approval a training course for a class or type rating is being conducted; or
  - — the examiner conducting the assessment of competence, skill test or proficiency check for the purpose of assessing, testing or checking.
- ‘Aerobatic flight’ means an intentional manoeuvre involving an abrupt change in an aircraft’s attitude, an abnormal attitude, or abnormal acceleration, not necessary for normal flight or for instruction for licences, certificates, or ratings other than the aerobatic rating.
- ‘Aeroplane’ means an engine-driven fixed-wing aircraft heavier than air which is supported in flight by the dynamic reaction of the air against its wings.
- ‘Aeroplane required to be operated with a co-pilot’ means a type of aeroplane which is required to be operated with a co-pilot as specified in the flight manual or by the air operator certificate.
- ‘Aeroplane upset prevention and recovery training’ (UPRT) means training consisting of:
  - — aeroplane upset prevention training: a combination of theoretical knowledge and flying training with the aim of providing flight crew with the required competencies to prevent aeroplane upsets; and
  - — aeroplane upset recovery training: a combination of theoretical knowledge and flying training with the aim of providing flight crew with the required competencies to recover from aeroplane upsets.
- ‘Aircraft’ means any machine which can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth’s surface.
- ‘Airmanship’ means the consistent use of good judgement and well-developed knowledge, skills and attitudes to accomplish flight objectives.
- ‘Airship’ means a power-driven lighter-than-air aircraft, with the exception of hot-air airships, which are considered to be balloons in accordance with Article 2(7) of Commission Regulation (EU) 2018/395.
- ‘Available FSTD’ means any flight simulation training device (FSTD) that is vacant for use of the FSTD operator or of the customer irrespective of any time considerations.
- ‘Angular operation’ means an instrument approach operation in which the maximum tolerable error/deviation from the planned track is expressed in terms of deflection of the needles on the Course Deviation Indicator (CDI) or equivalent display in the cockpit.

- ‘Assessment of competence’ means the demonstration of skills, knowledge and attitude for the initial issue, revalidation or renewal of an instructor or examiner certificate.
- ‘Balloon’ means a lighter-than-air aircraft which is not engine-driven and sustains flight through the use of either gas or an airborne heater. For the purposes of this Part, a hot-air airship, although engine-driven, is also considered a balloon.
- Provision repealed before document was retained.
- ‘Category of aircraft’ means a categorisation of aircraft according to specified basic characteristics, for example aeroplane, powered-lift, helicopter, airship, sailplane, free balloon.
- ‘Class of aeroplane’ means a categorisation of single-pilot aeroplanes not requiring a type rating.
- Provision repealed before document was retained.
- ‘Commercial air transport’ means the transport of passengers, cargo or mail for remuneration or hire.
- ‘Competency’ means a combination of skills, knowledge and attitude required to perform a task to the prescribed standard.
- ‘Competency element’ means an action which constitutes a task that has a triggering event and a terminating event that clearly defines its limits, and an observable outcome.
- ‘Competency unit’ means a discrete function consisting of a number of competency elements.
- ‘Co-pilot’ means a pilot operating other than as pilot-in-command, on an aircraft for which more than one pilot is required, but excluding a pilot who is on board the aircraft for the sole purpose of receiving flight instruction for a licence or rating.
- ‘Cross-country’ means a flight between a point of departure and a point of arrival following a pre-planned route, using standard navigation procedures.
- ‘Cruise relief co-pilot’ means a pilot who relieves the co-pilot of his/her duties at the controls during the cruise phase of a flight in multi-pilot operations above FL 200.
- ‘Dual instruction time’ means flight time or instrument ground time during which a person is receiving flight instruction from a properly authorised instructor.
- ”EBT operator” means an organisation that is holding an air operator certificate (AOC) in accordance with Annex III (Part-ORO) to Regulation (EU) No 965/2012 and that has implemented an EBT programme approved by the CAA, in accordance with the provisions of that Regulation.
- ”EBT practical assessment” means a method for assessing performance that serves to verify the integrated performance of competencies and takes place in either a simulated or an operational environment.
- ”EBT programme” means a pilot assessment and training programme in accordance with point ORO.FC.231 (evidence-based training) of Annex III (Part-ORO) to Regulation (EU) No 965/2012.

- ‘Error’ means an action or inaction taken by the flight crew which leads to deviations from organisational or flight intentions or expectations.
- ‘Error management’ means the process of detecting and responding to errors with countermeasures which reduce or eliminate the consequences of errors, and mitigate the probability of errors or undesired aircraft states.
- ‘Full Flight Simulator’ (FFS) means a full size replica of a specific type or make, model and series aircraft flight deck, including the assemblage of all equipment and computer programmes necessary to represent the aircraft in ground and flight operations, a visual system providing an out-of-the-flight deck view, and a force cueing motion system.
- ‘Flight time’:
  - for aeroplanes, touring motor gliders and powered-lift aircraft, it means the total time from the moment an aircraft first moves for the purpose of taking off until the moment it finally comes to rest at the end of the flight;
  - for helicopters, it means the total time from the moment a helicopter’s rotor blades start turning until the moment the helicopter finally comes to rest at the end of the flight, and the rotor blades are stopped;
  - for airships, it means the total time from the moment an airship is released from the mast for the purpose of taking off until the moment the airship finally comes to rest at the end of the flight, and is secured on the mast.
- ‘Flight time under Instrument Flight Rules’ (IFR) means all flight time during which the aircraft is being operated under the Instrument Flight Rules.
- ‘Flight Training Device’ (FTD) means a full size replica of a specific aircraft type’s instruments, equipment, panels and controls in an open flight deck area or an enclosed aircraft flight deck, including the assemblage of equipment and computer software programmes necessary to represent the aircraft in ground and flight conditions to the extent of the systems installed in the device. It does not require a force cueing motion or visual system, except in the case of helicopter FTD levels 2 and 3, where visual systems are required.
- ‘Flight and Navigation Procedures Trainer’ (FNPT) means a training device which represents the flight deck or cockpit environment, including the assemblage of equipment and computer programmes necessary to represent an aircraft type or class in flight operations to the extent that the systems appear to function as in an aircraft.
- ‘Flown solely by reference to instruments’ means that the pilots fly the aircraft without any external visual references, in simulated or actual instrument meteorological conditions (IMC).
- Provision repealed before document was retained.
- ‘Helicopter’ means a heavier-than-air aircraft supported in flight chiefly by the reactions of the air on one or more power-driven rotors on substantially vertical axes.
- ‘Instrument flight time’ means the time during which a pilot is controlling an aircraft in flight solely by reference to instruments.

- ‘Instrument ground time’ means the time during which a pilot is receiving instruction in simulated instrument flight, in flight simulation training devices (FSTD).
- ‘Instrument time’ means instrument flight time or instrument ground time.
- ‘Linear operation’ means an instrument approach operation in which the maximum tolerable error/deviation from the planned track is expressed in units of length, for instance nautical miles, for cross-track lateral deviation.
- ‘Line flying under supervision’ (LIFUS) means line flying after an approved zero flight time type rating training course or the line flying required by an operational suitability data (OSD) report.
- ‘LNAV’ means Lateral Navigation.
- ‘LPV’ means Localiser Performance with Vertical Guidance.
- [’Medical declaration’ means a medical declaration made in accordance with article 163(3) of the Air Navigation Order 2016 by a pilot holding a private pilot licence (PPL), a balloon pilot licence (BPL), a sailplane pilot licence (SPL), or a light aircraft pilot licence (LAPL), which has not ceased to be valid in accordance with article 163(4) of that Order.]
- ”Mixed EBT programme” means an operator’s recurrent training and checking programme provided for in point ORO.FC.230 of Annex III (Part-ORO) to Regulation (EU) No 965/2012, a portion of which is dedicated to the application of EBT but which does not replace proficiency checks provided for in Appendix 9 to this Annex.
- ~~‘Multi-pilot operation’:~~
  - ~~for aeroplanes, it means an operation requiring at least 2 pilots using multi-crew cooperation in either multi-pilot or single-pilot aeroplanes;~~
  - ~~for helicopters, it means an operation requiring at least 2 pilots using multi-crew cooperation on multi-pilot helicopters~~.

  ‘Multi-pilot operation’ means an operation requiring at least two pilots using multi-crew cooperation in either a multi-pilot or a single-pilot aircraft.
- ‘Multi-crew cooperation’ (MCC) means the functioning of the flight crew as a team of cooperating members led by the pilot-in-command.
- ‘Multi-pilot aircraft’:
  - ~~for aeroplanes, it means aeroplanes certificated for operation with a minimum crew of at least two pilots;~~
  - ~~for helicopters, airships and powered-lift aircraft, it means the type of aircraft which is required to be operated with a co-pilot as specified in the flight manual or by the air operator certificate or equivalent document.~~
  - for aeroplanes, it means aeroplanes certificated for operation with a minimum crew of at least two pilots,
  - for helicopters, airships and powered-lift aircraft, it means an aircraft which is certificated for operation with a minimum crew of at least two pilots or which is

required to be operated with at least two pilots in accordance with Regulation (EU) No 965/2012.

- ‘Night’ means the time from half an hour after sunset until half an hour before sunrise (both times inclusive), sunset and sunrise being determined at surface level .
- ‘OSD’ means the operational suitability data established in accordance with Annex I (Part-21) to Regulation (EU) No 748/2012.
- ‘Other training devices’ (OTD) means training aids other than FSTDs which provide means for training where a complete flight deck environment is not necessary.
- ‘Performance-Based Navigation (PBN)’ means area navigation based on performance requirements for aircraft operating along an ATS route, on an instrument approach procedure or in a designated airspace.
- ‘Performance criteria’ means a simple, evaluative statement on the required outcome of the competency element and a description of the criteria used to judge if the required level of performance has been achieved.
- ‘Pilot-in-command’ (PIC) means the pilot designated as being in command and charged with the safe conduct of the flight.
- ‘Pilot-in-command under supervision’ (PICUS) means a co-pilot performing, under the supervision of the pilot-in-command, the duties and functions of a pilot-in-command.
- ‘Powered-lift aircraft’ means any aircraft deriving vertical lift and in flight propulsion/lift from variable geometry rotors or engines/propulsive devices attached to or contained within the fuselage or wings.
- ‘Powered sailplane’ means a sailplane equipped with one or more engines that has, with engines inoperative, the characteristics of a sailplane.
- ‘Private pilot’ means a pilot who holds a licence which prohibits the piloting of aircraft in operations for which remuneration is given, with the exclusion of instruction or examination activities, as established in this Part.
- ‘Proficiency check’ means the demonstration of skill to revalidate or renew ratings or privileges, and including such oral examination as may be required.
- ‘Renewal’ (of, e.g. a rating or certificate) means the administrative action taken after a rating or certificate has lapsed for the purpose of renewing the privileges of the rating or certificate for a further specified period consequent upon the fulfilment of specified requirements.
- ‘Revalidation’ (of, e.g. a rating or certificate) means the administrative action taken within the period of validity of a rating or certificate which allows the holder to continue to exercise the privileges of a rating or certificate for a further specified period consequent upon the fulfilment of specified requirements.
- ‘RNP APCH’ means a PBN specification used for instrument approach operations.
- ‘RNP APCH operation down to LNAV minima’ means a 2D instrument approach operation for which the lateral guidance is based on GNSS positioning.

- ‘RNP APCH operation down to LNAV/VNAV minima’ means a 3D instrument approach operation for which the lateral guidance is based on GNSS positioning and the vertical guidance is provided either by the Baro VNAV function or by the GNSS positioning including SBAS.
- ‘RNP APCH operation down to LPV minima’ means a 3D instrument approach operation for which both lateral and vertical guidance are based on GNSS positioning including SBAS.
- ‘RNP AR APCH’ means a navigation specification used for instrument approach operations requiring a specific approval.
- ‘Route sector’ means a flight comprising take-off, departure, cruise of not less than 15 minutes, arrival, approach and landing phases.
- ‘Sailplane’ means a heavier-than-air aircraft which is supported in flight by the dynamic reaction of the air against its fixed lifting surfaces, the ~~free~~ flight of which does not depend on an engine.
- ~~‘Single-pilot aircraft’ means an aircraft certificated for operation by one pilot~~.
- ‘Single-pilot aircraft’:
  - for aeroplanes, it means an aircraft certificated for operation by one pilot,
  - for helicopters, airships and powered lift aircraft, it means an aircraft which is certificated for operation by one pilot and which is not required to be operated with at least two pilots by Regulation (EU) No 965/2012.
- ‘Skill test’ means the demonstration of skill for a licence or rating issue, including such oral examination as may be required.
- ‘Solo flight time’ means flight time during which a student pilot is the sole occupant of an aircraft.
- ‘Student pilot-in-command’ (SPIC) means a student pilot acting as pilot-in-command on a flight with an instructor where the latter will only observe the student pilot and shall not influence or control the flight of the aircraft.
- ‘Threat’ means events or errors which occur beyond the influence of the flight crew, increase operational complexity and which must be managed to maintain the margin of safety.
- ‘Threat management’ means the process of detecting and responding to the threats with countermeasures which reduce or eliminate the consequences of threats, and mitigate the probability of errors or undesired aircraft states.
- ‘Three-dimensional (3D) instrument approach operation’ means an instrument approach operation using both lateral and vertical navigation guidance.
- ‘Touring motor glider (TMG)’ means, unless otherwise specified following the certification process in accordance with Annex I (Part 21) to Regulation (EU) No 748/2012, a specific class of powered sailplanes that has an integrally mounted, non-retractable engine and a non-retractable propeller. It shall be capable of taking off and climbing under its engine power according to its flight manual.
- ‘Two-dimensional (2D) instrument approach operation’ means an instrument approach operation using lateral navigation guidance only.

- ‘Type of aircraft’ means a categorisation of aircraft requiring a type rating as determined in the operational suitability data established in accordance with Part-21, and which include all aircraft of the same basic design including all modifications thereto except those which result in a change in handling or flight characteristics.
- ‘Type rating and licence endorsement list’ means a list published by the Agency based on the result of the OSD evaluation and containing classes of aeroplanes and types of aircraft for the purpose of flight crew licensing.
- ‘VNAV’ means Vertical Navigation.

FCL.060 Recent experience

(a) Provision repealed before document was retained.

(b) Aeroplanes, helicopters, powered-lift aircraft and airships. A pilot shall not operate an aircraft in commercial air transport or to carry passengers:

~~(1) as PIC or co-pilot unless he/she has carried out, in the preceding 90 days, at least 3 take-offs, approaches and landings in an aircraft of the same type or class or an FFS representing that type or class. The 3 take-offs and landings shall be performed in either multi-pilot or single-pilot operations, depending on the privileges held by the pilot; and~~

(1) as PIC or co-pilot unless the individual has carried out, in the preceding 90 days, at least 3 take-offs, approaches and landings as a pilot flying in an aircraft of the same type or class or an FFS representing that type or class. The 3 take-offs and landings shall be performed in either multi-pilot or single-pilot operations, depending on the privileges held by the pilot; and

(2) as PIC at night unless he/she:

(i) has carried out in the preceding 90 days at least 1 take-off, approach and landing at night as a pilot flying in an aircraft of the same type or class or an FFS representing that type or class; or

(ii) holds an IR;

(3) as cruise relief co-pilot unless he/she:

(i) has complied with the requirements in (b)(1); or

(ii) has carried out in the preceding 90 days at least 3 sectors as a cruise relief pilot on the same type or class of aircraft; or

(iii) has carried out recency and refresher flying skill training in an FFS at intervals not exceeding 90 days. This refresher training may be combined with the operator's refresher training prescribed in the relevant requirements of Part-ORO.

(4) When a pilot has the privilege to operate more than one type of aeroplane with similar handling and operation characteristics, the 3 take-offs, approaches and landings required in (1) may be performed as defined in the operational suitability data established in accordance with Part-21.

(5) When a pilot has the privilege to operate more than one type of non-complex helicopter with similar handling and operation characteristics, as defined in the operational suitability data established in accordance with Part-21, the 3 take-offs, approaches and landings required in (1) may be performed in just one of the types, provided that the pilot has completed at least 2 hours of flight in each of the types of helicopter, during the preceding 6 months.

(c) Specific requirements for commercial air transport:

(1) In the case of commercial air transport, the 90-day period prescribed in subparagraphs (b)(1) and (2) above may be extended up to a maximum of 120 days, as long as the pilot undertakes line flying under the supervision of a type rating instructor or examiner.

(2) If the pilot does not comply with the requirement in point (1), he or she shall complete a training flight with an instructor qualified in accordance with Subpart J to instruct for that aircraft type. The training flight shall be performed in the aircraft or an FFS of the aircraft type to be used, and shall include at least the requirements described in points (b)(1) and (2) before he or she can exercise his/her privileges.

Subpart F - AIRLINE TRANSPORT PILOT LICENCE — ATPL Section 3 - Specific requirements for the helicopter category — ATPL(H)

FCL.510.H ATPL(H) — Prerequisites, experience and crediting

~~Applicants for an ATPL(H) shall:~~

~~(a) hold a CPL(H) and a multi-pilot helicopter type rating and have received instruction in MCC;~~

~~(b) have completed as a pilot of helicopters a minimum of 1000 hours of flight time including at least:~~

~~(1) 350 hours in multi-pilot helicopters;~~

~~(2)~~

~~(i) 250 hours as PIC; or~~

~~(ii) 100 hours as PIC and 150 hours as PIC under supervision; or~~

~~(iii) 250 hours as PIC under supervision in multi-pilot helicopters. In this case, the ATPL(H) privileges shall be limited to multi-pilot operations only, until 100 hours as PIC have been completed;~~

~~(3) 200 hours of cross-country flight time of which at least 100 hours shall be as PIC or as PIC under supervision;~~

~~(4) 30 hours of instrument time of which not more than 10 hours may be instrument ground time; and~~

~~(5) 100 hours of night flight as PIC or as co-pilot.~~

~~Of the 1000 hours, a maximum of 100 hours may have been completed in an FSTD, of which not more than 25 hours may be completed in an FNPT.~~

~~(c) Flight time in aeroplanes shall be credited up to 50 % against the flight time requirements of paragraph (b).~~

~~(d) The experience required in (b) shall be completed before the skill test for the ATPL(H) is taken.~~

Applicants for an ATPL(H) shall:

(a) hold a CPL(H);

(b) have received instruction in MCC in ~~accordance~~ with point FCL.735.H;

(c) have completed as a pilot of helicopters a minimum of 1 000 hours of flight time including at least:

(1) 350 hours in multi-pilot operations in helicopters;

(2) (i) 250 hours as PIC; or

(ii) 100 hours as PIC and 150 hours as PIC under supervision; or

(iii) 250 hours as PIC under supervision in multi-pilot helicopters. In this case, the ATPL(H) privileges shall be limited to multi-pilot operations only, until 100 hours as PIC have been completed;

(3) 200 hours of cross-country flight time of which at least 100 hours shall be as PIC or as PIC under supervision;

(4) 30 hours of instrument time of which not more than 10 hours may be instrument ground time; and

(5) 100 hours of night flight as PIC or as co-pilot.

Of the 1 000 hours, a maximum of 100 hours may have been completed in an FSTD, of which not more than 25 hours may be completed in an FNPT;

(d) flight time in aeroplanes shall be credited up to 50 % against the flight time requirements of point (c);

(e) the experience required in point (c) shall be completed before the skill test for the ATPL(H) is taken;

(f) applicants for an ATPL(H) shall receive a full credit for the requirement in point (b) when they comply with point FCL.720.H(a)(2)(ii) and, additionally, have received training at an ATO to meet the necessary standard for the successful completion of the course as per point FCL.735.H.

Subpart G - INSTRUMENT RATING — IR

Section 1 - Common requirements

FCL.605 IR — Privileges

~~(a) The privileges of a holder of an IR are to fly aircraft under IFR, including PBN operations, with a minimum decision height of no less than 200 feet (60 m).~~

~~(b) In the case of a multi-engine IR, these privileges may be extended to decision heights lower than 200 feet (60 m) when the applicant has undergone specific training at an ATO and has passed section 6 of the skill test prescribed in Appendix 9 to this Part in multi-pilot aircraft.~~

~~(c) Holders of an IR shall exercise their privileges in accordance with the conditions established in Appendix 8 to this Part.~~

~~(d) Helicopters only. To exercise privileges as PIC under IFR in multi-pilot helicopters, the holder of an IR(H) shall have at least 70 hours of instrument time of which up to 30 hours may be instrument ground time~~.

(a) Privileges

The privileges of holders of an IR are to fly aircraft under IFR, including PBN operations, with a minimum decision height of:

(1) no less than 200 ft (60 m);

(2) less than 200 ft (60 m), provided that they are authorised to do so in accordance with Annex V (Part-SPA) to Regulation (EU) No 965/2012.

(b) Conditions

(1) Holders of an IR shall exercise their privileges in accordance with the conditions established in Appendix 8 to this Annex.

(2) To exercise privileges as PIC under IFR in multi-pilot operation in helicopters, holders of an IR(H) shall have at least 70 hours of instrument time, of which up to 30 hours may be instrument ground time.

FCL.620 IR — Skill test

~~(a) Applicants for an IR shall pass a skill test in accordance with Appendix 7 to this Part to demonstrate the ability to perform the relevant procedures and manoeuvres with a degree of competency appropriate to the privileges granted.~~

~~(b) For a multi-engine IR, the skill test shall be taken in a multi-engine aircraft. For a single-engine IR, the test shall be taken in a single-engine aircraft. A multi-engine centreline thrust aeroplane shall be considered a single-engine aeroplane for the purposes of this paragraph.~~

~~(c) Applicants who have completed a skill test for a multi-engine IR in a single-pilot multi-engine aeroplane for which a class rating is required shall also be issued with a single-engine IR for the single-engine aeroplane class or type ratings that they hold.~~

Applicants for an IR shall pass a skill test in accordance with Appendix 7 to this Annex to demonstrate their ability to perform the relevant procedures and manoeuvres with a degree of competency appropriate to the privileges granted.

Section 2 - Specific requirements for the aeroplane category

FCL.620 IR — Skill test

(a) For a multi-engine IR(A), the skill test shall be taken in a multi-engine aeroplane. For a single-engine IR(A), the test shall be taken in a single-engine aeroplane. A multi-engine centreline thrust aeroplane shall be considered a single-engine aeroplane for the purposes of this point.

(b) Applicants who have completed a skill test for a multi-engine IR(A) in a single-pilot multi-engine aeroplane for which a class rating is required shall also be issued with a single-engine IR(A) for the single-engine aeroplane class or type ratings that they hold.

Section 3 - Specific requirements for the helicopter category

FCL.630.H IR(H) — Extension of privileges from single-engine to multi-engine helicopters

~~Holders of an IR(H) valid for single-engine helicopters wishing to extend for the first time the IR(H) to multi-engine helicopters shall complete:~~

~~(a) a training course at an ATO comprising at least 5 hours dual instrument instruction time, of which 3 hours may be in an FFS or FTD 2/3 or FNPT II/III; and~~

~~(b) section 5 of the skill test in accordance with Appendix 9 to this Part on multi-engine helicopters.~~

Unless specified otherwise in the operational suitability data established in accordance with Annex I (Part 21) to Regulation (EU) No 748/2012, holders of an IR(H) who wish to extend their IR(H) privileges to further helicopter types shall, in addition to the relevant type rating training course, complete at an ATO 2 hours of flight training on the relevant type by sole reference to instruments according to IFR which may be conducted in an FFS or an FTD which appropriately represents the relevant type for IFR operation.

Section 4 - Specific requirements for the airship category

FCL.620.As IR(As) – Skill Test

For a multi-engine IR(As), the skill test shall be taken in a multi-engine airship.
For a single-engine IR(As), the test shall be taken in a single-engine airship.

Subpart H - CLASS AND TYPE RATINGS

Section 1 - Common requirements

FCL.725 Requirements for the issue of class and type ratings

(a) Training course. An applicant for a class or type rating shall complete a training course at an ATO. An applicant for a non-high-performance single-engine piston class rating, a TMG class rating or a single-engine type rating for helicopters referred to in point DTO.GEN.110(a)(2)(c) of Annex VIII (Part-DTO) may complete the training course at a DTO. The type rating training course shall include the mandatory training elements for the relevant type as defined in the operational suitability data established in accordance with Annex I (Part-21) to Commission Regulation (EU) No 748/2012.

(b) Theoretical knowledge examination. The applicant for a class or type rating shall pass a theoretical knowledge examination organised by the ATO to demonstrate the level of theoretical knowledge required for the safe operation of the applicable aircraft class or type.

(1) For multi-pilot aircraft, the theoretical knowledge examination shall be written and comprise at least 100 multiple-choice questions distributed appropriately across the main subjects of the syllabus.

(2) For single-pilot multi-engine aircraft, the theoretical knowledge examination shall be written and the number of multiple-choice questions shall depend on the complexity of the aircraft.

(3) For single-engine aircraft, the theoretical knowledge examination shall be conducted verbally by the examiner during the skill test to determine whether or not a satisfactory level of knowledge has been achieved.

(4) For single-pilot aeroplanes that are classified as high performance aeroplanes, the examination shall be written and comprise at least 100 multiple-choice questions distributed appropriately across the subjects of the syllabus.

(5) For single-pilot single-engine and single-pilot multi-engine aeroplanes (sea), the examination shall be in a written form and shall comprise at least 30 multiple-choice questions.

(c) Skill test. An applicant for a class or type rating shall pass a skill test in accordance with Appendix 9 to this Part to demonstrate the skill required for the safe operation of the applicable class or type of aircraft.

The applicant shall pass the skill test within a period of 6 months after commencement of the class or type rating training course and within a period of 6 months preceding the application for the issue of the class or type rating.

~~(d) An applicant who already holds a type rating for an aircraft type, with the privilege for either single-pilot or multi-pilot operations, shall be considered to have already fulfilled the theoretical requirements when applying to add the privilege for the other form of operation on the same aircraft type. Such an applicant shall complete additional flight training for the other form of operation at an ATO or an AOC holder specifically authorised for such training by the CAA . The form of operation shall be entered in the licence~~.

‘(d) Single-pilot and multi-pilot operation

(1) A pilot who already holds a type rating for an aircraft type, with the privilege for either single-pilot or multi-pilot operations, shall be considered to have already fulfilled the theoretical requirements when applying to add the privilege for the other form of operation on the same aircraft type.

(2) Such a pilot shall complete additional flight training for the other form of operation in the relevant type in accordance with Appendix 9 to this Annex, unless specified otherwise in the operational suitability data established in accordance with Annex I (Part 21) to Regulation (EU) No 748/2012. This training shall be completed at either of the following:

(i) an ATO;

(ii) an organisation to which Annex III (Part-ORO) to Regulation (EU) No 965/2012 applies and that is entitled to provide such training on the basis of either an approval or, in the case of single-pilot helicopters, a declaration.

(3) Except for single-pilot helicopters, the form of operation shall be entered in the licence.

(4) In the case of single-pilot helicopters, all of the following shall apply:

(i) In the case where a skill test or a proficiency check for a non-complex single-pilot helicopter type rating was completed in multi-pilot operations only, a restriction to multi-pilot operation shall be endorsed with the type rating in the licence. This endorsement shall be removed when the applicant completes a proficiency check that included the necessary elements for single-pilot operation as specified in Appendix 9 to this Annex.

(ii) In all other cases, the form of operation shall not be entered in the licence. The pilot is entitled to exercise the privileges of the type rating:

(A) in single-pilot operation, provided that the skill test or proficiency check either:

(1) was completed in single-pilot operation; or

(2) was completed in multi-pilot operation and contained additional elements for single-pilot operation, as specified in Appendix 9 to this Annex.

(B) in multi-pilot operation under all of the following conditions:

(1) the pilot complies with point FCL.720.H(a)(2);

(2) the privileges are exercised in accordance with Annex III (Part-ORO) to Regulation (EU) No 965/2012 only;

(3) the skill test or proficiency check was completed in multi-pilot operation.’

(e) Notwithstanding the paragraphs above, pilots holding a flight test rating issued in accordance with FCL.820 who were involved in development, certification or production flight tests for an aircraft type, and have completed either 50 hours of total flight time or 10 hours of flight time as PIC on test flights in that type, shall be entitled to apply for the issue of the relevant type rating, provided that they comply with the experience requirements and

the prerequisites for the issue of that type rating, as established in this Subpart for the relevant aircraft category.

(f) Applicants for a class rating for TMGs who also hold an SPL in accordance with Annex III (Part-SFCL) to Commission Implementing Regulation (EU) 2018/1976, including the privileges to fly on TMGs, shall receive full credits towards the requirements in paragraphs (a), (b) and (c).

Section 3 - Specific requirements for the helicopter category

FCL.720.H Experience requirements and prerequisites for the issue of type ratings — helicopters

~~Unless otherwise determined in the operational suitability data established in accordance with Part-21, an applicant for the issue of the first helicopter type rating shall comply with the following experience requirements and prerequisites for the issue of the relevant rating:~~

Unless otherwise determined in the operational suitability data established in accordance with Annex I (Part 21) to Regulation (EU) No 748/2012, an applicant for the issue of the first helicopter type rating shall comply with the following experience requirements and prerequisites for the issue of the relevant rating

(a) ~~Multi-pilot helicopters. An applicant for the first type rating course for a multi-pilot helicopter type shall~~:

(a) Multi-pilot helicopters. An applicant for a type rating for a multi-pilot helicopter type shall, before starting the type rating training course

(1) have at least 70 hours as PIC on helicopters;

(2) except when the type rating course is combined with an MCC course:

(i) hold a certificate of satisfactory completion of an MCC course in helicopters; or

~~(ii) have at least 500 hours as a pilot on multi-pilot aeroplanes; or~~

(ii) have completed at least 500 hours of flight time as a pilot in multi-pilot operations in any aircraft category

~~(iii) have at least 500 hours as a pilot in multi-pilot operations on multi-engine helicopters~~;

(3) have passed the ATPL(H) theoretical knowledge examinations.

~~(b) An applicant for the first type rating course for a multi-pilot helicopter type who is a graduate from an ATP(H)/IR, ATP(H), CPL(H)/IR or CPL(H) integrated course and who does not comply with the requirement of (a)(1), shall have the type rating issued with the privileges limited to exercising functions as co-pilot only. The limitation shall be removed once the pilot has~~:

(b) A graduate from an ATP(H)/IR, ATP(H), CPL(H)/IR or CPL(H) integrated course who does not comply with the requirement of point (a)(1), shall be entitled to undergo the type rating training course for a multi-pilot helicopter type rating and shall have the type rating issued with the privileges limited to exercising functions as co-pilot only. The limitation shall be removed once the pilot has complied with all of the following:

(1) completed 70 hours as PIC or pilot-in-command under supervision of helicopters;

(2) passed the multi-pilot skill test on the applicable helicopter type as PIC.

~~(c) Single-pilot multi-engine helicopters. An applicant for the issue of a first type rating for a single-pilot multi-engine helicopter shall~~:

(c) Multi-engine helicopters. An applicant for the issue of a first type rating for a multi-engine helicopter shall:

(1) before starting flight training:

(i) have passed the ATPL(H) theoretical knowledge examinations; or

(ii) hold a certificate of completion of a pre-entry course conducted by an ATO. The course shall cover the following subjects of the ATPL(H) theoretical knowledge course:

— Aircraft General Knowledge: airframe/systems/power plant, and instrument/electronics,

— Flight Performance and Planning: mass and balance, performance;

(2) in the case of applicants who have not completed an ATP(H)/IR, ATP(H), or CPL(H)/IR integrated training course, have completed at least 70 hours as PIC on helicopters.

Section 3 - Specific requirements for the type rating instructor — TRI

FCL.905.TRI TRI — Privileges and conditions

(a) The privileges of a TRI are to instruct for:

(1) the revalidation and renewal of an IR, provided the TRI holds a valid IR;

(2) the issue of a TRI or SFI certificate, provided that the holder meets all of the following conditions:

(i) has at least 50 hours of instructional experience as a TRI or SFI in accordance with this Regulation or Regulation (EU) No 965/2012;

(ii) has conducted the flight instruction syllabus of the relevant part of the TRI training course in accordance with point FCL.930.TRI(a)(3) to the satisfaction of the head of training of an ATO;

(3) in the case of the TRI for single-pilot aeroplanes:

(i) the issue, revalidation and renewal of type ratings for single-pilot high-performance complex aeroplanes provided that the applicant seeks privileges to operate in single-pilot operations. The privileges of the TRI (SPA) may be extended to flight instruction for single- pilot high-performance complex aeroplane type ratings in multi-pilot operations, provided that the TRI meets either of the following conditions:

(A) holds or has held a TRI certificate for multi-pilot aeroplanes;

(B) has at least 500 hours on aeroplanes in multi-pilot operations and completed an MCCI training course in accordance with point FCL.930.MCCI;

(ii) the MPL course on the basic phase, provided that he or she has the privileges extended to multi-pilot operations and holds or has held an FI(A) or an IRI(A) certificate;

(4) in the case of the TRI for multi-pilot aeroplanes:

(i) the issue, revalidation and renewal of type ratings for:

(A) multi-pilot aeroplanes;

(B) single-pilot high-performance complex aeroplanes when the applicant seeks privileges to operate in multi-pilot operations;

(ii) MCC training;

(iii) the MPL course on the basic, intermediate and advanced phases, provided that, for the basic phase, he or she holds or has held an FI(A) or IRI(A) certificate;

(5) in the case of the TRI for helicopters:

(i) the issue, revalidation and renewal of helicopter type ratings;

~~(ii) MCC training, provided that he or she holds a multi- pilot helicopter type rating~~;

(ii) MCC training, provided that the individual has completed 350 hours of flight time as a pilot in multi-pilot operations in any aircraft category

~~(iii) the extension of the single-engine IR(H) to multi-engine IR(H);~~

(6) in the case of the TRI for powered-lift aircraft:

(i) the issue, revalidation and renewal of powered-lift type ratings;

(ii) MCC training.

(b) The privileges of a TRI include privileges to conduct EBT practical assessment at an EBT operator, provided that the instructor complies with the requirements of Annex III (Part-ORO) to Regulation (EU) No 965/2012 for EBT instructor standardisation at that EBT operator.

Editor's note: The transposition of the retained EU Regulation in FCL.905.TRI TRI (a)(2) contains an error/typographic error with the word 'either'. The correct word 'all' has been used above due to the significant difference that this has on the overall meaning of (a)(2); the legal text will be corrected in due course.

FCL.910.TRI TRI — Restricted privileges

(a) General. If the TRI training is carried out in FSTDs only, the privileges of TRIs shall be restricted to training in FSTDs. This restriction shall however include the following privileges for conducting, in the aircraft:

(1) LIFUS, provided that the TRI training course has included the training specified in point FCL.930.TRI(a)(4)(i);

(2) landing training, provided that the TRI training course has included the training specified in point FCL.930.TRI(a)(4)(ii); or

(3) the training flight specified in point FCL.060(c)(2), provided that the TRI training course has included the training referred to in points (a)(1) or (a)(2).

The restriction to FSTD shall be removed if TRIs have completed an assessment of competence in the aircraft.

(b) TRIs for aeroplanes and for powered-lift aircraft — TRI(A) and TRI(PL). The privileges of TRIs are restricted to the type of aeroplane or powered-lift aircraft in which the training and the assessment of competence were conducted. Unless otherwise determined in the OSD, to extend the privileges of TRIs to further types, TRIs shall have:

(1) completed within the 12 months preceding the application, at least 15 route sectors, including take-offs and landings on the applicable aircraft type, of which of maximum of 7 sectors may be completed in an FSTD;

(2) completed the relevant parts of the technical training and the flight instruction parts of the applicable TRI course;

(3) passed the relevant sections of the assessment of competence in accordance with point FCL.935 in order to demonstrate to an FIE or a TRE qualified in accordance with Subpart K to this Annex their ability to instruct a pilot to the level required for the issue of a type rating, including pre-flight, post-flight and theoretical knowledge instruction.

The privileges of TRIs shall be extended to further variants in accordance with the OSD if TRIs have completed the relevant parts of the technical training and flight instruction parts of the applicable TRI course.

(c) TRIs for helicopters — TRI(H).

(1) The privileges of TRIs(H) are restricted to the type of helicopter in which the assessment of competence for the issue of the TRI certificate was taken. Unless otherwise determined in the OSD, the privileges of the TRIs shall be extended to further types if TRIs have:

(i) completed the relevant parts of the technical training and flight instruction parts of the TRI course;

(ii) completed within the 12 months preceding the date of application, at least 10 hours on the applicable helicopter type, of which a maximum of 5 hours may be completed in an FFS or FTD 2/3; and

(iii) passed the relevant sections of the assessment of competence in accordance with point FCL.935 in order to demonstrate to an FIE or a TRE qualified in accordance with Subpart K of this Annex their ability to instruct a pilot to the level required for the issue of a type rating, including pre-flight, post-flight and theoretical knowledge instruction.

The privileges of TRIs shall be extended to further variants in accordance with the OSD if TRIs have competed the relevant parts of the technical training and flight instruction parts of the applicable TRI course.

~~(2) Before the privileges of a TRI(H) are extended from single-pilot to multi-pilot privileges on the same type of helicopters, the holder shall have completed at least 100 hours of multi-pilot operations on this type~~.

(2) In order to extend the privileges of a TRI(H) to multi-pilot operations in the same type of single-pilot helicopters, the holder shall have at least 350 hours of flight time as a pilot in multi-pilot operations in any aircraft category or have at least 100 hours of flight time as a pilot in multi-pilot operations on the specific type within the last 2 years.

(d) Notwithstanding the points above, holders of a TRI certificate who received a type rating in accordance with point FCL.725(e) shall be entitled to have their TRI privileges extended to that new type of aircraft.

(3) Before the privileges of a TRI(H) are extended from single-pilot helicopters to multi-pilot helicopters, the holder shall comply with point FCL.915.TRI(d)(3).

FCL.915.TRI TRI — Prerequisites

An applicant for a TRI certificate shall:

(a) hold a CPL, MPL or ATPL pilot licence on the applicable aircraft category;

(b) for a TRI(MPA) certificate:

(1) have completed 1500 hours flight time as a pilot on multi-pilot aeroplanes; and

(2) have completed, within the 12 months preceding the date of application, 30 route sectors, including take-offs and landings, as PIC or co-pilot on the applicable aeroplane type, of which 15 sectors may be completed in an FFS representing that type;

(c) for a TRI(SPA) certificate:

(1) have completed, within the 12 months preceding the date of the application, at least 30 route sectors, including take-offs and landings, as PIC on the applicable aeroplane type, of which a maximum of 15 sectors may be completed in an FSTD representing that type; and

(2)

(i) have competed at least 500 hours flight time as pilot on aeroplanes, including 30 hours as PIC on the applicable type of aeroplane; or

(ii) hold or have held an FI certificate for multi-engine aeroplanes with IR(A) privileges;

~~(d) for TRI(H):~~

~~(1) for a TRI(H) certificate for single-pilot single-engine helicopters, have completed 250 hours as a pilot on helicopters;~~

~~(2) for a TRI(H) certificate for single-pilot multi-engine helicopters, have completed 500 hours as pilot of helicopters, including 100 hours as PIC on single-pilot multi-engine helicopters;~~

~~(3) for a TRI(H) certificate for multi-pilot helicopters, have completed 1000 hours of flight time as a pilot on helicopters, including:~~

~~(i) 350 hours as a pilot on multi-pilot helicopters; or~~

~~(ii) for applicants already holding a TRI(H) certificate for single-pilot multi-engine helicopters, 100 hours as pilot of that type in multi-pilot operations~~.

(d) for TRI(H):

(1) for a TRI(H) certificate for single-pilot single-engine helicopters, either:

(i) have completed 250 hours as a pilot on helicopters; or

(ii) hold an FI(H) certificate.

(2) for a TRI(H) certificate for single-pilot multi-engine helicopters, either:

(i) have completed 500 hours as pilot of helicopters, including 100 hours as PIC in single-pilot multi-engine helicopters; or

(ii) hold an FI(H) certificate and have completed 100 hours of flight time as a pilot in multi-engine helicopters.

(3) for a TRI(H) certificate for multi-pilot helicopters, have completed 1 000 hours of flight time as a pilot on helicopters, and have either 350 hours in multi-pilot operations on any aircraft category or 100 hours of flight time as a pilot in multi-pilot operations on the type for which the TRI(H) certificate is sought

(4) Holders of an FI(H) certificate shall be fully credited towards the requirements of (1) and (2) in the relevant single-pilot helicopter;

(e) for TRI(PL):

(1) have completed 1500 hours flight time as a pilot on multi-pilot aeroplanes, powered-lift, or multi-pilot helicopters; and

(2) have completed, within the 12 months preceding the application, 30 route sectors, including take-offs and landings, as PIC or co-pilot on the applicable powered-lift type, of which 15 sectors may be completed in an FFS representing that type.

Section 5 - Specific requirements for the instrument rating instructor — IRI

FCL.915.IRI IRI — Prerequisites

Applicants for an IRI certificate shall:

(a) in case of an IRI(A):

(1) to provide training in FSTDs during an approved training course at an ATO, have completed at least 200 hours of flight time under IFR after the issuance of the BIR or the IR, of which at least 50 hours shall be in aeroplanes;

(2) to provide training in an aeroplane, have completed at least 800 hours of flight time under IFR, of which at least 400 hours shall be in aeroplanes;

(3) to apply for an IRI(A) for multi-engine aeroplanes, meet the requirements of points FCL.915.CRI(a), FCL.930.CRI and FCL.935;

(b) for an IRI(H):

(1) to provide training in FSTDs during an approved training course at an ATO, have completed at least 125 hours of flight time under IFR after the issuance of the IR, of which at least 65 hours shall be instrument flight time in helicopters;

(2) to provide training in a helicopter, have completed at least 500 hours of flight time under IFR, of which at least 250 hours shall be instrument flight time in helicopters; and

~~(3) to apply for an IR(H) for multi-engine helicopters, meet the requirements of point FCL.905.FI(h)(2);~~

(3) when seeking privileges to provide training in multi-engine helicopters, meet the requirements of points FCL.910.TRI(c)(1) and FCL.915.TRI(d)(2);

(c) Applicants for an IRI(As) certificate shall have completed at least 300 hours of flight time under IFR, of which at least 100 hours shall be instrument flight time in airships.

Section 6 - Specific requirements for the synthetic flight instructor — SFI

FCL.905.SFI SFI — Privileges and conditions

(a) The privileges of SFIs are to carry out synthetic flight instruction, within the relevant aircraft category, for:

(1) the revalidation and renewal of an IR, provided that they hold or have held an IR in the relevant aircraft category;

(2) the issue of an IR, provided that they hold or have held an IR in the relevant aircraft category and have completed an IRI training course.

(b) The privileges of SFIs for single-pilot aeroplanes are to carry out synthetic flight instruction for:

(1) the issue, revalidation and renewal of type ratings for single-pilot high performance complex aeroplanes, if applicants seek privileges to operate in single-pilot operations. The privileges of SFIs for single-pilot aeroplanes may be extended to flight instruction for single-pilot high performance complex aeroplanes type ratings in multi-pilot operations, provided that they meet any of the following conditions:

(i) hold or have held a TRI certificate for multi-pilot aeroplanes;

(ii) have at least 500 hours on aeroplanes in multi-pilot operations and have completed an MCCI training course in accordance with point FCL.930.MCCI;

(2) the MCC and the MPL training courses on the basic phase, provided that the privileges of SFIs(SPA) have been extended to multi-pilot operations in accordance with point (1).

(c) The privileges of SFIs for multi-pilot aeroplanes are to carry out synthetic flight instruction for:

(1) the issue, revalidation and renewal of type ratings for multi-pilot aeroplanes and if applicants seek privileges to operate in multi-pilot operations, for single-pilot high-performance complex aeroplanes;

(2) the MCC training course;

(3) the MPL course on the basic, intermediate and advanced phases, provided that, for the basic phase, they hold or have held an FI(A) or an IRI(A) certificate;

(d) The privileges of SFIs for helicopters are to carry out synthetic flight instruction for:

(1) the issue, revalidation and renewal of helicopter type ratings;

~~(2) MCC training, if SFIs have privileges to instruct for multi-pilot helicopters~~.

(2) MCC training, provided that they have at least 350 hours as a pilot in multi-pilot operations in any aircraft category

(e) The privileges of an SFI include privileges to conduct EBT practical assessment at an EBT operator, provided that the instructor complies with the requirements of Annex III (Part-

ORO) to Regulation (EU) No 965/2012 for EBT instructor standardisation at that EBT operator.

FCL.915.SFI SFI — Prerequisites

An applicant for an SFI certificate shall:

(a) hold or have held a CPL, MPL or ATPL in the appropriate aircraft category;

(b) have completed the proficiency check for the issue of the specific aircraft type rating in an FFS representing the applicable type, within the 12 months preceding the application; and

(c) additionally, for an SFI(A) for multi-pilot aeroplanes or SFI(PL), have:

(1) at least 1500 hours flight time as a pilot on multi-pilot aeroplanes or powered-lift, as applicable;

(2) completed, as a pilot or as an observer, within the 12 months preceding the application, at least:

(i) 3 route sectors on the flight deck of the applicable aircraft type; or

(ii) 2 line-orientated flight training-based simulator sessions conducted by qualified flight crew on the flight deck of the applicable type. These simulator sessions shall include 2 flights of at least 2 hours each between 2 different aerodromes, and the associated pre-flight planning and de-briefing;

(d) additionally, for an SFI(A) for single-pilot high performance complex aeroplanes:

(1) have completed at least 500 hours of flight time as PIC on single-pilot aeroplanes;

(2) hold or have held a multi-engine IR(A) rating; and

(3) have met the requirements in (c)(2);

(e) additionally, for an SFI(H), have:

(1) completed, as a pilot or as an observer, at least 1 hour of flight time on the flight deck of the applicable type, within the 12 months preceding the application; and

~~(2) in the case of multi-pilot helicopters, at least 1000 hours of flying experience as a pilot on helicopters, including at least 350 hours as a pilot on multi-pilot helicopters~~;

(2) in the case of multi-pilot helicopters, at least 1 000 hours of flying experience as a pilot in helicopters, including at least 350 hours in multi-pilot operations in any aircraft category;

(3) in the case of single-pilot multi-engine helicopters, completed 500 hours as pilot of helicopters, including 100 hours as PIC on single-pilot multi-engine helicopters;

~~(4) in the case of single-pilot single-engine helicopters, completed 250 hours as a pilot on helicopters.~~

(4) in the case of single-pilot single-engine helicopters, completed 250 hours as a pilot on helicopters

(5) in the case of single-pilot helicopters in multi-pilot operations, completed at least 350 hours in multi-pilot operations in any aircraft category

Section 7 - Specific requirements for the multi-crew cooperation instructor — MCCI

FCL.915.MCCI MCCI — Prerequisites

An applicant for an MCCI certificate shall:

(a) hold or have held a CPL, MPL or ATPL in the appropriate aircraft category;

~~(b) have at least:~~

~~(1) in the case of aeroplanes, airships and powered-lift aircraft, 1500 hours of flying experience as a pilot in multi-pilot operations;~~

~~(2) in the case of helicopters, 1000 hours of flying experience as a pilot in multi-crew operations, of which at least 350 hours in multi-pilot helicopters.~~

(b) have at least:

(1) in the case of aeroplanes, airships and powered-lift aircraft, 1 500 hours of flying experience as a pilot in multi-pilot operations, of which at least 350 hours in the appropriate aircraft category;

(2) in the case of helicopters, 1 000 hours of flying experience as a pilot in multi-pilot operations, of which at least 350 hours in helicopters.

Subpart K - EXAMINERS

Section 3 - Specific requirements for type rating examiners — TRE

FCL.1005.TRE TRE — Privileges and conditions

(a) TRE(A) and TRE(PL). The privileges of a TRE for aeroplanes or powered-lift aircraft are to conduct:

(1) skill tests for the initial issue of type ratings for aeroplanes or powered-lift aircraft, as applicable;

(2) proficiency checks for revalidation or renewal of type ratings, EIRs and IRs;

(3) skill tests for ATPL(A) issue;

(4) skill tests for MPL issue, provided that the examiner has complied with the requirements in FCL.925;

(5) assessments of competence for the issue, revalidation or renewal of a TRI or SFI certificates in the applicable aircraft category, provided that they have completed at least 3 years as a TRE and have undergone specific training for the assessment of competence in accordance with point FCL.1015 (b).

(b) TRE(H). The privileges of a TRE(H) are to conduct:

(1) skill tests and proficiency checks for the issue, revalidation or renewal of helicopter type ratings;

~~(2) proficiency checks for the revalidation or renewal of IRs, or for the extension of the IR(H) from single-engine helicopters to multi-engine helicopters, provided the TRE(H) holds a valid IR(H);~~

(2) proficiency checks for the revalidation or renewal of IRs, provided the TRE(H) holds a valid IR(H)

(3) skill tests for ATPL(H) issue;

(4) assessments of competence for the issue, revalidation or renewal of a TRI(H) or SFI(H) certificates, provided that they have completed at least 3 years as a TRE and have undergone specific training for the assessment of competence in accordance with point FCL.1015 (b).

FCL.1010.TRE TRE — Prerequisites

(a) TRE(A) and TRE(PL). Applicants for a TRE certificate for aeroplanes and powered-lift aircraft shall:

(1) in the case of multi-pilot aeroplanes or powered-lift aircraft, have completed 1500 hours of flight time as a pilot of multi-pilot aeroplanes or powered-lift aircraft, as applicable, of which at least 500 hours shall be as PIC;

(2) in the case of single-pilot high performance complex aeroplanes, have completed 500 hours of flight time as a pilot of single-pilot aeroplanes, of which at least 200 hours shall be as PIC;

(3) hold a CPL or ATPL and a TRI certificate for the applicable type;

(4) for the initial issue of an TRE certificate, have completed at least 50 hours of flight instruction as a TRI, FI or SFI in the applicable type or an FSTD representing that type.

(b) TRE(H). Applicants for a TRE (H) certificate for helicopters shall:

(1) hold a TRI(H) certificate or, in the case of single-pilot single-engine helicopters, a valid FI(H) certificate, for the applicable type;

(2) for the initial issue of a TRE certificate, have completed 50 hours of flight instruction as a TRI, FI or SFI in the applicable type or an FSTD representing that type;

(3) in the case of multi-pilot helicopters, hold a CPL(H) or ATPL(H) and have completed 1500 hours of flight as a pilot on multi-pilot helicopters, of which at least 500 hours shall be as PIC;

(4) in the case of single-pilot multi-engine helicopters:

(i) have completed 1000 hours of flight as pilot on helicopters, of which at least 500 hours shall be as PIC;

(ii) hold a CPL(H) or ATPL(H) and, when applicable, a valid IR(H);

(5) in the case of single-pilot single-engine helicopters:

(i) have completed 750 hours of flight as a pilot on helicopters, of which at least 500 hours shall be as PIC;

(ii) hold a CPL(H) or ATPL(H).

~~(6) Before the privileges of a TRE(H) are extended from single-pilot multi-engine to multi-pilot multi-engine privileges on the same type of helicopter, the holder shall have at least 100 hours in multi-pilot operations on this type~~.

(6) Before the privileges of a TRE(H) are extended from single-pilot operations to multi-pilot operations on the same type of helicopter, the holder shall have either:

(i) at least 100 hours in multi-pilot operations on this type; or

(ii) at least 350 hours in multi-pilot operations in any aircraft category

(7) In the case of applicants for the first multi-pilot multi-engine TRE certificate, the 1500 hours of flight experience on multi-pilot helicopters required in (b)(3) may be considered to have been met if they have completed the 500 hours of flight time as PIC on a multi-pilot helicopter of the same type.

Section 6 - Specific requirements for Synthetic Flight Examiner — SFE

FCL.1010.SFE SFE — Prerequisites

(a) SFE(A)

Applicants for an SFE(A) certificate shall comply with all of the following conditions:

(1) in the case of multi-pilot aeroplanes:

(i) hold or have held an ATPL(A) and a type rating;

(ii) hold an SFI(A) certificate for the applicable type of aeroplane; and

(iii) have at least 1500 hours of flight time as pilots of multi-pilot aeroplanes;

(2) in the case of single-pilot high-performance complex aeroplanes:

(i) hold or have held a CPL(A) or an ATPL(A) and a type rating;

(ii) hold an SFI(A) certificate for the applicable class or type of aeroplane; and

(iii) have at least 500 hours of flight time as pilots of single-pilot aeroplanes.

(3) for the initial issue of an SFE certificate, have completed at least 50 hours of synthetic flight instruction as a TRI(A) or an SFI(A) on the applicable type.

(b) SFE(H)

Applicants for an SFE(H) certificate shall comply with all of the following conditions:

(1) hold or have held an ATPL(H), and a type rating for the applicable type of helicopter;

(2) hold an SFI(H) certificate for the applicable type of helicopter;

~~(3) have at least 1000 hours of flight time as pilots of multi-pilot helicopters;~~

~~(4) for the initial issue of an SFE certificate, have completed at least 50 hours of synthetic flight instruction as a TRI(H) or an SFI(H) on the applicable type.~~

(3) in the case of multi-pilot helicopters, have at least 1 000 hours of flight time as pilots of multi-pilot helicopters;

(4) in the case of single-pilot helicopters in multi-pilot operations, have completed at least 350 hours in multi-pilot operations in any aircraft category

(5) for the initial issue of an SFE certificate, have completed at least 50 hours of synthetic flight instruction as a TRI(H) or an SFI(H) on the applicable type

Section 7 - Specific requirements for the flight instructor examiner — FIE

FCL.1005.FIE FIE — Privileges and conditions

(a) FIE(A). The privileges of an FIE on aeroplanes are to conduct assessments of competence for the issue, revalidation or renewal of certificates for FI(A), CRI(A), IRI(A) and TRI(A) on single-pilot aeroplanes, provided that the relevant instructor certificate is held.

(b) FIE(H). The privileges of an FIE on helicopters are to conduct assessments of competence for the issue, revalidation or renewal of certificates for FI(H), IRI(H) and TRI(H) on single-pilot helicopters, provided that the relevant instructor certificate is held.

(c) FIE(As). The privileges of an FIE on airships are to conduct assessments of competence for the issue, revalidation or renewal of instructor certificates of airships, provided that the relevant instructor certificate is held.

FCL.1010.FIE FIE — Prerequisites

(a) FIE(A). Applicants for an FIE certificate for aeroplanes shall:

in case of applicants wishing to conduct assessments of competence:

(1) hold the relevant instructor certificate, as applicable;

(2) have completed 2000 hours of flight time as a pilot on aeroplanes or TMGs; and

(3) have at least 100 hours of flight time instructing applicants for an instructor certificate.

(b) FIE(H). Applicants for an FIE certificate for helicopters shall:

(1) hold the relevant instructor certificate, as applicable;

(2) have completed 2000 hours of flight time as pilot on helicopters;

(3) have at least 100 hours of flight time instructing applicants for an instructor certificate.

(c) FIE(As). Applicants for an FIE certificate for airships shall:

(1) have completed 500 hours of flight time as a pilot on airships;

(2) have at least 20 hours of flight time instructing applicants for an FI(AS) certificate;

(3) hold the relevant instructor certificate.

(d) Provision repealed before document was retained.

(e) Provision repealed before document was retained.

Appendices to Annex I

Appendix 3 — Training courses for the issue of a CPL and an ATPL

1. This Appendix describes the requirements for the different types of training courses for the issue of a CPL and an ATPL, with and without an IR.

2. An applicant wishing to transfer to another ATO during a training course shall apply to the CAA for a formal assessment of the further hours of training required.

…

I CPL/IR integrated course — Helicopters

GENERAL

1. The aim of the CPL(H)/IR integrated course is to train pilots to the level of proficiency necessary to operate single-pilot multi-engine helicopters and to obtain the CPL(H)/IR multi-engine helicopter.

2. An applicant wishing to undertake a CPL(H)/IR integrated course shall complete all the instructional stages in one continuous course of training as arranged by an ATO.

3. An applicant may be admitted to training either as an ab-initio entrant, or as a holder of a PPL(H) issued in accordance with Annex 1 to the Chicago Convention. In the case of an entrant holding a PPL(H), 50 % of the relevant experience shall be credited, up to a maximum of:

(a) 40 hours, of which up to 20 hours may be dual instruction; or

(b) 50 hours, of which up to 25 hours may be dual instruction, if a helicopter night rating has been obtained.

4. The course shall comprise:

(a) theoretical knowledge instruction to CPL(H) and IR knowledge level, and the initial multi-engine helicopter type rating; and

(b) visual and instrument flying training.

5. An applicant failing or unable to complete the entire CPL(H)/IR course may apply to the CAA for the theoretical knowledge examination and skill test for a licence with lower privileges and an IR, if the applicable requirements are met.

THEORETICAL KNOWLEDGE

6. A CPL(H)/IR theoretical knowledge course shall comprise at least 500 hours of instruction.

THEORETICAL KNOWLEDGE EXAMINATION

7. An applicant shall demonstrate a level of knowledge appropriate to the privileges granted to the holder of a CPL(H) and an IR.

FLYING TRAINING

8. The flying training shall comprise a total of at least 180 hours including all progress tests. Within the 180 hours, applicants shall complete at least:

(a) 125 hours of dual instruction, of which:

(i) 75 hours visual instruction, which may include:

(1) 30 hours in a helicopter FFS level C/D; or

(2) 25 hours in a helicopter FTD 2,3; or

(3) 20 hours in a helicopter FNPT II/III; or

(4) 20 hours in an aeroplane or TMG;

(ii) 50 hours instrument instruction which may include:

(1) up to 20 hours in a helicopter FFS or FTD 2,3, or FNPT II, III; or

(2) 10 hours in at least a helicopter FNPT I or an aeroplane.

If the helicopter used for the flying training is of a different type from the FFS used for the visual training, the maximum credit shall be limited to that allocated for the FNPT II/III;

(b) 55 hours as PIC, of which 40 hours may be as SPIC. At least 14 hours solo day and 1 hour solo night shall be made;

(c) 10 hours dual cross-country flying;

(d) 10 hours of cross-country flight as PIC, including a VFR cross-country flight of at least 185 km (100 NM) in the course of which full stop landings at two different aerodromes from the aerodrome of departure shall be made;

(e) 5 hours of flight time in helicopters shall be completed at night comprising 3 hours of dual instruction including at least 1 hour of cross-country navigation and 5 solo night circuits. Each circuit shall include a take-off and a landing;

(f) 50 hours of dual instrument time comprising:

(i) 10 hours basic instrument instruction time; and

(ii) 40 hours IR Training, which shall include at least 10 hours in a multi-engine IFR-certificated helicopter.

SKILL TEST

~~9. Upon completion of the related flying training, the applicant shall take the CPL(H) skill test on either a multi-engine or a single-engine helicopter and the IR skill test on an IFR-certificated multi-engine helicopter~~.

9. Upon completion of the related flying training, the applicant shall take the CPL(H) skill test on either a multi-engine or a single-engine helicopter and the IR skill test on an IFR-certificated helicopter.

Appendix 6 — Modular training courses for the IR

B IR(H) — Modular flying training course

1. The aim of the IR(H) modular flying training course is to train pilots to the level of proficiency necessary to operate helicopters under IFR and in IMC.

2. An applicant for a modular IR(H) course shall be the holder of a PPL(H), or a CPL(H) or an ATPL(H). Prior to commencing the aircraft instruction phase of the IR(H) course, the applicant shall be the holder of the helicopter type rating used for the IR(H) skill test, or have completed approved type rating training on that type. The applicant shall hold a certificate of satisfactory completion of MCC if the skill test is to be conducted in Multi- Pilot conditions.

3. An applicant wishing to undertake a modular IR(H) course shall be required to complete all the instructional stages in one continuous approved course of training.

4. The course of theoretical instruction shall be completed within 18 months. The flight instruction and the skill test shall be completed within the period of validity of the pass in the theoretical examinations.

5. The course shall comprise:

(a) theoretical knowledge instruction to the IR knowledge level;

(b) instrument flight instruction.

THEORETICAL KNOWLEDGE

6. An approved modular IR(H) course shall comprise at least 150 hours of instruction.

FLYING TRAINING

~~7. A single-engine IR(H) course shall comprise at least 50 hours instrument time under instruction, of which:~~

~~(a) up to 20 hours may be instrument ground time in an FNPT I(H) or (A). These 20 hours instruction time in FNPT I (H) or (A) may be substituted by 20 hours instruction time for IR(H) in an aeroplane, approved for this course; or~~

~~(b) up to 35 hours may be instrument ground time in a helicopter FTD 2/3, FNPT II/III or FFS.~~

~~The instrument flight instruction shall include at least 10 hours in an IFR-certificated helicopter.~~

7. An IR(H) course shall comprise at least 55 hours instrument time under instruction, of which:

(a) up to 20 hours may be instrument ground time in an FNPT I (H) or (A). These 20 hours instruction time in FNPT I (H) or (A) may be substituted by 20 hours instruction time for IR(H) in an aeroplane, approved for this course; or

(b) up to 40 hours may be instrument ground time in a helicopter FTD 2/3, FNPT II/III or FFS.

The instrument flight instruction shall include at least 10 hours in an IFR-certificated helicopter.

~~8. A multi-engine IR(H) course shall comprise at least 55 hours instrument time under instruction of which;~~

~~(a) up to 20 hours may be instrument ground time in an FNPT I (H) or (A). These 20 hours instruction time in FNPT I (H) or (A) may be substituted by 20 hours instruction time for IR(H) in an aeroplane, approved for this course; or~~

~~(b) up to 40 hours may be instrument ground time in a helicopter FTD 2/3, FNPT II/III or FFS.~~

~~The instrument flight instruction shall include at least 10 hours in an IFR-certificated multi-engine helicopter~~.

~~9.1~~. 8.1 Holders of an ATPL(H) shall have the theoretical knowledge instruction hours reduced by 50 hours.

~~9.2~~.8.2 The holder of an IR(A) may have the amount of training required reduced to 10 hours.

~~9.3~~.8.3 The holder of a PPL(H) with a helicopter night rating or a CPL(H) may have the total amount of instrument time under instruction required reduced by 5 hours.

~~10~~.9. The flying exercises up to the IR(H) skill test shall comprise:

(a) pre-flight procedures for IFR flights, including the use of the flight manual and appropriate air traffic services documents in the preparation of an IFR flight plan;

~~(b) procedure and manoeuvres for IFR operation under normal, abnormal and emergency conditions covering at least:~~

~~transition from visual to instrument flight on takeoff,~~

~~standard instrument departures and arrivals,~~

~~en-route IFR procedures,~~

~~holding procedures,~~

~~instrument approaches to specified minima,~~

~~missed approach procedures,~~

~~landings from instrument approaches, including circling~~;

(b) procedure and manoeuvres for IFR operation under normal, abnormal and emergency conditions covering at least:

— transition from visual to instrument flight on take-off,

— standard instrument departures and arrivals,

— en-route IFR procedures,

— holding procedures,

— instrument approaches to specified minima,

— missed approach procedures,

— landings from instrument approaches, including circling.

(c) in-flight manoeuvres and particular flight characteristics;

(d) if required, operation of a multi-engine helicopter in the above exercises, including operation of the helicopter solely by reference to instruments with one engine simulated inoperative and engine shutdown and restart (the latter exercise to be carried out in an FFS or FNPT II or FTD 2/3).

Appendix 8 — Cross-crediting of the IR part of a class or type rating proficiency check

…

B Helicopters

~~Credits shall be granted only if holders are revalidating IR privileges for single-engine and single-pilot multi-engine helicopters as appropriate~~. ‘B. Helicopters

Credits shall be granted only if holders are revalidating or renewing IR privileges for single-pilot helicopters, as appropriate.

If a skill test or a proficiency check, including IR, is performed and the holders have a valid:	Credit is valid towards the IR part in a proficiency check for:
Multi-pilot helicopter (MPH) type rating	Single-pilot helicopter (SPH) of the same type, including privileges for single-pilot operations (*)
Single-pilot helicopter (SPH) type rating, in multi-pilot operations	Privileges for single-pilot operations in the same type (*)

* Provided that within the preceding 12 months at least three IFR departures and approaches exercising PBN privileges, including one RNP APCH approach (which may be a Point in Space (PinS) approach), have been performed on a SP type of helicopter in SP operations.

~~**If a skill test or a proficiency check, including IR, is performed and the holders have a valid:**~~	~~**Credit is valid towards the IR part in aproficiency check for:**~~
~~Multi-pilot helicopter (MPH) type rating~~	~~SE type rating (*); andSP ME type rating (*).~~
~~SP ME type rating, operated as single-pilot~~	~~SE type rating (*); andSP ME type rating (*).~~
~~SP ME type rating, restricted to multi-pilot operation~~	~~SE type rating (*); andSP ME type rating (*).~~
~~SP SE type rating, operated as single-pilot~~	~~SP SE type rating, operated as single -pilot~~

~~* Provided that within the preceding 12 months at least three IFR departures and approaches exercising PBN privileges, including one RNP APCH approach (could be a~~

~~Point in Space (PinS) approach), have been performed on a SP type of helicopter in SP operations~~.

Appendix 9 — Training, skill test and proficiency check for MPL, ATPL, type and class ratings, and proficiency check for IRs

A. General

1. Applicants for a skill test shall have received instruction in the same class or type of aircraft to be used in the test.

The training for MPA and PL type ratings shall be conducted in an FFS or in a combination of FSTD(s) and FFS. The skill test or proficiency check for MPA and PL type ratings and the issue of an ATPL and an MPL, shall be conducted in an FFS, if available.

The training, skill test or proficiency check for class or type ratings for SPA and helicopters shall be conducted in:

(a) an available and accessible FFS, or

(b) a combination of FSTD(s) and the aircraft if an FFS is not available or accessible; or

(c) the aircraft if no FSTD is available or accessible.

If FSTDs are used during training, testing or checking, the suitability of the FSTDs used shall be verified against the applicable 'Table of functions and subjective tests' and the applicable 'Table of FSTD validation tests' contained in the primary reference document applicable for the device used. All restrictions and limitations indicated on the device's qualification certificate shall be considered.

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

3. There is no limit to the number of skill tests that may be attempted.

CONTENT OF THE TRAINING/SKILL TEST/PROFICIENCY CHECK

4. Unless otherwise determined in the operational suitability data established in accordance with Annex I (Part-21) to Regulation (EU) No 748/2012 (OSD), the syllabus of flight instruction, the skill test and the proficiency check shall comply with this Appendix. The syllabus, skill test and proficiency check may be reduced to give credit for previous experience on similar aircraft types, as determined in the OSD.

5. Except in the case of skill tests for the issue of an ATPL, when so defined in the OSD for the specific aircraft, credit may be given for skill test items common to other types or variants where the pilots are qualified.

CONDUCT OF THE TEST/CHECK

6. The examiner may choose between different skill test or proficiency check scenarios containing simulated relevant operations. Full-flight simulators and other training devices shall be used, as established in this Annex (Part-FCL).

7. During the proficiency check, the examiner shall verify that holders of the class or type rating maintain an adequate level of theoretical knowledge.

8. Should applicants choose to terminate a skill test for reasons considered inadequate by the examiner, they 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.

9. At the discretion of the examiner, any manoeuvre or procedure of the test may be repeated once by the applicants. The examiner may stop the test at any stage if it is considered that the applicants' demonstration of flying skill requires a complete retest.

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

11. During preflight preparation for the test, applicants are required to determine power settings and speeds. Applicants 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 checklist for the aircraft on which the test is being taken and, if applicable, with the MCC concept. Performance data for take-off, approach and landing shall be calculated by applicants in compliance with the operations manual or flight manual for the aircraft used. Decision heights/altitudes, minimum descent heights/altitudes and missed approach point shall be agreed upon with the examiner.

12. The examiner shall take no part in the operation of the aircraft except where intervention is necessary in the interests of safety or to avoid unacceptable delay to other traffic.

~~**SPECIFIC REQUIREMENTS FOR THE SKILL TEST/PROFICIENCY CHECK FOR MULTI-PILOT AIRCRAFT TYPE RATINGS, FOR SINGLE-PILOT AEROPLANE TYPE RATINGS WHEN OPERATED IN MULTI-PILOT OPERATIONS, FOR MPL AND ATPL**~~

~~13. The skill test for a multi-pilot aircraft or a single-pilot aeroplane when operated in multi-pilot operations shall be performed in a multi-crew environment. Another applicant or another type rated qualified pilot may function as the second pilot. If an aircraft is used, the second pilot shall be the examiner or an instructor~~.

SPECIFIC REQUIREMENTS FOR THE SKILL TEST/PROFICIENCY CHECK FOR TYPE RATINGS FOR MULTI-PILOT AIRCRAFT, FOR SINGLE-PILOT AIRCRAFT WHEN OPERATED IN MULTI-PILOT OPERATIONS, FOR MPL AND FOR ATPL

13. The skill test for a multi-pilot aircraft or a single-pilot aircraft when operated in multi-pilot operations shall be performed in a multi-crew environment. Another applicant or another type rated qualified pilot may function as the second pilot. If an aircraft is used, the second pilot shall be the examiner or an instructor.

14. Applicants shall operate as PF during all sections of the skill test, except for abnormal and emergency procedures, which may be conducted as PF or PM in accordance with MCC.

Applicants for the initial issue of a multi-pilot aircraft type rating or ATPL shall also demonstrate the ability to act as PM. Applicants may choose either the left-hand or the right-hand seat for the skill test if all items can be executed from the selected seat.

~~15. The following matters shall be specifically checked by the examiner for applicants for the ATPL or a type rating for multi-pilot aircraft or for multi-pilot operations in a single-pilot aeroplane extending to the duties of a PIC, irrespective of whether the applicants act as PF or PM:~~

15. The following matters shall be specifically checked by the examiner for applicants for the ATPL or a type rating for multi-pilot aircraft or for multi-pilot operations in a single-pilot aircraft extending to the duties of a PIC, irrespective of whether the applicants act as PF or PM:

(a) managing crew cooperation;

(b) maintaining a general survey of the aircraft operation by appropriate supervision; and

(c) setting priorities and making decisions in accordance with safety aspects and relevant rules and regulations appropriate to the operational situation, including emergencies.

16. The test or check should be accomplished under IFR, if the IR rating is included, and as far as possible be accomplished in a simulated commercial air transport environment. An essential element to be checked is the ability to plan and conduct the flight from routine briefing material.

17. When the type rating course has included less than 2 hours of flight training in the aircraft, the skill test may be conducted in an FFS and may be completed before the flight training in the aircraft.

The approved flight training shall be performed by a qualified instructor under the responsibility of:

(a) an ATO; or

(b) an organisation holding an AOC issued in accordance with Annex III (Part-ORO) to Regulation (EU) No 965/2012 and specifically approved for such training; or

(c) the instructor, in cases where no aircraft flight training for SP aircraft at an ATO or AOC holder is approved, and the aircraft flight training was approved by the [...]CAA .

A certificate of completion of the type rating course including the flight training in the aircraft shall be forwarded to the CAA before the new type rating is entered in the applicants' licence.

18. For the upset recovery training, 'stall event' means either an approach-to-stall or a stall. An FFS can be used by the ATO to either train recovery from a stall or demonstrate the type-specific characteristics of a stall, or both, provided that:

(a) the FFS has been qualified in accordance with the special evaluation requirements in CS-FSTD(A); and

(b) the ATO has successfully demonstrated to the CAA that any negative transfer of training is mitigated.

B Specific requirements for the aeroplane category

PASS MARKS

1. In the case of single-pilot aeroplanes, with the exception of single-pilot high-performance complex aeroplanes, applicants shall pass all sections of the skill test or proficiency check. Failure in any item of a section will cause applicants to fail the entire section. If they fail only one section, they shall repeat only that section. Failure in more than one section will require applicants to repeat the entire test or check. Failure in any section in the case of a retest or recheck, including those sections that have been passed on a previous attempt, will require applicants to repeat the entire test or check again. For single-pilot multi-engine aeroplanes, Section 6 of the relevant test or check, addressing asymmetric flight, shall be passed.

~~2. In the case of multi-pilot and single-pilot high-performance complex aeroplanes, applicants shall pass all sections of the skill test or proficiency check. Failure in more than five items will require applicants to take the entire test or check again. Applicants failing 5 or fewer items shall take the failed items again. Failure in any item on the retest or recheck, including those items that have been passed on a previous attempt, will require applicants to repeat the entire check or test again. Section 6 is not part of the ATPL or MPL skill test. If applicants only fail or do not take Section 6, the type rating will be issued without CAT II or CAT III privileges. To extend the type rating privileges to CAT II or CAT III, applicants shall pass the Section 6 on the appropriate type of aircraft.~~

2. In the case of multi-pilot and single-pilot high-performance complex aeroplanes, applicants shall pass all sections of the skill test or proficiency check. Failure in more than five items will require applicants to take the entire test or check again. Applicants failing five or fewer items shall take the failed items again.

Failure in any item on the retest or recheck, including those items that have been passed on a previous attempt, will require applicants to repeat the entire check or test again.

FLIGHT TEST TOLERANCE

3. Applicants shall demonstrate the 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;

(e) 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;

(f) understand and apply crew coordination and incapacitation procedures, if applicable; and

(g) communicate effectively with the other crew members, if applicable.

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

Height

Generally ± 100 ft

Starting a go-around at decision height/altitude + 50 ft/– 0 ft

Minimum descent height/MAPt/altitude + 50 ft/– 0 ft

Tracking

On radio aids ± 5°

For ‘angular’ deviations: Half-scale deflection, azimuth and glide path (e.g. LPV, ILS, MLS, GLS)

2D (LNAV) and 3D (LNAV/VNAV) ‘linear’ lateral deviations: cross-track error/deviation shall normally be limited to ± (1) / (2) of the RNP value associated with the procedure. Brief deviations from this standard up to a maximum of one time the RNP value are allowable.

3D linear vertical deviations (e.g. RNP APCH (LNAV/VNAV) using BaroVNAV):

not more than – 75 ft below the vertical profile at any time, and not more than + 75 ft above the vertical profile at or below 1000 ft above aerodrome level.

Heading

all engines operating ± 5°

with simulated engine failure ± 10°

Speed

all engines operating ± 5°

with simulated engine failure ± 10°

CONTENT OF THE TRAINING/SKILL TEST/PROFICIENCY CHECK

5. Single-pilot aeroplanes, except for high-performance complex aeroplanes

(a) The following symbols mean:

P = Trained as PIC or co-pilot and as PF and PM

OTD = Other training devices may be used for this exercise

X = An FFS shall be used for this exercise; otherwise, an aeroplane shall be used if appropriate for the manoeuvre or procedure

P# = The training shall be complemented by supervised aeroplane inspection

(b) The practical training shall be conducted at least at the training equipment level shown as (P), or may be conducted on any higher level of equipment shown by the arrow (----->). The following abbreviations are used to indicate the training equipment used:

A = aeroplane

FFS = full-flight simulator

FSTD = flight simulation training device

(c) The starred (*) items of Section 3B and, for multi-engine, Section 6, shall be flown solely by reference to instruments if revalidation/renewal of an IR is included in the skill test or proficiency check. If the starred (*) items are not flown solely by reference to instruments during the skill test or proficiency check, and when there is no crediting of IR privileges, the class or type rating will be restricted to VFR only.

(d) Section 3A shall be completed to revalidate a type or multi-engine class rating, VFR only, where the required experience of 10 route sectors within the previous 12 months has not been completed. Section 3A is not required if Section 3B is completed.

(e) Where the letter 'M' appears in the skill test or proficiency check column, this will indicate a mandatory exercise or a choice where more than one exercise appears.

(f) An FSTD shall be used for practical training for type or ME class ratings if they form part of an approved class or type rating course. The following considerations will apply to the approval of the course:

(i) the qualification of the FSTD as set out in the relevant requirements of Annex VI (Part-ARA) and Annex VII (Part-ORA);

(ii) the qualifications of the instructors;

(iii) the amount of FSTD training provided on the course; and

(iv) the qualifications and previous experience on similar types of the pilots under training.

(g) If privileges for multi-pilot operation are sought for the first time, pilots holding privileges for single-pilot operations shall:

(1) complete a bridge course containing manoeuvres and procedures including MCC as well as the exercises of Section 7 using tthreat and error management (TEM), CRM and human factors at an ATO; and

(2) pass a proficiency check in multi-pilot operations.

(h) If privileges for single-pilot operations are sought for the first time, pilots holding privileges for multi-pilot operations shall be trained at an ATO and checked for the following additional manoeuvres and procedures in single-pilot operations:

(1) for SE aeroplanes, 1.6, 4.5, 4.6, 5.2 and, if applicable, one approach from Section 3.B;and

(2) for ME aeroplanes, 1.6, Section 6 and, if applicable, one approach from Section 3.B.

(i) Pilots holding privileges for both single-pilot and multi-pilot operations in accordance with points (g) and (h) may revalidate privileges for both types of operations by completing a proficiency check in multi-pilot operations in addition to the exercises referred to in points (h)(1) or (h)(2), as applicable, in single-pilot operations.

(j) If a skill test or a proficiency check is completed in multi-pilot operations only, the type rating shall be restricted to multi-pilot operations. The restriction shall be removed when pilots comply with point (h).

(k) The training, testing and checking shall follow the table mentioned below.

(1) Training at an ATO, testing and checking requirements for single-pilot privileges

(2) Training at an ATO, testing and checking requirements for multi-pilot privileges

(3) Training at an ATO, testing and checking requirements for pilots holding single-pilot privileges seeking multi-pilot privileges for the first time (bridge course)

(4) Training at an ATO, testing and checking requirements for pilots holding multi-pilot privileges seeking single-pilot privileges for the first time (bridge course)

(5) Training at an ATO and checking requirements for combined revalidation and renewal of single and multi-pilot privileges

Requirements for Training / Skill Test / Proficiency Check

	(1)		(2)		(3)		(4)		(5)	
	Type of operation									
Type of aircraft	SP		MP		SP → MP (initial)		MP → SP (initial)		SP + MP	
	Training	Testing/checking	Training	Testing/checking	Training	Testing/checking	Training, testing and checking (SE aeroplanes)	Training, testing and checking (ME aeroplanes)	SE aeroplanes	ME aeroplanes
Initial issue										
All (except SP complex)	Sections 1-6	Sections 1-6	MCCCRM Human factors TEM Sections 1-7	Sections 1-6	MCCCRM Human factors TEM Section 7	Sections 1-6	1.6, 4.5, 4.6, 5.2 and, if applicable, one approach from Section 3.B	1.5, Section 6 and, if applicable, one approach from Section 3.B		
SP complex	1-7	1-6								
Revalidation										
All	n/a	Sections 1-6	n/a	Sections 1-6	n/a	n/a	n/a	n/a	MPO:Sections 1-7 (training) Section 1-6 (checking) SPO: 1.6, 4.5, 4.6, 5.2 and, if applicable, one approach from Section 3.B	MPO:Sections 1-7 (training) Sections 1-6 (checking) SPO: 1.6, Section 6 and, if applicable, one approach from Section 3.B
Renewal										
All	FCL.740	Sections 1-6	FCL.740	Sections 1-6	n/a	n/a	n/a	n/a	Training: FCL.740Check: as for the revalidation	Training: FCL.740Check: as for the revalidation

(l) To establish or maintain PBN privileges, one approach shall be an RNP APCH. Where an RNP APCH is not practicable, it shall be performed in an appropriately equipped FSTD. By way of derogation from the subparagraph above, in cases where a proficiency check for revalidation of PBN privileges does not include an RNP APCH exercise, the PBN privileges of the pilot shall not include RNP APCH.The restriction shall be lifted if the pilot has completed a proficiency check including an RNP APCH exercise.

Specific Training / Skill Test / Proficiency Check

TMGs AND SINGLE-PILOT AEROPLANES, EXCEPT FOR HIGH-PERFORMANCE COMPLEX AEROPLANES	PRACTICAL TRAINING	CLASS OR TYPE RATING SKILL TEST OR PROFICIENCY CHECK

Manoeuvres/procedures		FSTD	A	Instructor initials when training completed	Tested or checked in FSTD or A	Examiner initials when test or check completed
SECTION 1						
11.1	DeparturePreflight including: — documentation; — mass and balance; — weather briefing; and — NOTAM.	OTD				
1.2	Pre-start checks					
1.2.1	External	OTDP#	P		M	
1.2.2	Internal	OTDP#	P		M	
1.3	Engine starting:normal malfunctions.	P---->	---->		M	
1.4	Taxiing	P---->	---->		M	
1.5	Pre-departure checks:engine run-up (if applicable)	P---->	---->		M	
1.6	Take-off procedure:— normal with flight manual flap settings; and — crosswind (if conditions are available).	P---->	---->		M	
1.7	Climbing:— Vx/Vy; — turns onto headings; and — level off.	P---->	---->		M	
1.8	ATC liaison — compliance, R/T procedures	P---->			M	
SECTION 2						
22.1	Airwork (visual meteorological conditions (VMC))Straight and level flight at various airspeeds including flight at critically low airspeed with and without flaps (including approach to V Vmca when applicable)	P---->	---->			
2.2	Steep turns (360° left and right at 45° bank)	P---->	---->		M	
2.3	Stalls and recovery:(i) clean stall; (ii) approach to stall in descending turn with bank with approach configuration and power; (iii) approach to stall in landing configuration and power; and	P---->	---->		M	

	(iv) approach to stall, climbing turn with take-off flap and climb power (single-engine aeroplanes only)					
2.4	Handling using autopilot and flight director (may be conducted in Section 3), if applicable	P---->	---->		M	
2.5	ATC liaison — compliance, R/T procedures	P---->	---->		M	
SECTION 3A						
3A3A.1	En route procedures VFR(see B.5 (c) and (d)) Flight plan, dead reckoning and map reading	P---->	---->			
3A.2	Maintenance of altitude, heading and speed	P---->	---->			
3A.3	Orientation, timing and revision of ETAs	P---->	---->			
3A.4	Use of radio navigation aids (if applicable)	P---->	---->			
3A.5	Flight management (flight log, routine checks including fuel, systems and icing)	P---->	---->			
3A.6	ATC liaison — compliance, R/T procedures	P---->	---->			
SECTION 3B						
3B3B.1*	Instrument flightDeparture IFR	P---->	---->		M	
3B.2*	En route IFR	P---->	---->		M	
3B.3*	Holding procedures	P---->	---->		M	
3B.4*	3D operations to decision height/altitude (DH/A) of 200 ft (60 m) or to higher minima if required by the approach procedure (autopilot may be used to the final approach segment vertical path intercept)	P---->	---->		M	
3B.5*	2D operations to minimum descent height/altitude (MDH/A)	P---->	---->		M	
3B.6*	Flight exercises including simulated failure of the compass and attitude indicator:— rate 1 turns; and — recoveries from unusual attitudes.	P---->	---->		M	
3B.7*	Failure of localiser or glideslope	P---->	---->			
3B.8*	ATC liaison — compliance, R/T procedures	P---->	---->		M	
	Intentionally left blank					
SECTION 4						
44.1	Arrival and landingsAerodrome arrival procedure	P---->	---->		M	

4.2	Normal landing	P---->	---->		M	
4.3	Flapless landing	P---->	---->		M	
4.4	Crosswind landing (if suitable conditions)	P---->	---->			
4.5	Approach and landing with idle power from up to 2000 ft above the runway (single-engine aeroplanes only)	P---->	---->			
4.6	Go-around from minimum height	P---->	---->		M	
4.7	Night go-around and landing (if applicable)	P---->	---->			
4.8	ATC liaison — compliance, R/T procedures	P---->	---->		M	
SECTION 5						
5	Abnormal and emergency procedures (This section may be combined with Sections 1 through 4.)					
5.1	Rejected take-off at a reasonable speed	P---->	---->		M	
5.2	Simulated engine failure after take-off (single-engine aeroplanes only)		P		M	
5.3	Simulated forced landing without power (single-engine aeroplanes only)		P		M	
5.4	Simulated emergencies:(i) fire or smoke in flight; and (ii) systems' malfunctions as appropriate	P---->	---->			
5.5	ME aeroplanes and TMG training only: engine shutdown and restart (at a safe altitude if performed in the aircraft)	P---->	---->			
5.6	ATC liaison — compliance, R/T procedures					
SECTION 6						
66.1*	Simulated asymmetric flight(This section may be combined with Sections 1 through 5.) Simulated engine failure during take-off (at a safe altitude unless carried out in an FFS or an FNPT II)	P---->	--->X		M	
6.2*	Asymmetric approach and go-around	P---->	---->		M	
6.3*	Asymmetric approach and full-stop landing	P---->	---->		M	
6.4	ATC liaison — compliance, R/T procedures	P---->	---->		M	
SECTION 7						
7	UPRT					
7.1	Flight manoeuvres and procedures					
7.1.1	Manual flight with and without flight directors(no autopilot,	P----->	---->			

	no autothrust/autothrottle, and at different control laws, where applicable)					
7.1.1.1	At different speeds (including slow flight) and altitudes within the FSTD training envelope.	P----->	---->			
7.1.1.2	Steep turns using 45° bank, 180° to 360° left and right	P----->	---->			
7.1.1.3	Turns with and without spoilers	P----->	---->			
7.1.1.4	Procedural instrument flying and manoeuvring including instrument departure and arrival, and visual approach	P----->	---->			
7.27.2.1	Upset recovery trainingRecovery from stall events in: — take-off configuration; — clean configuration at low altitude; — clean configuration near maximum operating altitude; and — landing configuration	P----->	---->			
7.2.2	The following upset exercises:— recovery from nose-high at various bank angles; and — recovery from nose-low at various bank angles.	P	XAn aeroplane shall not be used for this exercise			
7.3	Go-around with all engines operating* from various stages during an instrument approach	P--->	----->			
7.4	Rejected landing with all engines operating:— from various heights below DH/MDH 15 m (50 ft) above the runway threshold — after touchdown (baulked landing) — In aeroplanes which are not certificated as transport category aeroplanes (JAR/FAR 25) or as commuter category aeroplanes (SFAR 23), the rejected landing with all engines operating shall be initiated below MDH/A or after touchdown.	P----->	----->			

6. Multi-pilot aeroplanes and single-pilot high-performance complex aeroplanes

(a) The following symbols mean:

P = Trained as PIC or co-pilot and as PF and PM for the issue of a type rating as applicable.

OTD = Other training devices may be used for this exercise

X = An FFS shall be used for this exercise; otherwise an aeroplane shall be used if appropriate for the manoeuvre or procedure

P# = The training shall be complemented by supervised aeroplane inspection

(b) The practical training shall be conducted at least at the training equipment level shown as (P), or may be conducted up to any higher equipment level shown by the arrow (----->). The following abbreviations are used to indicate the training equipment used:

A = aeroplane

FFS = full-flight simulator

FSTD = flight simulation training device

(c) The starred items (*) shall be flown solely by reference to instruments.

(d) Where the letter 'M' appears in the skill test or proficiency check column, this will indicate a mandatory exercise or a choice where more than one exercise appears.

(e) An FFS shall be used for practical training and testing if the FFS forms part of an approved type rating course. The following considerations will apply to the approval of the course:

(i) the qualifications of the instructors;

(ii) the qualification and the amount of training provided on the course in an FSTD; and

(iii) the qualifications and previous experience on similar types of the pilots under training.

(f) Manoeuvres and procedures shall include MCC for multi-pilot aeroplane and for single-pilot high-performance complex aeroplanes in multi-pilot operations.

(g) Manoeuvres and procedures shall be conducted in single-pilot role for single-pilot high-performance complex aeroplanes in single-pilot operations.

(h) In the case of single-pilot high-performance complex aeroplanes, when a skill test or proficiency check is performed in multi-pilot operations, the type rating shall be restricted to multi-pilot operations. If privileges of single-pilot are sought, the manoeuvres/procedures in 2.5, 3.8.3.4, 4.4, 5.5 and at least one manoeuvre/procedure from Section 3.4 have to be completed in addition as single-pilot.

(i) In the case of a restricted type rating issued in accordance with [FCL.720.A(c)] , applicants shall fulfil the same requirements as other applicants for the type rating except for the practical exercises relating to the take-off and landing phases.

(j) To establish or maintain PBN privileges, one approach shall be an RNP APCH. Where an RNP APCH is not practicable, it shall be performed in an appropriately equipped FSTD. By way of derogation from the subparagraph above, in cases where a proficiency check for revalidation of PBN privileges does not include an RNP APCH exercise, the PBN

privileges of the pilot shall not include RNP APCH. The restriction shall be lifted if the pilot has completed a proficiency check including an RNP APCH exercise.

Specific Training / Skill Test / Proficiency Check

MULTI-PILOT AEROPLANES AND SINGLE-PILOT HIGH-PERFORMANCE COMPLEX AEROPLANES	PRACTICAL TRAINING			ATPL/MPL/TYPE RATING SKILL TEST OR PROF. CHECK	
Manoeuvres/procedures	FSTD	A	Instructor initials when training completed	Tested or checked in FSTD or A	Examiner initials when test or check completed
SECTION 1					
Flight preparationPerformance calculation	OTDP				
Aeroplane external visual inspection; location of each item and purpose of inspection	OTD P#	P			
Cockpit inspection	P----->	----->			
Use of checklist prior to starting engines, starting procedures, radio and navigation equipment check, selection and setting of navigation and communication frequencies	P----->	----->		M	
Taxiing in compliance with ATC instructions or instructions of instructor	P----->	----->			
Before take-off checks	P----->	----->		M	
SECTION 2					
Take-offsNormal take-offs with different flap settings, including expedited take-off	P----->	----->			
2.2* Instrument take-off; transition to instrument flight is required during rotation or immediately after becoming airborne	P----->	----->			
Crosswind take-off	P----->	----->			
Take-off at maximum take-off mass (actual or simulated maximum take-off mass)	P----->	----->			
Take-offs with simulated engine failure:2.5.1* shortly after reaching V2	P----->	----->			
(In aeroplanes which are not certificated as transport category or commuter category aeroplanes, the engine failure shall not be simulated until reaching a minimum height of 500 ft above the runway end. In aeroplanes having the same performance as a transport category aeroplane regarding take-off mass and density altitude, the instructor may simulate the engine failure shortly after reaching V2)					

2.5.2* between V1 and V2	P	X		M FFS only	
Rejected take-off at a reasonable speed before reaching V1	P----->	---->X		M	
SECTION 3					
Flight manoeuvres and proceduresManual flight with and without flight directors (no autopilot, no autothrust/autothrottle, and at different control laws, where applicable)	P----->	---->			
At different speeds (including slow flight) and altitudes within the FSTD training envelope	P----->	---->			
Steep turns using 45° bank, 180° to 360° left and right	P----->	---->			
Turns with and without spoilers	P----->	---->			
Procedural instrument flying and manoeuvring including instrument departure and arrival, and visual approach	P----->	---->			
Tuck under and Mach buffets (if applicable), and other specific flight characteristics of the aeroplane (e.g. Dutch Roll)	P----->	---->XAn aeroplane shall not be used for this exercise		FFS only	
Normal operation of systems and controls engineer's panel (if applicable)	OTDP----->	----->			
Normal and abnormal operations of following systems:				M	A mandatory minimum of 3 abnormal items shall be selected from 3.4.0 to 3.4.14 inclusive
Engine (if necessary propeller)	OTDP----->	----->			
Pressurisation and air conditioning	OTDP----->	----->			
Pitot/static system	OTDP----->	----->			
Fuel system	OTDP----->	----->			
Electrical system	OTDP----->	----->			
Hydraulic system	OTDP----->	----->			
Flight control and trim system	OTDP----->	----->			
Anti-icing/de-icing system, glare shield heating	OTDP----->	----->			
Autopilot/flight director	OTDP----->	----->		M(single pilot only)	
Stall warning devices or stall avoidance devices, and stability augmentation devices	OTDP----->	----->			
Ground proximity warning system, weather radar, radio altimeter, transponder	P----->	----->			

Radios, navigation equipment, instruments, FMS	OTDP----->	----->			
Landing gear and brake	OTDP----->	----->			
Slat and flap system	OTD	----->			
Auxiliary power unit (APU)	OTDP----->	----->			
Intentionally left blank					
Abnormal and emergency procedures:				M	A mandatory minimum of 3 items shall be selected from 3.6.1 to 3.6.9 inclusive
Fire drills, e.g. engine, APU, cabin, cargo compartment, flight deck, wing and electrical fires including evacuation	P----->	----->			
Smoke control and removal	P----->	----->			
Engine failures, shutdown and restart at a safe height	P----->	----->			
Fuel dumping (simulated)	P----->	----->			
Wind shear at take-off/landing	P	X		FFS only	
Simulated cabin pressure failure/emergency descent	P----->	----->			
Incapacitation of flight crew member	P----->	----->			
Other emergency procedures as outlined in the appropriate aeroplane flight manual (AFM)	P----->	----->			
TCAS event	OTDP----->	An aeroplane shall not be used		FFS only	
Upset recovery trainingRecovery from stall events in: — take-off configuration; — clean configuration at low altitude; — clean configuration near maximum operating altitude; and — landing configuration.	PFFS qualified for the training task only	XAn aeroplane shall not be used for this exercise			
The following upset exercises:— recovery from nose-high at various bank angles; and — recovery from nose-low at various bank angles	PFFS qualified for the training task only	XAn aeroplane shall not be used for this exercise		FFS only	
Instrument flight procedures					
3.8.1* Adherence to departure and arrival routes and ATC instructions	P----->	----->		M	
3.8.2* Holding procedures	P----->	----->			
3.8.3* 3D operations to DH/A of 200 ft (60 m) or to higher minima if required by the approach procedure					
Note: According to the AFM, RNP APCH procedures may require the use of autopilot or flight director. The procedure to be flown manually shall be chosen taking into account such limitations (for example, choose an ILS for 3.8.3.1 in the case of such AFM limitation).					

3.8.3.1* Manually, without flight director	P----->	----->		M(skill test only)	
3.8.3.2* Manually, with flight director	P----->	----->			
3.8.3.3* With autopilot	P----->	----->			
3.8.3.4* Manually, with one engine simulated inoperative during final approach, either until touchdown or through the complete missed approach procedure (as applicable), starting:(i) before passing 1000 ft above aerodrome level; and (ii) after passing 1000 ft above aerodrome level. In aeroplanes which are not certificated as transport category aeroplanes (JAR/FAR 25) or as commuter category aeroplanes (SFAR 23), the approach with simulated engine failure and the ensuing go-around shall be initiated in conjunction with the 2D approach in accordance with 3.8.4. The go-around shall be initiated when reaching the published obstacle clearance height/altitude (OCH/A); however, not later than reaching an MDH/A of 500 ft above the runway threshold elevation. In aeroplanes having the same performance as a transport category aeroplane regarding take-off mass and density altitude, the instructor may simulate the engine failure in accordance with exercise 3.8.3.4.	P —->	—->		M	
Provision repealed before document was retained.					
3.8.4* 2D operations down to the MDH/A	P*--->	----->		M	
Circling approach under the following conditions:(a)* approach to the authorised minimum circling approach altitude at the aerodrome in question in accordance with the local instrument approach facilities in simulated instrument flight conditions; followed by: (b) circling approach to another runway at least 90° off centreline from the final approach used in item (a), at the authorised	P*--->	----->			

minimum circling approach altitude. Remark: If (a) and (b) are not possible due to ATC reasons, a simulated low visibility pattern may be performed.					
Visual approaches	P---->	----->			
SECTION 4					
Missed approach procedures					
Go-around with all engines operating* during a 3D operation on reaching decision height	P*--->	----->			
Go-around with all engines operating* from various stages during an instrument approach	P*--->	----->			
Other missed approach procedures	P*--->	----->			
4.4* Manual go-around with the critical engine simulated inoperative after an instrument approach on reaching DH, MDH or MAPt	P*----->	----->		M	
Rejected landing with all engines operating:— from various heights below DH/MDH; — after touchdown (baulked landing) In aeroplanes which are not certificated as transport category aeroplanes (JAR/FAR 25) or as commuter category aeroplanes (SFAR 23), the rejected landing with all engines operating shall be initiated below MDH/A or after touchdown.	P----->	----->			
SECTION 5					
LandingsNormal landings* with visual reference established when reaching DA/H following an instrument approach operation	P				
Landing with simulated jammed horizontal stabiliser in any out-of-trim position	P----->	An aeroplane shall not be used for this exercise		FFS only	
Crosswind landings (aircraft, if practicable)	P----->	----->			
Traffic pattern and landing without extended or with partly extended flaps and slats	P----->	----->			
Landing with critical engine simulated inoperative	P----->	----->		M	
Landing with two engines inoperative:— aeroplanes with three engines: the centre engine and one outboard engine as far as	P	X		MFFS only (skill test only)	

practicable according to data of the AFM; and — aeroplanes with four engines: two engines at one side					
~~General remarks:Special requirements for the extension of a type rating for instrument approaches down to a decision height of less than 200 ft (60 m), i.e. CAT II/III operations.~~					
~~SECTION 6~~					
~~Additional authorisation on a type rating for instrument approaches down to a DH of less than 60 m (200 ft) (CAT II/III)The following manoeuvres and procedures are the minimum training requirements to permit instrument approaches down to a DH of less than 60 m (200 ft). During the following instrument approaches and missed approach procedures, all aeroplane equipment required for type certification of instrument approaches down to a DH of less than 60 m (200 ft) shall be used.~~	-	-	-	-	-
~~6.1* Rejected take-off at minimum authorised runway visual range (RVR)~~	~~P* —>~~	~~—>XAn aeroplane shall not be used for this exercise~~	-	~~M*~~	-
~~6.2* CAT II/III approaches:in simulated instrument flight conditions down to the applicable DH, using flight guidance system. Standard procedures of crew coordination (task sharing, call-out procedures, mutual surveillance, information exchange and support) shall be observed.~~	~~P —>~~	~~—>~~	-	~~M~~	-
~~6.3* Go-around:after approaches as indicated in 6.2 on reaching DH.~~ ~~The training shall also include a go-around due to (simulated) insufficient RVR, wind shear, aeroplane deviation in excess of approach limits for a successful approach, ground/airborne equipment failure prior to reaching DH, and go-around with simulated airborne equipment failure.~~	~~P —>~~	~~—>~~	-	~~M*~~	-
~~6.4* Landing(s):with visual reference established at DH following an instrument approach. Depending on the specific flight~~	~~P —>~~	~~—>~~	-	~~M~~	-

~~guidance system, an automatic landing shall be performed.~~				

~~NOTE: CAT II/III operations shall be performed in accordance with the applicable air operations requirements.~~

7. Class ratings — sea

Section 6 shall be completed to revalidate a multi-engine class rating sea, VFR only, where the required experience of 10 route sectors within the previous 12 months has not been completed.

Specific Training / Skill Test / Proficiency Check			
CLASS RATING SEA		PRACTICAL TRAINING	CLASS RATING SKILL TEST OR PROFICIENCY CHECK
Manoeuvres/procedures		Instructor's initials when training completed	Examiner's initials when test completed
SECTION 1			
DeparturePreflight including: — documentation; — mass and balance; — weather briefing; and — NOTAM.			
Pre-start checksExternal/internal			
Engine start-up and shutdownNormal malfunctions			
Taxiing			
Step taxiing			
Mooring:	BeachJetty pier Buoy		
Engine-off sailing			
Pre-departure checks:Engine run-up (if applicable)			
Take-off procedure:— normal with flight manual flap settings; and — crosswind (if conditions are available).			
Climbing:— turns onto headings — level off			
ATC liaison — compliance, R/T procedures			
SECTION 2			
Airwork (VFR)Straight and level flight at various airspeeds including flight at critically low airspeed with and without flaps (including approach to VMCA when applicable)			
Steep turns (360° left and right at 45° bank)			
Stalls and recovery:(i) clean stall; (ii) approach to stall in descending turn with bank with approach configuration and power; (iii) approach to stall in landing configuration and power; and (iv) approach to stall, climbing turn with take-off flap and climb power (single-engine aeroplanes only).			
ATC liaison — compliance, R/T procedures			
SECTION 3			

En route procedures VFRFlight plan, dead reckoning and map reading		
Maintenance of altitude, heading and speed		
Orientation, timing and revision of ETAs		
Use of radio navigation aids (if applicable)		
Flight management (flight log, routine checks including fuel, systems and icing)		
ATC liaison — compliance, R/T procedures		
SECTION 4		
Arrivals and landingsAerodrome arrival procedure (amphibians only)		
Normal landing		
Flapless landing		
Crosswind landing (if suitable conditions)		
Approach and landing with idle power from up to 2000′ above the water (single-engine aeroplanes only)		
Go-around from minimum height		
Glassy water landingRough water landing		
ATC liaison — compliance, R/T procedures		
SECTION 5		
Abnormal and emergency procedures(This section may be combined with Sections 1 through 4.) Rejected take-off at a reasonable speed		
Simulated engine failure after take-off (single-engine aeroplanes only)		
Simulated forced landing without power (single-engine aeroplanes only)		
Simulated emergencies:(i) fire or smoke in flight; and (ii) systems' malfunctions as appropriate.		
ATC liaison — compliance, R/T procedures		
SECTION 6		
Simulated asymmetric flight(This section may be combined with Sections 1 through 5.) Simulated engine failure during take-off (at a safe altitude unless carried out in an FFS and an FNPT II)		
Engine shutdown and restart (ME skill test only)		
Asymmetric approach and go-around		
Asymmetric approach and full-stop landing		
ATC liaison — compliance, R/T procedures		

C Specific requirements for the helicopter category

1. In the case of skill test or proficiency check for type ratings and the ATPL, applicants shall pass Sections 1 to 4 and 6 (as applicable) of the skill test or proficiency check. Failure in more than five items will require applicants to repeat the entire test or check. Applicants failing not more than five items shall repeat the failed items. Failure in any item in the case of a retest or a recheck or failure in any other items already passed will require the applicants to repeat the entire test or check again. All sections of the skill test or proficiency check shall be completed within 6 months.

2. In the case of proficiency check for an IR, applicants shall pass Section 5 of the proficiency check. Failure in more than 3 items will require applicants to repeat the entire Section 5. Applicants failing not more than 3 items shall repeat the failed items. Failure in

any item in the case of a recheck or failure in any other items of Section 5 already passed will require applicants to repeat the entire check.

FLIGHT TEST TOLERANCE

3. Applicants shall demonstrate the ability to:

(a) operate the helicopter within its limitations;

(b) complete all manoeuvres with smoothness and accuracy;

(c) exercise good judgement and airmanship;

(d) apply aeronautical knowledge;

(e) maintain control of the helicopter at all times in such a manner that the successful outcome of a procedure or manoeuvre is never in doubt;

(f) understand and apply crew coordination and incapacitation procedures, if applicable; and

(g) communicate effectively with the other crew members, if applicable.

4. The following limits shall apply, corrected to make allowance for turbulent conditions and the handling qualities and performance of the helicopter used.

(a) IFR flight limits

Height

Generally ± 100 ft

Starting a go-around at decision height/altitude + 50 ft/– 0 ft

Minimum descent height/MAPt/altitude + 50 ft/– 0 ft

Tracking

On radio aids ± 5°

For ‘angular’ deviations: Half-scale deflection, azimuth and glide path (e.g. LPV, ILS, MLS, GLS)

2D (LNAV) and 3D (LNAV/VNAV) ‘linear’ lateral deviations: cross-track error/deviation shall normally be limited to ± (1) / (2) of the RNP value associated with the procedure. Brief deviations from this standard up to a maximum of one time the RNP value are allowable.

3D linear vertical deviations (e.g. RNP APCH (LNAV/VNAV) using BaroVNAV): not more than – 75 ft below the vertical profile at any time, and not more than + 75 ft above the vertical profile at or below 1000 ft above aerodrome level.

Heading

all engines operating ± 5°

with simulated engine failure ± 10°

Speed

all engines operating ± 5 knots

with simulated engine failure + 10 knots/– 5 knots

(b) VFR flight limit

Height

Generally ± 100 ft

Heading

Normal operations ± 5°

Abnormal operations / emergencies ± 10°

Speed

Generally ± 10 knots

With simulated engine failure + 10 knots/– 5 knots

Ground drift

T.O. hover I.G.E. ± 3 ft

Landing ± 2 ft (with 0 ft rearward or lateral flight)

CONTENT OF THE TRAINING/SKILL TEST/PROFICIENCY CHECK GENERAL

5. The following symbol means:

P = Trained as PIC for the issue of a type rating for single-pilot helicopters (SPH) or trained as PIC or co-pilot and as PF and PM for the issue of a type rating for multi pilot helicopters (MPH).

6. The practical training shall be conducted at least at the training equipment level shown as (P), or may be conducted up to any higher equipment level shown by the arrow (---->).

The following abbreviations are used to indicate the training equipment used:

FFS = full-flight simulator

FTD = flight training device

H = helicopter

7. The starred items (*) shall be flown in actual or simulated IMC, only by applicants wishing to renew or revalidate an IR(H) or extend the privileges of that rating to another type.

8. Instrument flight procedures (Section 5) shall be performed only by applicants wishing to renew or revalidate an IR(H) or extend the privileges of that rating to another type. An FFS or an FTD 2/3 may be used for this purpose.

8a. To establish or maintain PBN privileges, one approach shall be an RNP APCH. Where an RNP APCH is not practicable, it shall be performed in an appropriately equipped FSTD.

By way of derogation from subparagraph above, in cases where a proficiency check for revalidation of PBN privileges does not include an RNP APCH exercise, the PBN privileges of the pilot shall not include RNP APCH. The restriction shall be lifted if the pilot has completed a proficiency check including an RNP APCH exercise.

9. Where the letter 'M' appears in the skill test or proficiency check column, this will indicate a mandatory exercise.

10. An FSTD shall be used for practical training and testing if the FSTD forms part of a type rating course. The following considerations will apply to the course:

(a) the qualification of the FSTD as set out in the relevant requirements of Annex VI (Part-ARA) and Annex VII (Part-ORA);

(b) the qualifications of the instructor and examiner;

(c) the amount of FSTD training provided on the course;

(d) the qualifications and previous experience in similar types of the pilots under training; and

(e) the amount of supervised flying experience provided after the issue of the new type rating.

MULTI-PILOT HELICOPTERS

11. Applicants for the skill test for the issue of the multi-pilot helicopter type rating and ATPL(H) shall pass only Sections 1 to 4 and, if applicable, Section 6.

12. Applicants for the revalidation or renewal of the multi-pilot helicopter type rating proficiency check shall pass only Sections 1 to 4 and, if applicable, Section 6.

Specific training / skill test / proficiency check						
SINGLE/MULTI-PILOT HELICOPTERS		PRACTICAL TRAINING			SKILL TEST OR PROFICIENCY CHECK	
Manoeuvres/procedures		FSTD	H	Instructor initials when training completed	Checked in FSTD or H	Examiner initials when test completed
SECTION 1 — Preflight preparations and checks						
1.1	Helicopter exterior visual inspection; location of each item and purpose of inspection		P		M (if performed in the helicopter)	
1.2	Cockpit inspection	P	---->		M	
1.3	Starting procedures, radio and navigation equipment check, selection and setting of navigation and communication frequencies	P	---->		M	
1.4	Taxiing/air taxiing in compliance with ATC instructions or with instructions of an instructor	P	---->		M	
1.5	Pre-take-off procedures and checks	P	---->		M	
SECTION 2 — Flight manoeuvres and procedures						
2.1	Take-offs (various profiles)	P	---->		M	

2.2	Sloping ground or crosswind take-offs & landings	P	---->			
2.3	Take-off at maximum take-off mass (actual or simulated maximum take-off mass)	P	---->			
2.4	Take-off with simulated engine failure shortly before reaching TDP or DPATO	P	---->		M	
2.4.1	Take-off with simulated engine failure shortly after reaching TDP or DPATO	P	---->		M	
2.5	Climbing and descending turns to specified headings	P	---->		M	
2.5.1	Turns with 30° bank, 180° to 360° left and right, by sole reference to instruments	P	---->		M	
2.6	Autorotative descent	P	---->		M	
2.6.1	For single-engine helicopters (SEH) autorotative landing or for multi-engine helicopters (MEH) power recovery	P	---->		M	
2.7	Landings, various profiles	P	---->		M	
2.7.1	Go-around or landing following simulated engine failure before LDP or DPBL	P	---->		M	
2.7.2	Landing following simulated engine failure after LDP or DPBL	P	---->		M	
SECTION 3 — Normal and abnormal operations of the following systems and procedures						
3	Normal and abnormal operations of the following systems and procedures:				M	A mandatory minimum of 3 items shall be selected from this section
3.1	Engine	P	---->			
3.2	Air conditioning (heating, ventilation)	P	---->			
3.3	Pitot/static system	P	---->			
3.4	Fuel system	P	---->			
3.5	Electrical system	P	---->			
3.6	Hydraulic system	P	---->			
3.7	Flight control and trim system	P	---->			
3.8	Anti-icing and de-icing system	P	---->			
3.9	Autopilot/flight director	P	--->			
3.10	Stability augmentation devices	P	---->			
3.11	Weather radar, radio altimeter, transponder	P	---->			
3.12	Area navigation system	P	---->			
3.13	Landing gear system	P	----->			
3.14	APU	P	---->			
3.15	Radio, navigation equipment, instruments and FMS	P	---->			
SECTION 4 — Abnormal and emergency procedures						

4	Abnormal and emergency procedures				M	A mandatory minimum of 3 items shall be selected from this section
4.1	Fire drills (including evacuation if applicable)	P	---->			
4.2	Smoke control and removal	P	---->			
4.3	Engine failures, shutdown and restart at a safe height	P	---->			
4.4	Fuel dumping (simulated)	P	---->			
4.5	Tail rotor control failure (if applicable)	P	---->			
4.5.1	Tail rotor loss (if applicable)	P	A helicopter shall not be used for this exercise			
4.6	Incapacitation of crew member — MPH only	P	---->			
4.7	Transmission malfunctions	P	---->			
4.8	Other emergency procedures as outlined in the appropriate flight manual	P	---->			
SECTION 5 — Instrument flight procedures (to be performed in IMC or simulated IMC)						
5.1	Instrument take-off: transition to instrument flight is required as soon as possible after becoming airborne	P*	---->*			
5.1.1	Simulated engine failure during departure	P*	---->*		M*	
5.2	Adherence to departure and arrival routes and ATC instructions	P*	---->*		M*	
5.3	Holding procedures	P*	---->*			
5.4	3D operations to DH/A of 200 ft (60 m) or to higher minima if required by the approach procedure	P*	---->*			
5.4.1	Manually, without flight director. **Note:**	P*	---->*		M*	
5.4.2	Manually, with flight director	P*	---->*		M*	
5.4.3	With coupled autopilot	P*	---->*			
5.4.4	Manually, with one engine simulated inoperative; engine failure has to be simulated during final approach before passing 1000 ft above aerodrome level until touchdown or until completion of the missed approach procedure	P*	---->*		M*	
5.5	2D operations down to the MDA/H	P*	---->*		M*	
5.6	Go-around with all engines operating on reaching DA/H or MDA/MDH	P*	---->*			
5.6.1	Other missed approach procedures	P*	---->*			

5.6.2	Go-around with one engine simulated inoperative on reaching DA/H or MDA/MDH	P*	---->*		M*	
5.7	IMC autorotation with power recovery	P*	---->*		M*	
5.8	Recovery from unusual attitudes	P*	---->*		M*	
SECTION 6 — Use of optional equipment						
6	Use of optional equipment	P	---->			

SINGLE-PILOT HELICOPTERS

13. Applicants for the issue, revalidation or renewal of a single-pilot helicopter type rating shall:

(a) if privileges for single-pilot operation are sought, complete the skill test or proficiency check in single-pilot operation;

(b) if privileges for multi-pilot operation are sought, complete the skill test or proficiency check in multi-pilot operation;

(c) if privileges for both single-pilot and multi-pilot privileges are sought, complete the skill test or proficiency check in multi-pilot operation and, additionally, the following manoeuvres and procedures in single-pilot operation:

(1) for single-engine helicopters: 2.1 take-off and 2.6 and 2.6.1 autorotative descent and autorotative landing;

(2) for multi-engine helicopters: 2.1 take-off and 2.4 and 2.4.1 engine failures shortly before and shortly after reaching TDP;

(3) for IR privileges, in addition to point (1) or (2), as applicable, one approach of Section 5, unless the criteria of Appendix 8 to this Annex are met;

(d) in order to remove a restriction to multi-pilot operation from a non-complex single-pilot helicopter type rating, complete a proficiency check that includes the manoeuvres and procedures referred to in point (c) (1) or (c)(2), as applicable

D Specific requirements for the powered-lift aircraft category

1. In the case of skill tests or proficiency checks for powered-lift aircraft type ratings, applicants shall pass Sections 1 to 5 and 6 (as applicable) of the skill test or proficiency check. Failure in more than five items will require applicants to repeat the entire test or check. Applicants failing not more than five items shall repeat the failed items. Failure in any item in the case of a retest or a recheck or failure in any other items already passed will require applicants to repeat the entire test or check. All sections of the skill test or proficiency check shall be completed within 6 months.

FLIGHT TEST TOLERANCE

2. Applicants shall demonstrate the ability to:

(a) operate the powered-lift aircraft within its limitations;

(b) complete all manoeuvres with smoothness and accuracy;

(c) exercise good judgement and airmanship;

(d) apply aeronautical knowledge;

(e) maintain control of the powered-lift aircraft at all times in such a manner that the successful outcome of a procedure or manoeuvre is never in doubt;

(f) understand and apply crew coordination and incapacitation procedures; and

(g) communicate effectively with the other crew members.

3. The following limits shall apply, corrected to make allowance for turbulent conditions and the handling qualities and performance of the powered-lift aircraft used.

(a) IFR flight limits

Height

Generally ± 100 ft

Starting a go-around at decision height/altitude + 50 ft/– 0 ft

Minimum descent height/altitude + 50 ft/– 0 ft

Tracking

On radio aids ± 5°

Precision approach: Half-scale deflection, azimuth and glide path

Heading

all engines operating ± 5°

abnormal operations / emergencies ± 10°

Speed

all engines operating ± 10 knots

with simulated engine failure + 10 knots/– 5 knots

(b) VFR flight limit

Height

Generally ± 100 ft

Heading

Normal operations ± 5°

Abnormal operations / emergencies ± 10°

Speed

Generally ± 10 knots

With simulated engine failure + 10 knots/– 5 knots

Ground drift

T.O. hover I.G.E. ± 3 ft

Landing ± 2 ft (with 0 ft rearward or lateral flight)

CONTENT OF THE TRAINING/SKILL TEST/PROFICIENCY CHECK

4. The following symbol means:

P = Trained as PIC or co-pilot and as PF and PM for the issue of a type rating as applicable

5. The practical training shall be conducted at least at the training equipment level shown as (P), or may be conducted up to any higher equipment level shown by the arrow (---->).

6. The following abbreviations are used to indicate the training equipment used:

FFS = full-flight simulator

FTD = flight training device

OTD = other training device

PL = powered-lift aircraft

~~(a) Applicants for the skill test for the issue of the powered-lift aircraft type rating shall pass Sections 1 to 5 and, if applicable, Section 6.~~

~~(b) Applicants for the revalidation or renewal of the powered-lift aircraft type rating proficiency check shall pass Sections 1 to 5 and, if applicable, Section 6 and/or Section 7.~~

~~(c) The starred items (*) shall be flown solely by reference to instruments. If this condition is not met during the skill test or proficiency check, the type rating will be restricted to VFR only~~.

(6a) The starred items (*) shall be flown solely by reference to instruments. If this condition is not met during the skill test or proficiency check, the type rating will be restricted to VFR only.

7. Where the letter ‘M’ appears in the skill test or proficiency check column, this will indicate a mandatory exercise.

8. FSTDs shall be used for practical training and testing if they form part of an approved type rating course. The following considerations will apply to the approval of the course:

(a) the qualification of the FSTDs as set out in the relevant requirements of Annex VI (Part-ARA) and Annex VII (Part-ORA); and

(b) the qualifications of the instructor.

Requirements for Training / Skill Test / Proficiency Check

POWERED-LIFT AIRCRAFT CATEGORY		PRACTICAL TRAINING					SKILL TEST OR PROFICIENCY CHECK	
Manoeuvres/procedures						Instructor’s initials when training completed	Checked in FFS PL	Examiner’s initials when test completed
		OTD	FTD	FFS	PL			
SECTION 1 — Preflight preparations and checks								
1.1	Powered-lift aircraft exterior visual inspection;location of each item and purpose of inspection				P			
1.2	Cockpit inspection	P	---->	---->	---->			

1.3	Starting procedures, radio and navigation equipment check, selection and setting of navigation and communication frequencies	P	---->	---->	---->		M	
1.4	Taxiing in compliance with ATC instructions or with instructions of an instructor		P	---->	---->			
1.5	Pre-take-off procedures and checks including power check	P	---->	---->	---->		M	
SECTION 2 — Flight manoeuvres and procedures								
2.1	Normal VFR take-off profiles:Runway operations (short take-off and landing (STOL) and vertical take-off and landing (VTOL)) including crosswind Elevated heliports Ground level heliports		P	---->	---->		M	
2.2	Take-off at maximum take-off mass (actual or simulated maximum take-off mass)		P	---->				
2.3.1	Rejected take-off:— during runway operations; — during elevated heliport operations; and — during ground level operations.		P	---->			M	
2.3.2	Take-off with simulated engine failure after passing decision point:during runway operations; during elevated heliport operations; and during ground level operations.		P	---->			M	
2.4	Autorotative descent in helicopter mode to ground (an aircraft shall not be used for this exercise)	P	---->	---->			MFFS only	
2.4.1	Windmill descent in aeroplane mode (an aircraft shall not be used for this exercise)		P	---->			MFFS only	
2.5	Normal VFR landing profiles:runway operations (STOL and VTOL) elevated heliports ground level heliports		P	---->	---->		M	
2.5.1	Landing with simulated engine failure after reaching decision							

	point:— during runway operations; — during elevated heliport operations; and — during ground level operations.							
2.6	Go-around or landing following simulated engine failure before decision point		P	---->			M	
SECTION 3 — Normal and abnormal operations of the following systems and procedures:								
3	Normal and abnormal operations of the following systems and procedures (may be completed in an FSTD if qualified for the exercise):						M	A mandatory minimum of 3 items shall be selected from this section
3.1	Engine	P	---->	---->				
3.2	Pressurisation and air conditioning (heating, ventilation)	P	---->	---->				
3.3	Pitot/static system	P	---->	---->				
3.4	Fuel system	P	---->	---->				
3.5	Electrical system	P	---->	---->				
3.6	Hydraulic system	P	---->	---->				
3.7	Flight control and trim system	P	---->	---->				
3.8	Anti-icing and de-icing system, glare shield heating (if fitted)	P	---->	---->				
3.9	Autopilot/flight director	P	--->	--->				
3.10	Stall warning devices or stall avoidance devices and stability augmentation devices	P	---->	---->				
3.11	Weather radar, radio altimeter, transponder, ground proximity warning system (if fitted)	P	---->	---->				
3.12	Landing gear system	P	----->	----->				
3.13	APU	P	---->	---->				
3.14	Radio, navigation equipment, instruments and FMS	P	---->	---->				
3.15	Flap system	P	---->	---->				
SECTION 4 — Abnormal and emergency procedures								
4	Abnormal and emergency procedures(may be completed in an FSTD if qualified for the exercise)						M	A mandatory minimum of 3 items shall be selected from this section
4.1	Fire drills, engine, APU, cargo compartment, flight deck and electrical fires including evacuation if applicable	P	---->	---->				
4.2	Smoke control and removal	P	---->	---->				
4.3	Engine failures, shutdown and restart(an aircraft shall not be used for this exercise) including one engine inoperative conversion from	P	---->	---->			FFSonly	

	helicopter to aeroplane modes and vice versa							
4.4	Fuel dumping (simulated, if fitted)	P	---->	---->				
4.5	Wind shear at take-off and landing (an aircraft shall not be used for this exercise)			P			FFSonly	
4.6	Simulated cabin pressure failure/emergency descent (an aircraft shall not be used for this exercise)	P	---->	---->			FFSonly	
4.7	ACAS event(an aircraft shall not be used for this exercise)	P	---->	---->			FFSonly	
4.8	Incapacitation of crew member	P	---->	---->				
4.9	Transmission malfunctions	P	---->	---->			FFSonly	
4.10	Recovery from a full stall (power on and off) or after activation of stall warning devices in climb, cruise and approach configurations (an aircraft shall not be used for this exercise)	P	---->	---->			FFSonly	
4.11	Other emergency procedures as detailed in the appropriate flight manual	P	---->	---->				
SECTION 5 — Instrument flight procedures (to be performed in IMC or simulated IMC)								
5.1	Instrument take-off: transition to instrument flight is required as soon as possible after becoming airborne	P*	---->*	---->*				
5.1.1	Simulated engine failure during departure after decision point	P*	---->*	---->*			M*	
5.2	Adherence to departure and arrival routes and ATC instructions	P*	---->*	---->*			M*	
5.3	Holding procedures	P*	---->*	---->*				
5.4	Precision approach down to a decision height not less than 60 m (200 ft)	P*	---->*	---->*				
5.4.1	Manually, without flight director	P*	---->*	---->*			M* (Skill test only)	
5.4.2	Manually, with flight director	P*	---->*	---->*				
5.4.3	With use of autopilot	P*	---->*	---->*				
5.4.4	Manually, with one engine simulated inoperative; engine failure has to be simulated during final approach before passing the OM and continued either to touchdown or until completion of the missed approach procedure	P*	---->*	---->*			M*	
5.5	Non-precision approach down to the MDA/H	P*	---->*	---->*			M*	

5.6	Go-around with all engines operating on reaching DA/H or MDA/MDH	P*	----->*	----->*				
5.6.1	Other missed approach procedures	P*	----->*	----->*				
5.6.2	Go-around with one engine simulated inoperative on reaching DA/H or MDA/MDH	P*					M*	
5.7	IMC autorotation with power recovery to land on runway in helicopter mode only (an aircraft shall not be used for this exercise)	P*	----->*	----->*			M*FFS only	
5.8	Recovery from unusual attitudes (this one depends on the quality of the FFS)	P*	----->*	----->*			M*	
~~SECTION 6 — Additional authorisation on a type rating for instrument approaches down to a decision height of less than 60 m (200 ft) (CAT II/III)~~								
~~6~~	~~Additional authorisation on a type rating for instrument approaches down to a decision height of less than 60 m (CAT II/III).The following manoeuvres and procedures are the minimum training requirements to permit instrument approaches down to a DH of less than 60 m (200 ft). During the following instrument approaches and missed approach procedures, all powered lift aircraft equipment required for the type certification of instrument approaches down to a DH of less than 60 m (200 ft) shall be used.~~							
~~6.1~~	~~Rejected take-off at minimum authorised RVR~~	~~-~~	~~P~~	~~—>~~	~~-~~	~~-~~	~~M*~~	
~~6.2~~	~~ILS approaches:in simulated instrument flight conditions down to the applicable DH, using flight guidance system. Standard operating procedures (SOPs) of crew coordination shall be observed.~~	~~-~~	~~P~~	~~—>~~	~~—>~~	~~-~~	~~M*~~	
~~6.3~~	~~Go-around:after approaches as indicated in 6.2 on reaching DH. The training shall also include a go-around due to (simulated) insufficient RVR, wind shear, aircraft deviation in excess of approach limits for a successful approach, ground/airborne~~	~~-~~	~~P~~	~~—>~~	~~—>~~	~~-~~	~~M*~~	

	~~equipment failure prior to reaching DH, and go-around with simulated airborne equipment failure.~~							
~~6.4~~	~~Landing(s):with visual reference established at DH following an instrument approach. Depending on the specific flight guidance system, an automatic landing shall be performed.~~	~~-~~	~~P~~	~~---->~~	~~-~~	~~-~~	~~M*~~	
~~SECTION 7~~ SECTION 6 — Optional equipment								
7	Use of optional equipment		P	---->	---->			

E Specific requirements for the airship category

1. In the case of skill tests or proficiency checks for airship type ratings, applicants shall pass Sections 1 to 5 and 6 (as applicable) of the skill test or proficiency check. Failure in more than five items will require applicants to repeat the entire test or check. Applicants failing not more than five items shall take the failed items again. Failure in any item in the case of a retest or a recheck, or failure in any other items already passed will require applicants to repeat the entire test or check again. All sections of the skill test or proficiency check shall be completed within 6 months.

FLIGHT TEST TOLERANCE

2. Applicants shall demonstrate the ability to:

(a) operate the airship within its limitations;

(b) complete all manoeuvres with smoothness and accuracy;

(c) exercise good judgement and airmanship;

(d) apply aeronautical knowledge;

(e) maintain control of the airship at all times in such a manner that the successful outcome of a procedure or manoeuvre is never in doubt;

(f) understand and apply crew coordination and incapacitation procedures; and

(g) communicate effectively with the other crew members.

3. The following limits shall apply, corrected to make allowance for turbulent conditions and the handling qualities and performance of the airship used.

(a) IFR flight limits

Height

Generally ± 100 ft

Starting a go-around at decision height/altitude + 50 ft/– 0 ft

Minimum descent height/altitude + 50 ft/– 0 ft

Tracking

On radio aids ± 5°

Precision approach: Half-scale deflection, azimuth and glide path

Heading

all engines operating ± 5°

abnormal operations / emergencies ± 10°

(b) VFR flight limit

Height

Generally ± 100 ft

Heading

Normal operations ± 5°

Abnormal operations / emergencies ± 10°

CONTENT OF THE TRAINING/SKILL TEST/PROFICIENCY CHECK

4. The following symbol means:

P = Trained as PIC or co-pilot and as PF and PM for the issue of a type rating as applicable.

5. The practical training shall be conducted at least at the training equipment level shown as (P), or may be conducted up to any higher equipment level shown by the arrow (---->).

6. The following abbreviations are used to indicate the training equipment used:

FFS = full-flight simulator

FTD = flight training device

OTD = other training device

As = airship

~~(a) Applicants for the skill test for the issue of the airship shall pass Sections 1 to 5 and, if applicable, Section 6.~~

~~(b) Applicants for the revalidation or renewal of the airship type rating proficiency check shall pass Sections 1 to 5 and, if applicable Section 6.~~

~~(c) The starred items (*) shall be flown solely by reference to instruments. If this condition is not met during the skill test or proficiency check, the type rating will be restricted to VFR only.~~

(6a) The starred items (*) shall be flown solely by reference to instruments. If this condition is not met during the skill test or proficiency check, the type rating will be restricted to VFR only.

7. Where the letter 'M' appears in the skill test or proficiency check column, this will indicate a mandatory exercise.

8. FSTDs shall be used for practical training and testing if they form part of a type rating course. The following considerations will apply to the course:

(a) the qualification of the FSTDs as set out in the relevant requirements of Annex VI (Part-ARA) and Annex VII (Part-ORA); and

(b) the qualifications of the instructor.

Requirements for Training / Skill Test / Proficiency Check

AIRSHIP CATEGORY		PRACTICAL TRAINING					SKILL TEST OR PROFICIENCY CHECK	
Manoeuvres/procedures						Instructor's initials when training completed	Checked in	Examiner's initials when test completed
		OTD	FTD	FFS	As		FFS As	
SECTION 1 — Preflight preparations and checks								
1.1	Preflight inspection				P			
1.2	Cockpit inspection	P	---->	---->	---->			
1.3	Starting procedures, radio and navigation equipment check, selection and setting of navigation and communication frequencies		P	---->	---->		M	
1.4	Off-mast procedure and ground manoeuvring			P	---->		M	
1.5	Pre-take-off procedures and checks	P	---->	---->	---->		M	
SECTION 2 — Flight manoeuvres and procedures								
2.1	Normal VFR take-off profile			P	---->		M	
2.2	Take-off with simulated engine failure			P	---->		M	
2.3	Take-off with heaviness > 0 (Heavy T/O)			P	---->			
2.4	Take-off with heaviness < 0 (Light/TO)			P	---->			
2.5	Normal climb procedure			P	---->			
2.6	Climb to pressure height			P	---->			
2.7	Recognising of pressure height			P	---->			
2.8	Flight at or close to pressure height			P	---->		M	
2.9	Normal descent and approach			P	---->			
2.10	Normal VFR landing profile			P	---->		M	
2.11	Landing with heaviness > 0 (Heavy Ldg.)			P	---->		M	
2.12	Landing with heaviness < 0 (Light Ldg.)			P	---->		M	
	Intentionally left blank							
SECTION 3 — Normal and abnormal operations of the following systems and procedures								
3	Normal and abnormal operations of the following systems and procedures (may be completed in an FSTD if qualified for the exercise):						M	A mandatory minimum of 3 items shall be selected from this section

3.1	Engine	P	---->	---->	---->			
3.2	Envelope pressurisation	P	---->	---->	---->			
3.3	Pitot/static system	P	---->	---->	---->			
3.4	Fuel system	P	---->	---->	---->			
3.5	Electrical system	P	---->	---->	---->			
3.6	Hydraulic system	P	---->	---->	---->			
3.7	Flight control and trim system	P	---->	---->	---->			
3.8	Ballonet system	P	---->	---->	---->			
3.9	Autopilot/flight director	P	--->	--->	---->			
3.10	Stability augmentation devices	P	---->	---->	---->			
3.11	Weather radar, radio altimeter, transponder, ground proximity warning system (if fitted)	P	---->	---->	---->			
3.12	Landing gear system	P	----->	----->	---->			
3.13	APU	P	---->	---->	---->			
3.14	Radio, navigation equipment, instruments and FMS	P	---->	---->	---->			
	Intentionally left blank							
SECTION 4 — Abnormal and emergency procedures								
4	Abnormal and emergency procedures(may be completed in an FSTD if qualified for the exercise)						M	A mandatory minimum of three items shall be selected from this section
4.1	Fire drills, engine, APU, cargo compartment, flight deck and electrical fires, including evacuation if applicable	P	---->	---->	---->			
4.2	Smoke control and removal	P	---->	---->	---->			
4.3	Engine failures, shutdown and restart:in particular phases of flight, inclusive multiple engine failure	P	---->	---->	---->			
4.4	Incapacitation of crew member	P	---->	---->	---->			
4.5	Transmission/gearbox malfunctions	P	---->	---->	---->		FFS only	
4.6	Other emergency procedures as outlined in the appropriate flight manual	P	---->	---->	---->			
SECTION 5 — Instrument Flight Procedures (to be performed in IMC or simulated IMC)								
5.1	Instrument take-off: transition to instrument flight is required as soon as possible after becoming airborne	P*	---->*	---->*	---->*			
5.1.1	Simulated engine failure during departure	P*	---->*	---->*	---->*		M*	
5.2	Adherence to departure and arrival routes and ATC instructions	P*	---->*	---->*	---->*		M*	
5.3	Holding procedures	P*	---->*	---->*	---->*			
5.4	Precision approach down to a decision height not less than 60 m (200 ft)	P*	---->*	---->*	---->*			
5.4.1	Manually, without flight director	P*	---->*	---->*	---->*		M*(Skill test only)	
5.4.2	Manually, with flight director	P*	---->*	---->*	---->*			

5.4.3	With use of autopilot	P*	~~---->*~~	~~---->*~~	~~---->*~~			
5.4.4	Manually, with one engine simulated inoperative; engine failure has to be simulated during final approach before passing the OM and continued to touchdown or until completion of the missed approach procedure	P*	~~---->*~~	~~---->*~~	~~---->*~~		M*	
5.5	Non-precision approach down to the MDA/H	P*	~~---->*~~	~~---->*~~	~~---->*~~		M*	
5.6	Go-around with all engines operating on reaching DA/H or MDA/MDH	P*	~~---->*~~	~~---->*~~	~~---->*~~			
5.6.1	Other missed approach procedures	P*	~~---->*~~	~~---->*~~	~~---->*~~			
5.6.2	Go-around with one engine simulated inoperative on reaching DA/H or MDA/MDH	P*					M*	
5.7	Recovery from unusual attitudes(this one depends on the quality of the FFS)	P*	~~---->*~~	~~---->*~~	~~---->*~~		M*	
~~SECTION 6 — Additional authorisation on a type rating for instrument approaches down to a decision height of less than 60 m (200 ft) (CAT II/III)~~								
~~6~~	~~Additional authorisation on a type rating for instrument approaches down to a decision height of less than 60 m (200 ft) (CAT II/III).The following manoeuvres and procedures are the minimum training requirements to permit instrument approaches down to a DH of less than 60 m (200 ft). During the following instrument approaches and missed approach procedures, all airship equipment required for the type certification of instrument approaches down to a DH of less than 60 m (200 ft) shall be used.~~							
~~6.1~~	~~Rejected take-off at minimum authorised RVR~~	~~-~~	~~P~~	~~—>~~	~~-~~	~~-~~	~~M*~~	
~~6.2~~	~~ILS approaches:in simulated instrument flight conditions down to the applicable DH, using flight guidance system. SOPs of crew coordination shall be observed.~~	~~-~~	~~P~~	~~—>~~	~~-~~	~~-~~	~~M*~~	
~~6.3~~	~~Go-aroundAfter approaches as indicated in 6.2 on reaching DH.~~ ~~The training shall also include a go-around due to (simulated)~~	~~-~~	~~P~~	~~—>~~	~~-~~	~~-~~	~~M*~~	

	~~insufficient RVR, wind shear, aircraft deviation in excess of approach limits for a successful approach, ground/airborne equipment failure prior to reaching DH and, go-around with simulated airborne equipment failure.~~							
~~6.4~~	~~Landing(s):with visual reference established at DH following an instrument approach. Depending on the specific flight guidance system, an automatic landing shall be performed~~	~~-~~	~~P~~	~~---->~~	~~-~~	~~-~~	~~M*~~	
~~SECTION 7~~ SECTION 6— Optional equipment								
7	Use of optional equipment		P	---->