**CHECK LIST (A) TYPE RATING ATPL, MPL MPA-SP HPCA REV 21 OCT. 2019**

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| **logoENAC_engl** | **MULTI-PILOT AEROPLANES**  **and**  **SINGLE- PILOT HIGH-PERFORMANCE**  **COMPLEX AEROPLANES.**  **ATPL/MPL/TYPE RATING**  **SKILL TEST/ PROFICIENCY CHECK**  **CHECKLIST**  **Ref.: Appendix 9 reg. 1178/2011** | **ATPL MPL**  **SE ME IR**  **Type Rating M.P.**  **Type Rating S.P.H.P.**  **Proficiency Check**  **Training record**  **Skill test** |

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| **Cognome:**  *Applicant’s last name* | **Nome:**  *Applicant’s first name* | **Firma del richiedente**:  *Signature of applicant* |
| **Tipo di licenza:**  *Type of licence* | **Numero:**  *Number* | **Stato**:  *State* |

1. The following symbols mean:

P = Trained as PIC or Co-pilot and as PF and PM for the issue of 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 aircraft shall be used if appropriate for the manoeuvre or procedure.

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

1. 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 simulator training device

1. The starred items (\*) shall be flown solely by reference to instruments.
2. Where letter “M” appears in the skill test or proficiency check column, this will indicate a mandatory exercise.
3. 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:
4. the qualificationsof the instructors**;**
5. the qualification and the amount of training provided on the course in an FSTD; and
6. the qualifications and previous experience on similar types of the pilots under training.
7. Manoeuvres and procedures shall include MCC for multi-pilot aeroplane and for single-pilot high-performance complex aeroplanes in multi-pilot operations.
8. Manoeuvres and procedures shall be conducted in single-pilot role for single-pilot high-performance complex aeroplanes in single pilot operations.
9. 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 manoeuver/procedure from section 3.4 have to be completed in addition as single–pilot.
10. In the case of a restricted type rating issued in accordance with FCL.720.A(e), 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.
11. 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.

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| **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** | | | | | | |
| **1** | **Flight preparation** | | | | | |
| 1.1 | Performance calculation | OTD  P |  |  |  |  |
| 1.2 | Aeroplane ext. visual inspection; location of each item and purpose of inspection | OTD P# | P |  |  |  |
| 1.3 | Cockpit inspection | P……> | ……..> |  |  |  |
| 1.4 | Use of checklist prior to starting engines; starting procedures radio and navigation equipment check, selection and setting of navigation and communication frequencies | P……> | ……..> |  | M |  |
| 1.5 | Taxiing in compliance with ATC instructions or instructions of instructor | P……> | ……..> |  |  |  |
| 1.6 | Before take-off checks | P……> | ……..> |  | M |  |

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| **SECTION 2** | | | | | | |
| **2** | **Take-offs** | | | | | |
| 2.1 | Normal 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…...> | ……..> |  |  |  |
| 2.3 | Cross wind take-off | P…...> | ……..> |  |  |  |
| 2.4 | Take-off at maximum take off mass (actual or simulated maximum take-off mass) | P…...> | ……..> |  |  |  |
| **2.5** | **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 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 |  |
| 2.6 | Rejected take-off at a reasonable speed before reaching V1 | P…...> | ……..> |  | M |  |
| **SECTION 3** | | | | | | |
| **3** | **Flight Manoeuvres and Procedures** | | | | | |
| 3.1 | Manual flight with and without flight directors (no autopilot, no autothrust / autothrottle, and at different control laws, where applicable) | P…...> | ….….> |  |  |  |
| 3.1.1 | At different speeds (including slow flight) and altitudes within the FSTD training envelope | P…...> | ….….> |  |  |  |
| 3.1.2 | Steep turns using 45° bank, 180° to 360° left and right | P…...> | ….….> |  |  |  |
| 3.1.3 | Turns with and without spoilers | P…...> | ….….> |  |  |  |
| 3.1.4 | Procedural instrument flying and manoeuvring including instrument departure and arrival, and visual approach | P…...> | ….….> |  |  |  |
| 3.2 | Tuck under and Mach buffets (if applicable) and other specific flight characteristics of the aeroplane (e.g. Dutch Roll) | P…...> | ….….>X  An aeroplane shall not be used for this exercise |  | FFS only |  |
| 3.3 | Normal operation of systems and controls engineer’s panel (if applicable) | OTD  P……> | ……..> |  |  |  |
| **3.4** | **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 |
| 3.4.0 | Engine (if necessary propeller) | OTD  P……> | ……..> |  |  |  |
| 3.4.1 | Pressurization and air conditioning | OTD  P……> | ……..> |  |  |  |
| 3.4.2 | Pitot / static system | OTD  P……> | ……..> |  |  |  |
| 3.4.3 | Fuel system | OTD  P……> | ……..> |  |  |  |
| 3.4.4 | Electrical system | OTD  P……> | ……..> |  |  |  |
| 3.4.5 | Hydraulic system | OTD  P……> | ……..> |  |  |  |
| 3.4.6 | Flight control and trim system | OTD  P……> | ……..> |  |  |  |
| 3.4.7 | Anti-icing / de-icing system,  glare shield heating | OTD  P……> |  |  |  |  |

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| **Manoeuvres/Procedures** | | FSTD | A | Instructor  initials when training completed | Tested or checked in FSTD or A | Examiner  initials when  test or check completed |
| **SECTION 3 cont.** | | | | | | |
| 3.4.8 | Autopilot / Flight Director | OTD  P……> |  |  | M (single pilot only) |  |
| 3.4.9 | Stall warning devices or stall avoidance devices, and stability augmentation devices | OTD  P……> |  |  |  |  |
| 3.4.10 | Ground proximity warning system, weather radar, radio altimeter, transponder | P……> |  |  |  |  |
| 3.4.11 | Radios, navigation equipment, instruments, FMS | OTD  P……> |  |  |  |  |
| 3.4.12 | Landing gear and brake | OTD  P……> | ……..> |  |  |  |
| 3.4.13 | Slat and Flap system | OTD | ……..> |  |  |  |
| 3.4.14 | Auxiliary Power Unit (APU) | OTD  P……> | ……..> |  |  |  |
|  | Intentionally left blank |  |  |  |  |  |
| **3.6** | **Abnormal and Emergency Procedures** | | | | M | A mandatory minimum of 3 items shall be selected from 3.6.1 to 3.6.9 Inclusive |
| 3.6.1 | Fire drills e.g. Engine, APU, cabin, cargo compartment, flight deck, wing and electrical fires including evacuation | P…...> | ……..> |  |  |  |
| 3.6.2 | Smoke control and removal | P…...> | ……..> |  |  |  |
| 3.6.3 | Engine failures, shutdown and restart at a safe height | P…...> | ……..> |  |  |  |
| 3.6.4 | Fuel dumping (simulated) | P…...> | ……..> |  |  |  |
| 3.6.5 | Wind shear at take-off / landing | P | X |  | FFS only |  |
| 3.6.6 | Simulated cabin pressure failure / emergency descent | P…...> | ……..> |  |  |  |
| 3.6.7 | Incapacitation of flight crew member | P…...> | ……..> |  |  |  |
| 3.6.8 | Other emergency procedures as outlined in the appropriate aeroplane fight manual (AFM) | P…...> | ……..> |  |  |  |
| 3.6.9 | TCAS event | OTD  P……> | An aeroplane shall not be used |  | FFS only |  |
| **3.7** | **Upset recovery training** | | | | | |
| 3.7.1 | Recovery from stall events in:   * take-off configuration; * clean configuration at low altitude; * clean configuration near maximum operating altitude; and * landing configuration. | P  FFS  qualified for the training task only | X  An aeroplane shall not be used for this exercise |  |  |  |
| 3.7.2 | The following upset exercises:   * recovery from nose-high at various bank angles; and * recovery from nose-low at various bank angles. | P  FFS  qualified for the training task only | X  An aeroplane shall not be used for this exercise |  | FFS only |  |
| **3.8** | **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…...> | ……..> |  |  |  |

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| **Manoeuvres/Procedures** | | FSTD | A | Instructor  initials when training completed | Tested or checked in FSTD or A | Examiner  initials when  test or check completed |
| **SECTION 3 cont.** | | | | | | |
| 3.8.3.4\* | 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 through the complete missed approach procedure.  In aeroplanes which are not certificated as transport category (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 non-precision approach as described in 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 3.8.3.4. | P…...> | ……..> |  | M |  |
| 3.8.3.5\* | Manually, with one engine simulated inoperative; engine failure has to be simulated during final approach after passing the outer marker (OM) with a distance of not more than 4 NM until touchdown or through the complete missed approach procedure.  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 non-precision approaches described in 3.8.4. The go-around shall be initiated when reaching the published 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 3.8.3.4. | P…...> | ……..> |  | M |  |
| 3.8.4\* | 2D operations down to the MDH/A | P\*……> | ……..> |  | M |  |
| 3.8.5 | Circling approach under the following conditions:   1. \* 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:   1. circling approach to another runway at least 90° off centreline from the final approach used in item (a), at the authorised minimum circling approach altitude.   Remark: if (a) and (b) are not possible due ATC reasons, a simulated low visibility pattern may be performed. | P\*……> | ……..> |  |  |  |
| 3.8.6 | Visual approaches | P……> | ……..> |  |  |  |

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| **SECTION 4** | | | | | | | | | |
| **4** | **Missed Approach Procedures** | | P\*……> | | ……..> |  | |  |  |
| 4.1 | Go-around with all engines operating\* during a 3D operation on reaching decision height | | P\*……> | | ……..> |  | |  |  |
| 4.2 | Go-around with all engines operating\* from various stages during an instrument approach | | P\*……> | | ……..> |  | |  |  |
| 4.3 | 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 |  |
| 4.5 | 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 aeroplane (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** | | | | | | | | | |
| **5** | **Landings** | | | | | | | | |
| 5.1 | Normal landings\* with visual reference established when reaching DA/H following an instrument approach operation | | P | |  |  | |  |  |
| 5.2 | Landing with simulated jammed horizontal stabiliser in any out-of-trim position | | P……> | | An aeroplane shall not be used for this exercise |  | | FFS only |  |
| 5.3 | Crosswind landings (aircraft, if practicable) | | P……> | | ……..> |  | |  |  |
| 5.4 | Traffic pattern and landing without extended or with partly extended flaps and slats. | | P……> | | ……..> |  | |  |  |
| 5.5 | Landing with critical engine simulated inoperative | | P……> | | ……..> |  | | M |  |
| 5.6 | Landing with two engines inoperative:   * aeroplanes with three engines: the centre engine and one outboard engine as far as practicable according to data of the AFM ; and * aeroplanes with four engines: two engines at one side. | | P | | X |  | | M  FFS only (Skill test only |  |
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|  |  | |  | |  |  | |  |  |
| Signature of T.R.I.  (as applicable) | |  | | Name of T.R.I.  (as applicable) | | |  | | |
| Location and date: | |  | | Type & number of Licence | | |  | | |
| Signature of T.R.E. | |  | | Name of T.R.E. | | |  | | |
| Location and date: | |  | | Type & number of Examiner Licence | | |  | | |
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| **Manoeuvres/Procedures** | | | FSTD | | A | Instructor  initials when training completed | | Tested or checked in FSTD or A | Examiner  initials when  test or check completed |
| *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 authorization 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\*……> | | …….X  An 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 guidance system, an automatic landing shall be performed. | | P……> | | ……..> |  | | M |  |
| *NOTE: CAT II/III operations shall be accomplished in accordance with the applicable air operations requirements.* | | | | | | | | | |
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| Signature of T.R.I. | |  | | Name of T.R.I. | | |  | | |
| Location and date: | |  | | Type & number of Licence | | |  | | |
| Signature of T.R.E. | |  | | Name of T.R.E. | | |  | | |
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