European Aviation Safety Agency

Notice of Proposed Amendment 2014-29 (C)(3)

Amendments to Commission Regulation (EU) No 1178/2011 (the Aircrew Regulation)

Flight Examiner Manual
Module 8, Chapter 1 & Module 9, Chapter 1

RMT.0188 (FCL.002(a)) & RMT.0189 (FCL.002(b)) — 17.12.2014

EXECUTIVE SUMMARY

This Notice of Proposed Amendment (NPA) addresses a safety and regulatory coordination issue related to flight crew licensing.

The main objective of this NPA is to introduce the long syllabus and Learning Objectives (LOs) for professional licences and instrument ratings in the EASA regulatory system.

The NPA also aims to resolve any inconsistencies identified after the adoption of the FCL Implementing Rules. This is necessary to ensure that the EASA regulatory system reflects the state of the art, and specifically the best practices developed in the Member States, in the field of pilot training.

The following Safety Recommendations were taken into consideration for the development of this NPA: SR AUST-2012-006, SR BELG-2010-010, SR UNKG-2006-130, SR SWED-2010-008, SR SWED-2012-006, SR FRAN-2013-033, SR FRAN-2013-035 and SR FRAN-2013-017.

The specific objective of this NPA is to maintain a high level of safety for flight crews, to ensure harmonised implementation of the Aircrew Regulation, and to consider at all levels the importance of General Aviation issues.

— **NPA 2014-29 (A)** contains the Explanatory Note and the changes to the rule text of 'Annex I — Part-FCL', 'Annex II — Conditions for the conversion of existing national licences and ratings for aeroplanes and helicopters', and 'Annex III — Conditions for the acceptance of licences issued by or on behalf of third countries'.

Due to the number of the proposed changes and the complexity of the text that was amended twice after its initial publication, the decision was taken to base the NPA on the amended text and to publish the changes to Annexes I, II and III in a consolidated version.

— **NPA 2014-29 (B)** contains the changes to the existing AMC and GM text.

— **NPAs 2014-29 (C)(1), (C)(2) and (C)(3)** contain the new AMC with the Flight Examiner Manual (FEM).

— **NPAs 2014-29 (D)(1) and (D)(2)** contain the new AMC with the Learning Objectives (LOs).

The proposed changes are expected to increase safety, reduce regulatory burden on Member States, improve harmonisation, ensure compliance with ICAO, and improve proportionality of the rules for General Aviation by applying the principles of the 'General Aviation Road Map'.

As indicated above, NPA 2014-29 (C)(3) contains the third part of the FEM. For the Explanatory Note, please refer to NPA 2014-29 (A).

Applicability	
Affected regulations and decisions:	Commission Regulation (EU) No 1178/2011, as amended; ED Decision 2011/016/R, as amended.
Affected stakeholders:	Pilots; training organisations; instructors; examiners; national competent authorities.
Driver/origin:	Safety; level playing field; proportionality; RMT FCL.001.
Reference:	EASA NPA 2008-17 'Implementing Rules for Pilot Licensing'.

Process map	
Concept Paper:	No
Terms of Reference:	21.7.2011
Rulemaking group:	Yes
RIA type:	None
Technical consultation during NPA drafting:	Yes
Duration of NPA consultation:	3 months
Review group:	TBD
Focussed consultation:	No
Publication date of the Opinion:	2015/Q4
Publication date of the Decision:	2015/Q4

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Flight Examiner Manual

8. Module 8 — Test standards, class/type ratings, and proficiency checks: Aeroplanes

Introduction

Module 8 deals with the conduct of tests and checks for the issue, revalidation, and renewal of single-pilot, single-engine, and multi-engine aeroplane class/type ratings. When a class rating test or check includes an instrument rating test or check, the examiner should also refer to **Module 1 'Common requirements'.**

8.1. Chapter 1 — Class ratings: Aeroplanes

8.1.1. Who may test

A CRE if:

8.1.1.1. the applicant's licence has been issued by the same competent authority as the examiner's; or

8.1.1.2. in the case of an applicant whose competent authority is not the same one that issued the examiner certificate, the examiner shall have reviewed the latest available information containing the relevant national procedures of the applicant's competent authority.

8.1.2. Conduct of test/check

General

An applicant for a test or check shall have received instruction on the same class of aircraft to be used in the test or check.

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

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

The applicant should complete all items at attempt number one prior to retesting any item (attempt number two). When conducting the test/check in an aircraft, it may be inappropriate or impossible to complete the first attempt due to ATC or external influences. This would not be appropriate or required during simulator testing.

The examiner may choose between different test or proficiency check scenarios containing simulated relevant operations developed and approved by the competent authority.

The test/proficiency check format for the test/check is intended to simulate a practical flight. Planning and preparation must be completed by the applicant using routine planning material in accordance with normal operating procedures. In flight, the applicant must use the approved charts and plates.

Tests and proficiency checks must not be conducted on a flight for the purpose of commercial air transport or public transport of passengers.

During pre-flight preparation for the test, the applicant is required to determine power settings and speeds. The applicant 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, if applicable. Performance data for take-off, approach, and landing shall be calculated by the applicant in compliance with the Flight manual or other appropriate document for the aircraft used. When conducting the test or check in an aeroplane, all appropriate safety parameters shall be agreed with the examiner.

During the proficiency check, the examiner shall verify that the holder of the class rating maintains an adequate level of theoretical knowledge.

Should the applicant choose to terminate a test or check for reasons considered inadequate by the examiner, the applicant shall retake the entire test or check. If the test is terminated for reasons considered adequate by the examiner, only those sections not completed shall be tested in a further flight.

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

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

In the case of single-pilot operations, the examiner shall take no part in the operation of the aircraft except where intervention is necessary in the interest of safety or to avoid unacceptable delay to other traffic.

The following matters shall be specifically checked by the examiner:

(a) maintaining a general overview of the aircraft operation by appropriate supervision;

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

(c) management of crew cooperation.

The test/check should be accomplished under IFR, 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.

8.1.3. Flight test tolerances

The applicant shall demonstrate the ability to:

(a) operate the aircraft within its limitations;

(b) complete all manoeuvres with smoothness and accuracy;

(c) exercise good judgment and airmanship;

(d) apply aeronautical knowledge;

(e) maintain control of the aircraft at all times in such a manner that the successful outcome of a procedure or manoeuvre is always assured;

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

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

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 feet;

— starting a go-around at decision height: + 50 feet/– 0 feet;

— minimum descent height/altitude: + 50 feet/– 0 feet.

Tracking:

— on radio aids: ± 5 degrees;

— precision approach: half-scale deflection, azimuth, and glide path.

Heading:

— all engines operating: ± 5 degrees;

— with simulated engine failure: ± 10 degrees.

Speed:

— all engines operating: ± 5 knots;

— with simulated engine failure: + 10 knots/– 5 knots.

APV Baro final approach segment:

— + 100 feet/– 50 feet, or as defined in the Flight manual or other appropriate document.

PBN RNAV (GNSS) NPA and APV Baro approach:

— on radio aids: ± 5 degrees;

— for angular deviations: half-scale deflection, azimuth, and glide path (e.g. LPV, ILS, MLS, GLS, etc.);

— for linear lateral deviations: < RNP value (e.g. RNP APCH(LNAV));

— for linear vertical deviations (e.g. RNP APCH (LNAV/VNAV) using Baro VNAV): not more than – 75 feet below the vertical profile, and not more than + 75 feet above the vertical profile at or below 700 feet above the aerodrome level.

8.1.4. Content of the test or check

The content of the test or check shall comply with Appendix 9 to Part-FCL.

The items marked '[M]' (i.e. mandatory) in Appendix 9 to Part-FCL show the minimum practical exercise that must be tested. The applicant may be required to complete any of the manoeuvres/procedures detailed in Appendix 9 to Part-FCL to the required standard. At their discretion, the examiner may select additional items from the 'practical training' to be tested. If additional items are to be included in the test or check, they must be briefed, although it is not necessary to be prescriptive.

8.1.5. Detailed testing/checking standards

The tables in this Module give practical guidance on the criteria to be considered by the examiner when assessing each item of Appendix 9 to Part-FCL.

The phase-of-flight headings are:

1. Section 1 Departure
2. Section 2 Airwork (VFR)
3. Section 3A En route VFR procedures-airwork (VMC)
4. Section 3B Instrument flight
5. Section 4 Arrivals and landings
6. Section 5 Abnormal and emergency procedures
7. Section 6 Simulated asymmetric flight

The table is separated into four rows as follows:

PHASE OF TEST OR CHECK	
Title of assessed item taken from the Part-FCL schedule	
OBJECTIVE	This cell describes the applicant's proficiency to be assessed by the examiner.
SKILL	This cell describes the competency elements that the applicant is required to demonstrate: — manual aircraft control; — effective flight path management through proper use of the flight management system guidance and automation; and — application of procedures.
KNOWLEDGE	This cell describes the knowledge required to meet the objectives.
ATTITUDE	This cell describes the competency elements encapsulated in airmanship, CRM, and threat and error management, such as: — situation awareness; — effective communication; — leadership and teamwork; — effective workload management; and — effective problem-solving and decision-making.
GENERAL	
In most phases of the flight there are competencies that apply to a group of manoeuvres, e.g. turns, or even to the whole phase. In order to avoid repetition, the common competencies are grouped under the 'General' item heading. Examiners must refer to both the 'General' heading criteria and to the criteria under the specific item being assessed, e.g. 'Turns — General', plus 'Steep turns' as the specific item. Multiple cell borders at the beginning and at the end of the group identify the group.	

Note: It is sometimes possible to place a competence in either of the two rows of the table, because physical skills, knowledge, etc., cannot always be clearly separated; this is not critical for assessments. The intention is to assist the examiner in identifying what competencies are required for satisfactory performance of a test item and to assist them in identifying why an applicant may have failed to achieve a pass in an item.

SECTION 1: DEPARTURE	
1.1. Pre-flight, including documentation, mass and balance, weather briefing, NOTAMs	
OBJECTIVE	To determine that the applicant: (a) is able to check aeroplane serviceability record and technical log; (b) is able to check that all required documents for the flight are carried and correct (including charts); (c) obtains and assesses all elements of the prevailing and forecast weather conditions; (d) completes mass-and-balance schedule and establishes performance criteria; (e) checks NOTAMs for factors likely to affect conduct of the flight; (f) is able to complete an appropriate flight navigation log, flight and fuel plan.
SKILL	To determine that the applicant demonstrates proficient use of performance charts, tables, graphs, or other data relating to items such as: (a) accelerate-stop distance; (b) accelerate-go distance; (c) take-off performance — all engines; (d) one engine inoperative; (e) climb performance, including climb performance with all engines operating, with one engine inoperative, and with other engine malfunctions as may be appropriate; (f) cruise performance; (g) fuel consumption, range, and endurance; (h) go-around from rejected landings; (i) operational factors affecting aircraft performance; (j) other performance data appropriate to the test aircraft; (k) airspeeds used during specific phases of flight; (l) effects of meteorological conditions upon performance characteristics, and correct application of these factors to a specific chart, table, graph or other performance data; (m) impact of relevant NOTAMs on conduct of the flight; (n) aircraft documentation and licensing requirements; (o) ensures that all required paperwork is correctly completed prior to the flight: flight navigation log, up-to-date maps and charts, flight plan, fuel plan, and that the aircraft is correctly fuelled for the flight.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) personal licence requirements and privileges; (b) the adverse effects of exceeding any limitation; (c) Flight Manual or other appropriate document chapters dedicated to: (1) limitations; (2) performance calculation in general; (3) performance calculation and associated procedures when specific conditions exist.

ATTITUDE	Situation awareness: — understands the responsibilities of proper pre-departure planning and preparations. Effective communication: — ensures appropriate and clear communication with all ground service personnel (ATC, dispatch, MET, catering). Leadership and teamwork: — cares for the safety of passengers, crew, and ground staff as applicable). Effective workload management: — provides sufficient time and manages the workload for departure procedures (including documentation) to be completed in an efficient manner. Effective problem-solving and decision-making: — makes appropriate decisions on all identified threats, and plans and implements suitable mitigatory actions.

1.2. Pre-start checks (includes 1.2.1. External, and 1.2.2. Internal)	
OBJECTIVE	To determine that the applicant is able to: (a) complete all elements of the aircraft and equipment pre-flight inspections as detailed in the Flight manual or other appropriate document.
SKILL	To determine that the applicant demonstrates proficient checking of the general area around the aircraft for hazards to the safety of the aircraft and persons: (a) takes the aircraft position into account; (b) confirms the operational status of the aircraft; (c) operates properly all applicable aircraft systems; (d) inspects the items which must be checked in accordance with the appropriate checklist; (e) identifies possible defects; (f) takes corrective action; (g) makes correct passenger and departure briefing; (h) performs all items up to start procedures by systematically following the checklist items.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) the required instruments and equipment for day VFR (night if applicable); (b) Flight Manual or other appropriate document chapters dedicated to: (1) limitations; (2) ground operations; (3) normal procedures; (4) abnormal and emergency procedures; (5) safety policy.

ATTITUDE	Situation awareness: — notes the position of the aircraft, any surrounding hazards, and location of emergency equipment; — considers the effects of engine start on the surrounding environment. Effective communication: — demonstrates correct crew communication (where applicable); — makes correct passenger and departure briefing. Leadership and teamwork: — demonstrates correct crew coordination (where applicable). Effective workload management: — confirms from the checklist that all pre-flight requirements have been addressed; — demonstrates an organised approach to performing inspection of aircraft and equipment. Effective problem-solving and decision-making: — identifies possible defects and threats; — takes corrective action.

1.3. Engine-starting — Normal and malfunctions	
OBJECTIVE	To determine that the applicant is able to correctly follow engine-starting procedures and takes the proper action required in the event of a malfunction in accordance with the Flight manual or other appropriate document.
SKILL	To determine that the applicant demonstrates all items of the engine-starting procedures by systematically following the checklist, confirms from the checklist correct engine start(s), and correctly applies abnormal engine procedures in the event of a malfunction.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to: — correct starting procedures under various atmospheric conditions; — normal and abnormal starting limitations; — proper action required in the event of a malfunction; — ground-safety procedures.
ATTITUDE	Situation awareness: — identifies potential problems when observing the start sequence, the conditions, and knows how to react. Effective communication: — demonstrates correct crew and ground staff communication (where applicable). Leadership and teamwork: — demonstrates correct crew and ground staff coordination (where applicable). Effective workload management: — confirms from the checklist correct engine start(s). Effective problem-solving and decision-making: — applies correct procedures to resolve start malfunctions.

1.4. Taxiing	
OBJECTIVE	To determine that the applicant is able to : (a) apply all recommended taxiing checks and procedures; (b) demonstrate compliance with ATC instructions, airport markings, and signals.
SKILL	To determine that the applicant demonstrates the following: (a) obtains appropriate clearance before taxiing and before crossing/entering active runways; (b) complies with instructions issued by ATC; (c) maintains correct and positive aircraft control; (d) gives due consideration to environmental conditions (e.g. surface wind, contamination, surface condition, etc.); (e) maintains proper spacing on other aircraft, obstructions, and persons; (f) accomplishes the applicable briefing/checklist items, and performs recommended procedures.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to the understanding of the need to correctly perform the taxi checks, as well as knowledge and understanding of the following: (a) runway hold lines and stop-bar lighting as applicable; (b) localiser and glide slope critical areas; (c) beacons and other surface control markings and lighting; (d) taxi speeds; (e) rules and procedures in the event of loss of communication (priority, lighting signals); (f) rules for manoeuvring in reduced meteorological conditions.
ATTITUDE	Situation awareness: — maintains constant vigilance and lookout during taxi operation; — uses headings in poor-visibility conditions to confirm the path; — maintains awareness of taxi speeds appropriate to the conditions and limitations. Effective communication: — demonstrates correct crew and ATC communication (where applicable). Leadership and teamwork: — demonstrates correct crew coordination (where applicable). Effective workload management: — divides attention properly inside and outside the cockpit. Effective problem-solving and decision-making: — stops the aircraft to check position when in doubt; — assesses major risks: collision with other aircraft, obstacles, and aircraft security.

1.5. Pre-departure checks — Engine run-up (if applicable)	
OBJECTIVE	To determine that the applicant is able to ensure that all systems are within the normal operating range and that the aircraft is correctly configured for departure; to complete all departure checks and drills including engine operation; to obtain and comply with ATC departure clearance; and to determine that the aircraft's planned take-off performance remains valid, considering current environmental conditions, such as wind direction and strength, and runway condition.
SKILL	To determine that the applicant is able to verify that instruments and navigation aids are tuned and ready for use by: (a) ensuring that checklists are completed; (b) ensuring that the aircraft and its systems are checked and ready for departure; (c) confirming that performance is met; (d) verifying engine malfunction routing; (e) ensuring the cleared departure route can be achieved, and verifies cleared or planned level of altitudes.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to the understanding of the need to correctly perform the pre-departure checks, as well as understanding of the following: (a) the reason for checking the items outlined in the checklist; (b) how to detect possible malfunctions; (c) aeronautical charts and topographical maps; (d) Flight Manual or other appropriate document chapters dedicated to: (1) limitations; (2) normal procedures; (3) abnormal and emergency procedures; (4) performances.
ATTITUDE	Situation awareness: — position (e.g. engine slipstream) and status of aircraft (e.g. use of brakes) during engine run-up; — demonstrates awareness of changing environmental conditions, surface conditions, obstructions or other hazards that might hinder a safe take-off. Effective communication: — demonstrates effective crew communication (as applicable). Leadership and teamwork: — demonstrates effective crew coordination (as applicable). Effective workload management: — divides attention properly inside and outside the cockpit. Effective problem-solving and decision-making: — determines if the aircraft is safe for the proposed flight; — makes appropriate decisions to mitigate the potential effect of changing conditions on the aircraft performance prior to take-off (e.g. flaps position, weather condition, etc.).

1.6. Take-off procedures — Normal with Flight manual or other appropriate document settings — Crosswind (if conditions available)	
OBJECTIVE	To determine that that the applicant is able to perform a safe take-off in compliance with ATC clearance and within the Flight manual or other appropriate document limits taking into account environmental conditions.
SKILL	To determine that the applicant demonstrates the following: (a) obtains appropriate take-off clearance using standard R/T phraseology; (b) performs all the required pre-take-off checks (including visually scanning for other aircraft); (c) positions the aircraft correctly for take-off taking into account any crosswind condition; (d) applies the controls correctly to maintain longitudinal alignment on the centre line of the runway prior to initiating and during the take-off; (e) sets the throttle(s) to take-off power with appropriate checks (e.g. verifies the expected engine performance, and monitors engine controls, settings, and instruments during take-off to ensure that all predetermined parameters are maintained); (f) uses the correct take-off technique by using the recommended speeds for rotation, lift-off, and initial climb; (g) adjusts the controls to attain the desired pitch attitude at the predetermined airspeed to obtain the desired performance; (h) ensures a safe climb and departure in accordance with clearance and with due regard to other air traffic, as well as noise-abatement and wake-turbulence avoidance procedures by adjusting power and aircraft configuration and maintaining the desired path (or heading) as appropriate; (i) completes all the necessary post-take-off checks, performs or calls for and verifies the accomplishment of landing gear and flap retractions, power adjustments, and other required pilot-related activities at the required airspeeds within the tolerances established in the Pilot Operating Manual or AFM.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) Flight Manual or other appropriate document chapters dedicated to: (1) limitations; (2) normal procedures (understands different techniques dependent on varying flap settings and environmental conditions); (3) abnormal and emergency procedures; (4) performances; (b) applicable rules relating to wake-turbulence separation.

ATTITUDE	Situation awareness: — monitors engine parameters for any deviations; — monitors aircraft acceleration during take-off; — monitors aircraft ground and flight path at all stages of the take-off procedure; — is aware of position and flight path in relation to other aircraft. Effective communication: — demonstrates effective crew communication (as applicable). Leadership and teamwork: — demonstrates effective crew coordination (as applicable). Effective problem-solving and decision-making: — correctly assesses take-off and climb hazards particularly those related to other aircraft, aerodrome infrastructure, obstacles, and weather, and has a strategy to mitigate the threats.

1.7. Climbing — Vx/Vy — Turns onto headings — Level off	
OBJECTIVE	To determine that the applicant is able to: (a) achieve target speeds and headings; (b) comply with ATC instructions, and use correct lookout techniques; (c) complete all necessary climb checks.
SKILL	To determine that the applicant demonstrates the following: (a) transits to climb power-setting and pitch attitude, on an assigned heading, by using proper instrument cross-checks and interpretation, and coordinated control application; (b) climbs at the correct airspeed to assigned altitudes/levels, in straight flight, and whilst turning onto specific headings; (c) levels off at the assigned altitude or level, and establishes straight and level cruise.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) Flight Manual or other appropriate document chapters dedicated to: (1) limitations; (2) normal procedures (understands different techniques dependent on varying flap settings and environmental conditions); (3) appropriate pitch, power, and speeds to achieve Vx/Vy; (4) performances; (b) procedures related to altimeter-setting as appropriate to the level change required.
ATTITUDE	Situation awareness: — maintains appropriate lookout (aircraft/terrain). Effective communication: — uses correct ATC phraseology for level-change requests and instructions from ATC. Effective workload management: — monitors and maintains the correct profile for the climb.

1.8. ATC liaison — Compliance, R/T procedures	
OBJECTIVE	To determine that the applicant is able to: (a) use standard RTF procedures and phraseology; (b) demonstrate compliance with ATC instructions.
SKILL	To determine that the applicant demonstrates the following: (a) sets the appropriate communication and navigation frequencies; (b) sets transponder codes in compliance with the ATC clearance; (c) establishes communications with ATC using proper phraseology; (d) uses standard phraseology when reading back clearance; (e) determines that it is possible to comply with ATC clearance; (f) complies, in a timely manner, with all ATC clearances, instructions, and restrictions; (g) clarifies any possible confusion.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) standard ICAO phraseology and national differences; (b) pilot–controller responsibilities including tower, en route, and appropriate clearances; (c) and demonstrates adequate knowledge of R/T failure procedures.
ATTITUDE	Situation awareness: — establishes communication with ATC on the correct frequencies and at the appropriate times. Effective communication: — reads back correctly, in a timely manner, the ATC clearance in the sequence received. Leadership and teamwork: — demonstrates correct crew coordination (where applicable). Effective workload management: — copies correctly, in a timely manner, the ATC clearance as issued. Effective problem-solving and decision-making: — interprets correctly the ATC clearance received and, when necessary, requests clarification, verification, or change.

SECTION 2: AIRWORK (VFR)	
2.1. Straight and level flight at various airspeeds including flight at very slow airspeed with and without flaps (including approach to Vmca when applicable)	
OBJECTIVE	To determine that the applicant is able to: (a) demonstrate control by visual attitude whilst maintaining a correct lookout technique; (b) demonstrate correct technique for visual flight manoeuvring within the specified limits, and maintains balanced and trimmed flight. **Slow flight:** (a) considers all safety checks before the manoeuvres, where necessary; (b) selects and stabilises the aircraft at a nominated low airspeed above the stall speed whilst maintaining balance, trim, and lookout; (c) maintains specified altitude/level, heading, and speed as specified by the examiner; (d) maintains safe bank angles, speed, and altitude (if required) during turning, and completes turns onto specified headings.
SKILL	To determine that the applicant demonstrates the following: (a) maintains altitude, heading, and balance by visual references (and solely by reference to instruments, if applicable to flight) using correct instrument confirmation and coordinated control application; (b) maintains altitude, heading, and balance whilst accelerating/decelerating to specific speeds as determined by the Flight manual or other appropriate document or as specified by the examiner; (c) maintains altitude, heading, and balance at different airspeeds, power settings, and configurations as determined by the Flight manual or other appropriate document or as specified by the examiner. **Slow flight:** (a) recognises critically low airspeed; (b) establishes the recommended configuration and airspeed, and maintains that airspeed and desired heading; (c) controls aircraft smoothly within its limitations.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) the procedures for controlling the aircraft in accordance with the Pilot Operating Manual/AFM and Operations Manual, as appropriate. **Slow flight:** (a) takes action in accordance with the Flight manual or other appropriate document.

ATTITUDE	**Slow flight:** Situation awareness: — maintains adequate lookout before, during, and after the execution of any manoeuvre by visual references; — demonstrates orientation throughout the manoeuvres. Effective communication: — demonstrates correct crew communication and coordination appropriate to the type of operation (MPA). Effective workload management: — divides attention properly inside and outside the cockpit. Effective problem-solving and decision-making: — reacts to unexpected departure from slow-flight attitude.

2.2. Steep turns (360 degrees left and right at 45-degree bank)	
OBJECTIVE	To determine that the applicant is able to: (a) demonstrate thorough lookout to clear the airspace before, during, and after the turns; (b) roll into a coordinated turn with a bank angle of not less than 45 degrees; (c) maintain a stable, balanced turn through at least 360 degrees; (d) establish and maintain bank, angle, speed, and height by using smooth, coordinated control inputs; (e) roll out of the turn and stabilise the aircraft in straight and level flight on a specified heading.
SKILL	To determine that the applicant demonstrates the following: (a) selects a safe height as recommended by the manufacturer, training syllabus or other training directive, or as agreed upon with the examiner; (b) establishes the recommended entry airspeed in straight and level flight; (c) rolls into a coordinated turn of 360 degrees with a bank angle of not less than 45 degrees, and maintains the bank angle in a stable, balanced turn; (d) applies smooth, coordinated pitch, bank, and power adjustments to maintain the specified altitude, attitude, and airspeed; (e) avoids any indication of an approaching stall, abnormal flight attitude, or exceeding any structural or operating limitation during any part of the manoeuvre; (f) rolls out of the turn, stabilises the aircraft in straight and level flight or, at the discretion of the examiner, reverses the direction of turn and repeats the manoeuvre in the opposite direction; (g) recovers accurately onto the desired heading and at the desired airspeed for straight and level flight.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) the procedures for controlling the aircraft with/without automatic flight control systems, in accordance with the Flight Manual or other appropriate document, as required.

ATTITUDE	Situation awareness: — maintains adequate lookout before, during, and after turning by visual references; — demonstrates orientation throughout the manoeuvre. Effective communication: — communicates and coordinates with other flight crew members, as appropriate, for lookout (MPA). Effective workload management: — demonstrates orientation throughout the manoeuvre. Effective problem-solving and decision-making: — reacts to departure from stabilised steep-turn attitude.

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** **(iv) Approach to stall, climbing turn with take-off flap and climb power (single-engine only)**	
OBJECTIVE	To determine that the applicant is able to conduct appropriate safety checks before stalling: (a) establishes the required aircraft configuration and stall entry as appropriate from straight and level or manoeuvring flight; (b) maintains heading (or 10–30-degree bank angle, as required) to stall entry; (c) recognises the symptoms of stall or approaching stall, and initiates the correct recovery action; (d) recovers using the correct techniques and with minimum height loss to return to a clean configuration best-rate climb, or as otherwise directed by the examiner; (e) completes all necessary checks and drills; (f) maintains effective lookout throughout.
SKILL	To determine that the applicant demonstrates the following: (a) selects an entry altitude in accordance with the safety requirements. When accomplished in an FTD or flight simulator, the entry altitude may be at low, intermediate or high altitude as appropriate for the aircraft and the configuration, at the discretion of the examiner; (b) completes the appropriate pre-stalling checklist; (c) slowly establishes the pitch attitude (using trim or elevator/stabiliser), bank angle, and power setting that will induce stall at the desired target airspeed. Trim must not be used at less than 1.3 of Vs; (d) recognises and announces the first indication of a stall appropriate to the specific aircraft design, and initiates recovery as directed by the examiner; (e) recovers to a reference airspeed, altitude, and heading allowing only the acceptable altitude or airspeed loss and heading deviation by using the manufacturer's recommended technique; (f) demonstrates smooth, positive control during entry, approach to a stall, and recovery.

KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) limitations; (b) safety procedures before stall exercises; (c) stall-recovery procedures and techniques.
ATTITUDE	Situation awareness: — ensures that the aircraft is in a safe area and clear of hazards prior to accomplishing an approach to a stall. Effective communication: — communicates and coordinates with other flight crew members, as appropriate, for lookout (MPA). Effective workload management: — divides attention properly inside and outside the cockpit. Effective problem-solving and decision-making: — reacts appropriately to aircraft behaviour (i.e. wing drop).

2.4. Handling using autopilot and Flight Director (may be conducted in Section 3, if applicable)	
OBJECTIVE	To determine that the applicant is able to: (a) demonstrate the correct procedure for pre-flight functional check of autopilot and/or Flight Director; (b) demonstrate the correct operating procedure for autopilot and/or Flight Director in all modes.
SKILL	To determine that the applicant demonstrates safe control of the aircraft by: (a) correctly selecting the appropriate FD/AP modes; (b) crossing-checking the aircraft profile against the selected modes; (c) correctly using the cockpit checklist.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) the procedures for controlling the aircraft with automatic flight control systems in accordance with the Flight Manual or other appropriate document, as applicable.
ATTITUDE	Situation awareness: — maintains adequate scan rate before, during, and after the execution of any manoeuvre by reference to instruments and AP performance. Effective communication: — communicates and coordinates with other flight crew members, as appropriate, during the manoeuvre (MPA). Effective workload management: — uses autopilot to manage workload effectively. Effective problem-solving and decision-making: — reacts appropriately to any anomalies in AP behaviour.

2.5. ATC liaison — Compliance, R/T procedures	
OBJECTIVE	To determine that the applicant is able to: (a) obtain and maintain a suitable level of service from ATC; (b) listen, watch, and respond appropriately to messages/instructions/clearances from ATC.
SKILL	To determine that the applicant demonstrates and sets the appropriate communication and navigation frequencies and transponder codes in compliance with ATC clearance: (a) establishes communication with ATC using proper phraseology; (b) uses standard phraseology when reading back clearance; (c) determines that it is possible to comply with ATC clearance; (d) complies, in a timely manner, with all ATC clearances, instructions, and restrictions.

KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) standard ICAO phraseology; (b) pilot–controller responsibilities including tower and en route control, and appropriate clearances; (c) and demonstrates adequate knowledge of two-way communications failure procedures.
ATTITUDE	Situation awareness: — establishes communication with ATC on the correct frequencies and at the appropriate times. Effective communication: — reads back correctly, in a timely manner, the ATC clearance in the sequence received. Leadership and teamwork: — demonstrates correct crew coordination (where applicable). Effective workload management: — copies correctly, in a timely manner, the ATC clearance as issued. Effective problem-solving and decision-making: — interprets correctly the ATC clearance received and, when necessary, requests clarification, verification, or change.

SECTION 3A: EN ROUTE VFR PROCEDURES-AIRWORK (VMC) (SEE NOTES B.5(C) AND (D))	
3A.1. Flight plan, dead reckoning, and map-reading	
OBJECTIVE	To determine that the applicant is able to: (a) demonstrate that if submitted, the flight plan and clearance are completed correctly and clearances are complied with; (b) demonstrate dead reckoning and map-reading.
SKILL	To determine that the applicant demonstrates the following: (a) uses the appropriate and current aeronautical charts; (b) extracts and records pertinent information from NOTAMs, the aerodrome/facility directory, and other flight publications; (c) plots a course for the intended route of flight; (d) identifies airspace, obstructions, and terrain features; (e) selects easily identifiable en route checkpoints; (f) selects the most favourable altitudes; (g) computes headings, flight time, and fuel requirements; (h) selects appropriate navigation systems/facilities and communication frequencies; (i) confirms availability of alternate aerodromes; (j) completes a navigation log and files a VFR flight plan.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) weather reports and forecasts; (b) pilot and radar reports; (c) surface-analysis charts; (d) radar-summary charts; (e) significant weather prognostics; (f) winds and temperatures aloft; (g) freezing-level charts; (h) stability charts; (i) severe weather outlook charts; (j) tables and conversion graphs; (k) SIGMETs; (l) ATIS and VOLMET reports; (m) NOTAM abbreviation and decoding; (n) charts; (o) airspace.

ATTITUDE	Situation awareness: — establishes communication with ATC on the correct frequencies and at the appropriate times; — identifies airspace, obstructions, and terrain features. Effective communication: — reads back correctly, in a timely manner, the ATC clearance in the sequence received; — demonstrates correct crew communication (where applicable). Leadership and teamwork: — demonstrates correct crew coordination (where applicable). Effective workload management: — selects appropriate navigation systems/facilities and communication frequencies. Effective problem-solving and decision-making: — deals with unexpected navigation errors or system malfunctions.

3A.2. Maintenance of altitude, heading, and speed	
OBJECTIVE	To determine that the applicant is able to: (a) control the aircraft using visual attitude flying techniques; (b) configure airframe and engine(s) for cruise or endurance performance in accordance with the approved checklist or the Flight manual or other appropriate document; (c) maintain heading, height, and speed as computed in the navigation log or as advised to the examiner within the prescribed limits; (d) adjust and monitor fuel consumption for range or endurance, as appropriate.
SKILL	To determine that the applicant demonstrates the following: (a) follows the pre-planned track solely by reference to landmarks; (b) identifies landmarks by relating surface features to chart symbols; (c) navigates by means of pre-computed headings, ground speed, and elapsed time; (d) uses correct altimetry procedures; (e) verifies the aircraft's position in relation to the flight-planned route; (f) correctly assesses track error and makes suitable adjustments to heading; (g) corrects and records the differences between pre-flight fuel, ground speed, heading and time calculations and those determined en route; (h) completes all the appropriate checklists.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) national (EU) VFR rules.

ATTITUDE	Situation awareness: — establishes communication with ATC on the correct frequencies and at the appropriate times; — identifies airspace, obstructions, and terrain features. Effective communication: — reads back correctly, in a timely manner, the ATC clearance in the sequence received; — demonstrates correct crew communication (where applicable). Leadership and teamwork: — demonstrates correct crew coordination (where applicable). Effective workload management: — selects appropriate navigation systems/facilities and communication frequencies. Effective problem-solving and decision-making: — deals with unexpected navigation errors or system malfunctions.

3A.3. Orientation, timing, and revision of estimated time of arrival (ETA)	
OBJECTIVE	To determine that the applicant is able to correctly: (a) identify position visually by reference to ground features and map; (b) navigate by means of calculated headings, ground speed, and time; (c) reach destinations or turning points within 3 minutes of ETA; (d) calculate heading, ground speed, ETA, and fuel required during any unscheduled diversion; (e) amend plan to avoid deteriorating weather and maintain VMC, or consider discontinuing navigation route if unable to maintain VMC.
SKILL	To determine that the applicant demonstrates: (a) arrival at the en route checkpoints and at destination at the revised ETA.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) techniques for adjusting leg timings and ETAs.

ATTITUDE	Situation awareness: — establishes communication with ATC on the correct frequencies and at the appropriate times; — identifies airspace, obstructions, and terrain features. Effective communication: — reads back correctly, in a timely manner, the ATC clearance in the sequence received; — demonstrates correct crew communication (where applicable). Leadership and teamwork: — demonstrates correct crew coordination (where applicable). Effective workload management: — selects appropriate navigation systems/facilities and communication frequencies. Effective problem-solving and decision-making: — deals with unexpected navigation errors or system malfunctions.

3A.4. Use of radio navigation aids (if applicable)	
OBJECTIVE	To determine that the applicant is able to: (a) select, identify, and interpret position/navigation information from the appropriate ground-based radio and navigation aids or from GPS information as required or nominated by the examiner; (b) intercept and maintain given tracks or radials, or navigate to designated waypoints (VFR) using the navigation aids nominated by the examiner; (c) maintain heading, height, and speed within the prescribed limits.
SKILL	To determine that the applicant demonstrates the following: (a) selects, identifies, and checks the appropriate navigation system/facility; (b) locates the aircraft's position using radials, bearing (QDM/QDR), DME range or coordinates, as appropriate; (c) intercepts and tracks a given radial or bearing (QDM/QDR), if appropriate; (d) recognises and describes the indication of station passage, if appropriate; (e) recognises signal loss and takes appropriate action.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to operating manual chapters dedicated to: (a) navigation systems.

ATTITUDE	Situation awareness: — establishes communication with ATC on the correct frequencies and at the appropriate times; — identifies airspace, obstructions, and terrain features. Effective communication: — reads back correctly, in a timely manner, the ATC clearance in the sequence received; — demonstrates correct crew communication (where applicable). Leadership and teamwork: — demonstrates correct crew coordination (where applicable). Effective workload management: — selects appropriate navigation systems/facilities and communication frequencies. Effective problem-solving and decision-making: — deals with unexpected navigation errors or system malfunctions.

3A.5. Flight management (flight log, routine checks, including fuel, systems, and icing)	
OBJECTIVE	To determine that that the applicant is able to: (a) complete all elements of VFR planning for the route prescribed with particular reference to planned tracks, altitudes, and safe levels of operation; (b) maintain a navigation log and radio log by recording sufficient information such that the route may be reconstructed if necessary after the flight; (c) monitor engine and aircraft systems throughout the flight; (d) monitor fuel consumption versus fuel available and fuel required throughout the flight.
SKILL	To determine that the applicant demonstrates the following: (a) follows the pre-planned track solely by reference to landmarks; (b) identifies landmarks by relating surface features to chart symbols; (c) navigates by means of pre-computed headings, ground speed, and elapsed time; (d) uses correct altimetry procedures; (e) verifies the aircraft's position in relation to the flight-planned route; (f) correctly assesses track error and makes suitable adjustments to heading; (g) corrects and records the differences between pre-flight fuel, ground speed, heading and time calculations and those determined en route; (h) completes all appropriate checklists.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) national (EU) VFR rules.
ATTITUDE	Situation awareness: — establishes communication with ATC on the correct frequencies and at the appropriate times; — identifies airspace, obstructions, and terrain features. Effective communication: — reads back correctly, in a timely manner, the ATC clearance in the sequence received; — demonstrates correct crew communication (where applicable). Leadership and teamwork: — demonstrates correct crew coordination (where applicable). Effective workload management: — selects appropriate navigation systems/facilities and communication frequencies. Effective problem-solving and decision-making. — deals with unexpected navigation errors or system malfunctions.

3A.6. ATC liaison — Compliance, R/T procedures	
OBJECTIVE	To determine that the applicant is able to: (a) set and cross-check altimeters to the most appropriate pressure setting in accordance with national regulations or as required by the checklist, the Flight manual or other appropriate document or ATC; (b) use correct and standard RTF phraseology throughout; (c) where appropriate, obtain ATC clearances and the appropriate level of service; (d) where required, comply with ATC clearances and instructions; (e) exhibits sound airmanship, flight management, and decision-making; (f) complete all necessary checks and drills.
SKILL	To determine that the applicant demonstrates the following: (a) sets the appropriate communication and navigation frequencies and transponder codes in compliance with ATC clearance; (b) establishes communication with ATC using proper phraseology; (c) uses standard phraseology when reading back clearance; (d) determines that it is possible to comply with ATC clearance; (e) complies, in a timely manner, with all ATC clearances, instructions, and restrictions.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) standard ICAO phraseology; (b) pilot/controller responsibilities including tower and en route control, and appropriate clearances; (c) and demonstrates adequate knowledge of two-way communications failure procedures.
ATTITUDE	Situation awareness: — establishes communication with ATC on the correct frequencies and at the appropriate times. Effective communication: — reads back correctly, in a timely manner, the ATC clearance in the sequence received. Leadership and teamwork: — demonstrates correct crew coordination (where applicable). Effective workload management: — copies correctly, in a timely manner, the ATC clearance as issued. Effective problem-solving and decision-making: — interprets correctly the ATC clearance received and, when necessary, requests clarification, verification, or change.

SECTION 3B: INSTRUMENT FLIGHT	
3B.1. Departure IFR	
OBJECTIVE	To determine that the applicant: (a) in addition to pre-flight planning as described at Section 1 above, is able to perform the IFR planning required for the route to be flown. Additionally, the applicant is able to: (b) perform take-off in accordance with the performance calculations using the correct techniques; (c) establish the climb, complete a smooth transition to instrument flight, and complete post-take-off checks and drills; (d) complete the Standard Instrument Departure (SID) procedure or follow the ATC departure instructions; (e) use the correct altimeter-setting procedure; (f) maintain aircraft control, speed, heading, level, and balance; (g) apply appropriate drift corrections to maintain published departure track, or as instructed by ATC; (h) identify any navigation aids used; (i) comply with any noise, routing or departure procedures and ATC clearances; (j) complete all necessary climb checks including altimeter-setting procedures and ice precaution.
SKILL	To determine that the applicant demonstrates the following: (a) uses the current and appropriate navigation publications for the proposed departure; (b) makes correct use of instruments, flight director, autopilot, navigation equipment, and communication equipment appropriate to the performance of the departure; (c) intercepts, in a timely manner, all courses, radials, and bearings (QDM/QDR) appropriate to the departure route, ATC clearance, or as directed by the examiner; (d) complies, in a timely manner, with all ATC clearances, instructions, and restrictions; (e) performs the aircraft briefing/checklist items appropriate to the departure; (f) adheres to airspeed restrictions and adjustments required by regulations, ATC, the Pilot Operating Manual, the AFM, and the examiner; (g) maintains the appropriate airspeed, altitude, and headings, and accurately tracks radials, courses, and bearing (QDM/QDR); (h) completes the appropriate checklist.

KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) basic Instrument-Rating knowledge; (b) proper ATC phraseology. Flight Manual or other appropriate document: (a) limitations; (b) normal procedures; (c) patterns; (d) two-way communications failure procedures; (e) communication, navigation, and autoflight systems. Flight Manual or other appropriate document regarding: (a) altimetry procedures, in accordance with the relevant regulations; (b) operational procedures and ATC requirements.
ATTITUDE	Situation awareness: — establishes communication with ATC on the correct frequencies and at the appropriate times. Effective communication: — reads back correctly, in a timely manner, the ATC clearance in the sequence received; — communicates with crew members as appropriate. Leadership and teamwork: — demonstrates correct crew coordination (where applicable). Effective workload management: — monitors to ensure that the flight profile complies with the cleared departure routing. Effective problem-solving and decision-making: — reacts to navigation errors or unexpected systems malfunctions.

3B.2. En route IFR	
OBJETIVE	To determine that the applicant is able to: (a) follow the flight-planned route or any other ATC route requirements within the operating limits specified; (b) identify and use navigation systems correctly; (c) use the correct altimeter-setting procedures and show awareness of MSA; (d) maintain a flight log for navigation, RTF, and fuel use, sufficient to give position reports and to confirm acceptable minimum fuel states; (e) conduct en route holding procedures if required by ATC; (f) monitor OAT and the aircraft surfaces for ice, and take the appropriate actions if necessary (this may be simulated if there is no actual icing); (g) use correct RTF procedures and phraseology.

SKILL	To determine that the applicant demonstrates the following: (a) uses current and appropriate navigation publications for the proposed flight; (b) makes correct use of instruments, flight director, autopilot, navigation equipment, and communication equipment appropriate to the performance of the procedure; (c) intercepts, in a timely manner, all courses, radials, and bearings (QDM/QDR) appropriate to the procedure, route, ATC clearance, or as directed by the examiner; (d) complies, in a timely manner, with all ATC clearances, instructions, and restrictions; (e) performs the aircraft briefing/checklist items appropriate to the arrival; (f) adheres to airspeed restrictions and adjustments required by regulations, ATC, the Pilot Operating Manual, the AFM, and the examiner; (g) complies with the provisions of the descent profile, STAR, and other arrival procedures, as appropriate; (h) establishes, where appropriate, a rate of descent consistent with the aircraft operating characteristics and safety; (i) maintains the appropriate airspeed, altitude, and headings, and accurately tracks radials, courses, and bearing (QDM/QDR); (j) completes the appropriate checklist.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) proper ATC phraseology; (b) demonstrates adequate knowledge of: (1) Flight Manual or other appropriate document regarding: — limitations; — patterns; — two-way communications failure procedures; — communication, navigation, and autoflight systems; (2) Flight Manual or other appropriate document policy regarding: — altimetry procedures, in accordance with the relevant regulations; — operational procedures and ATC requirements.
ATTITUDE	Situation awareness: — establishes communication with ATC on the correct frequencies and at the appropriate times. Effective communication: — reads back correctly, in a timely manner, the ATC clearance in the sequence received; — communicates with crew members as appropriate. Leadership and teamwork: — demonstrates correct crew coordination (where applicable). Effective workload management: — monitors to ensure that the flight profile complies with the cleared en route routing. Effective problem-solving and decision-making: — reacts to navigation errors or unexpected systems malfunctions.

3B.3. Holding procedures	
OBJECTIVE	To determine that the applicant is able to: (a) complete any holding procedure with the appropriate corrections to tracking and timing in order to achieve the published holding pattern.
SKILL	To determine that the applicant demonstrates the following: (a) makes appropriate adjustments in order to arrive over the holding fix as close as possible to the 'expected approach time'; (b) recognises arrival at the clearance limit or holding fix; (c) complies with ATC reporting requirements; (d) changes the recommended holding airspeed appropriate for the aircraft and holding altitude so as to cross the holding fix at or below the maximum holding airspeed; (e) follows the appropriate entry procedures in accordance with standard operational procedures or as required by ATC or the examiner; (f) uses the correct timing criteria where required by the holding procedure, ATC or the examiner's instructions; (g) uses wind-drift correction techniques accurately to maintain the appropriate joining and holding pattern, and to establish and maintain the correct tracks and bearings; (h) maintains the appropriate airspeed, altitude, and headings accurately to establish and maintain the correct tracks and bearings; (i) makes appropriate adjustments to the procedure timing to allow for the effects of known wind.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) holding endurance including but not necessarily limited to: (1) fuel on board; (2) fuel flow while holding; (3) fuel required to alternate, etc.
ATTITUDE	Situation awareness: — establishes communication with ATC on correct frequencies and at the appropriate times. Effective communication: — reads back correctly, in a timely manner, the ATC clearance in the sequence received; — communicates with crew members as appropriate. Leadership and teamwork: — demonstrates correct crew coordination (where applicable). Effective workload management: — monitors to ensure that the flight profile complies with the cleared holding pattern. Effective problem-solving and decision-making: — reacts to navigation errors or unexpected systems malfunctions.

3B.4. ILS to DH/A of 200 feet (60 metres) or to procedure minima (autopilot may be used to glide slope intercept)	
OBJECTIVE	To determine that the applicant is able to: (a) complete the checks and drills for landing and configure the aircraft correctly; (b) set and identify the relevant navigation aids; (c) set and cross-check the appropriate altimeter settings; (d) use the correct RTF procedures and terminology, and comply with all ATC instructions and clearances; (e) wherever possible, avoid disruption or inconvenience to other traffic; (f) confirm availability and serviceability of selected navigation equipment; (g) comply with the published arrival and precision-approach procedures; (h) establish the appropriate aircraft configuration and airspeed for the phase of the approach; (i) complete the necessary aircraft checks and drills; (j) complete the manoeuvring pattern as required to establish the final approach segment within the specified flight tolerances; (k) establish the final approach and maintain the approach path in horizontal and vertical profile to DH/A; (l) control the aircraft as necessary to achieve a stable and trimmed final approach path; (m) acquire visual references and continue to land or initiate missed approach by DH/A. **Missed approach:** (n) establish the aircraft in a safe climb; (o) configure the aircraft to achieve and maintain the climb performance in the Flight manual or other appropriate document; (p) follow the published missed-approach procedure or as directed by ATC.
SKILL	To determine that the applicant demonstrates the following: (a) intercepts and tracks localiser within the prescribed limits; (b) establishes a predetermined rate of descent at the point where the electronic glide slope begins in order to follow the glide slope; (c) maintains electronic glide slope within the prescribed limits; (d) arrives at DA/DH in such a position that a landing, go-around or circling approach may be accomplished safely; (e) avoids descent below DA/DH before initiating a missed-approach procedure or transitioning to a landing; (f) initiates immediately the missed approach, when at DA/DH, if the required visual references for the runway are not unmistakably visible and identifiable; (g) maintains localiser and glide slope during the visual descent from DA/DH to a point over the runway where glide slope must be abandoned to accomplish a normal landing.

KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) Flight Manual or other appropriate document: (1) limitations; (2) normal procedures; (3) abnormal procedures; (4) communication, navigation, and autoflight systems; (b) Flight Manual or other appropriate document policy dedicated to: (1) adjustments necessary to the published approach minima criteria for the aircraft approach category, and with due regard to: (2) NOTAMs; (3) inoperative navigation equipment; (4) inoperative visual aids associated with the landing environment; (5) reported weather conditions.
ATTITUDE	Situation awareness: — establishes communication with ATC on the correct frequencies and at the appropriate times; Effective communication: — reads back correctly, in a timely manner, the ATC clearance in the sequence received; — communicates with crew members as appropriate; Leadership and teamwork: — demonstrates correct crew coordination (where applicable) with regard to SOP call-out; Effective workload management: — monitors to ensure that the flight profile complies with the approach procedure; Effective problem-solving and decision-making: — reacts to deviation errors or unexpected systems malfunctions.

3B.5. Non-precision approach to MDH/A and MAP	
OBJECTIVE	To determine that the applicant is able to: (a) select and comply with the appropriate VOR/NDB/ILS/LLZ/GNSS instrument approach procedure; (b) confirm serviceability of selected navigation equipment; (c) comply with all ATC instructions and clearances; (d) use correct RTF for VOR/NDB/ILS/LLZ/GNSS procedures; (e) establish the appropriate aircraft configuration and airspeed for all phases of the approach; (f) complete the necessary aircraft checks and drills; (g) complete the manoeuvring pattern to establish the final approach segment within the specified limits; (h) establish the final approach segment and maintain the approach track and vertical profile; (i) for CDFA approaches, achieve steady and stable rates of descent and adhere to the published distance/altitude profile; (j) acquire visual references and continue to land or initiate missed approach by MAP; (k) for CDFA, acquire visual references and continue to land or initiate missed approach by DA/H; (l) if flying a circling approach, acquire visual references by circling minima and circle in accordance with the published procedure or conduct a missed approach. **Missed approach:** As for the precision approach.
SKILL	To determine that the applicant demonstrates the following: (a) establishes a rate of descent that will ensure arrival at MDA/H (at, or prior to reaching, the visual descent point if published) with the aircraft in a position from which a descent from MDA/H to a landing on the intended runway can be made, at a normal rate using normal manoeuvring.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) adequate judgement and knowledge of the aircraft performance in order to comply with the published approach procedure and the equipment used for the approach.

ATTITUDE	Situation awareness: — establishes communication with ATC on the correct frequencies and at the appropriate times; — exhibits CFIT awareness. Effective communication: — reads back correctly, in a timely manner, the ATC clearance in the sequence received; — communicates with crew members as appropriate. Leadership and teamwork: — demonstrates correct crew coordination (where applicable) with regard to SOP call-out. Effective workload management: — monitors to ensure tha the flight profile complies with the approach procedure. Effective problem-solving and decision-making: — reacts to deviation errors or unexpected systems malfunctions.

3B.6. Flight exercises including failure of compass and attitude indicator (Rate-1 turns and recoveries from unusual attitudes)	
OBJECTIE	To determine that the applicant is able to recognise **failure of compass and altitude indicator:** (a) recognises the failure promptly; (b) controls the aircraft by sole reference to partial or limited instruments within the nominated limits (due consideration shall be given to turbulence); (c) performs controlled straight and level flight and turns flown at Rate 1 onto nominated headings, using the correct technique and demonstrating correct instrument scan and interpretation; (d) recovers from unusual attitudes with minimum further loss or gain of height back to straight and level balanced flight and target speed.
SKILL	To determine that the applicant demonstrates the following: (a) recovers promptly to a stabilised level-flight attitude by using smooth, coordinated control application in the correct sequence and visual attitude flying or instruments as required; (b) avoids exceeding the airframe limitations.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) the understanding of the limitations of limited panel flight.
ATTITUDE	Situation awareness: — maintains effective communication: — communicates and coordinates with other crew members, as appropriate, for lookout (MPA). Effective workload management: — demonstrates orientation throughout the manoeuvre. Effective problem-solving and decision-making: — reacts to departure from stabilised flight.

3B.7. Failure of localiser or glide slope	
OBJECTIVE	To determine that the applicant is able to: (a) recognise the failure promptly; (b) maintain control and make timely decision to continue approach (LLZ only) or conduct MAP.
SKILL	The applicant demonstrates the ability to: (a) on recognising failure, convert the approach by establishing a rate of descent that will ensure arrival at MDA/H (at, or prior to, reaching the visual descent point if published) with the aircraft in a position from which a descent from MDA/H to a landing on the intended runway can be made, at a normal rate using normal manoeuvring.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) adequate judgement and knowledge of the aircraft performance in order to comply with the published approach procedure and the use of the equipment for the approach.
ATTITUDE	Situation awareness: — demonstrates CFIT awareness when failure is recognised. Effective communication: — communicates with crew members, as appropriate, to confirm failure. Leadership and teamwork: — demonstrates correct crew coordination (where applicable) with regard to SOP procedures for loss-of-approach capability. Effective workload management: — monitors to ensure that the flight profile remains safe. Effective problem-solving and decision-making. — makes appropriate decision to abandon the approach.

3B.8. ATC liaison — Compliance, R/T procedures	
OBJECTIVE	To determine that the applicant is able to: (a) use correct and standard RTF phraseology throughout; (b) where appropriate, obtain ATC clearances and the appropriate level of service; (c) where required, comply with ATC clearances and instructions.
SKILL	To determine that the applicant demonstrates the following: (a) sets the appropriate communication and navigation frequencies and transponder codes in compliance with the ATC clearance; (b) establishes communication with ATC using proper phraseology; (c) uses standard phraseology when reading back clearance; (d) determines that it is possible to comply with ATC clearance; (e) complies, in a timely manner, with all ATC clearances, instructions, and restrictions.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) standard ICAO phraseology; (b) pilot–controller responsibilities including tower and en route control, and appropriate clearances; (c) and demonstrates adequate knowledge of two-way communications failure procedures.
ATTITUDE	Situation awareness: — establishes communication with ATC on the correct frequencies and at the appropriate times. Effective communication: — reads back correctly, in a timely manner, the ATC clearance in the sequence received. Leadership and teamwork: — demonstrates correct crew coordination (where applicable). Effective workload management: — copies correctly, in a timely manner, the ATC clearance as issued. Effective problem-solving and decision-making: — interprets correctly the ATC clearance received and, when necessary, requests clarification, verification, or change.

SECTION 4: ARRIVALS AND LANDINGS	
4.1. Aerodrome arrival procedures	
OBJECTIVE	To determine that the applicant is able to: (a) carry out the appropriate checks and drills; (b) set altimeters and cross-check in accordance with the checklist, or as required; (c) comply with published arrival procedure or clearance; (d) maintain adequate lookout and collision avoidance.
SKILL	To determine that the applicant: (a) maintains the appropriate: (1) airspeed, (2) altitude, (3) headings; (b) demonstrates adequate knowledge of two-way communications failure procedures.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) the use of current and appropriate navigation publications for the proposed arrival routeing; (b) complying, in a timely manner, with ATC instructions and airspace restrictions; (c) performing the aircraft briefing/checklist items appropriate to the arrival; (d) performing the correct altimetry procedures in accordance with the relevant regulations, operational procedures, and ATC requirements; (e) the completion of the appropriate checklist.
ATTITUDE	Situation awareness: — demonstrates terrain awareness, orientation, division of attention, and proper planning. Effective communication: — establishes communication with ATC using proper phraseology; — interprets correctly the ATC clearance received and, when necessary, requests clarification, verification, or change. Leadership and teamwork: — liaises with other crew members for the correct operation of the aircraft systems throughout the arrival phase. Effective workload management: — divides attention properly inside and outside the cockpit. Effective problem-solving and decision-making: — makes appropriate decision to modify airfield arrival as necessary to fit into arrival sequence.

4.2. Normal landing	
OBJECTIVE	To determine that the applicant is able to: (a) consider weather and wind conditions, landing surface and obstructions; (b) plan and follow the circuit pattern and orientation with the landing area; (c) from the circuit pattern, establish the recommended approach configuration and adjust speed and rate of descent to maintain a stabilised approach; (d) select and achieve the appropriate touchdown area at the recommended speed; (e) adjust descent and round out (flare) to achieve a safe landing with little or no float with the appropriate drift and crosswind correction; (f) maintain directional control after touchdown and apply brakes for a safe roll-out; (g) complete all necessary checks and drills.
SKILL	To determine that the applicant demonstrates the following: (a) establishes the recommended approach and landing configuration, and airspeed; (b) adjusts pitch attitude and power as required in order to maintain the correct approach path and airspeed; (c) completes the appropriate pre-landing checklist; (d) maintains a ground track that ensures that the desired traffic circuit will be flown, taking into account any obstructions and ATC or examiner requirements; (e) makes proper correction for drift (using existing wind conditions), and maintains a precise ground track; (f) achieves and maintains a stabilised approach; (g) accomplishes a smooth, positively controlled transition from final approach to touchdown; (h) achieves a landing within the designated touchdown zone at the correct speed, in the correct attitude, and on the runway centre line; (i) touches down with no side drift and with the aircraft aligned with the runway centre line; (j) maintains positive directional control throughout the landing roll; (k) uses spoilers, propeller reverse, thrust reverse, wheel brakes, and other drag/braking devices, as appropriate, in such a manner to bring the aircraft to a safe stop; (l) accomplishes the appropriate post-landing checklist items.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) Flight Manual or other appropriate document; (b) limitations; (c) normal procedures.

ATTITUDE	Situation awareness: — considers wind conditions, landing surface and obstructions, and selects the correct touchdown point; — notes any surface conditions, obstructions or other hazards that might hinder a safe landing. Effective communication: — correctly interprets the ATC clearance received and, when necessary, requests clarification, verification, or change. Leadership and teamwork: — liaises with other crew members for the correct operation of the aircraft systems during approach and landing. Effective workload management: — listens to the R/T environment to establish satisfactory awareness of other traffic. Effective problem-solving and decision-making: — makes appropriate decision to modify landing as dictated by ATC and environmental changes.

4.3. Flapless landing	
OBJECTIVE	To determine that for normal landing the applicant is able to: (a) consider changed aircraft performance; (b) adjust final approach slope, if appropriate for the type of reduced drag; (c) ascertain and achieve a planned landing position.
SKILL	To determine that the applicant demonstrates the following: (a) maintains a stabilised approach at an appropriate approach speed, in accordance with the Pilot Operating Manual/AFM; (b) accomplishes a smooth, positively controlled transition from final approach to touchdown.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to Flight Manual or other appropriate document: (a) abnormal procedures; (b) limitations; (c) uses correct R/T phraseology to obtain the appropriate clearance, and advises ATC of any technical problem.

ATTITUDE	Situation awareness: — makes due allowance for landing performance in the no-flap configuration; — considers wind conditions, landing surface and obstructions, and selects the correct touchdown point; — notes any surface conditions, obstructions or other hazards that might hinder a safe landing. Effective communication: — correctly interprets the ATC clearance received and, when necessary, requests clarification, verification, or change. Leadership and teamwork: — liaises with other crew members for the correct operation of the aircraft systems during approach and landing. Effective workload management: — listens to the R/T environment to establish satisfactory awareness of other traffic. Effective problem-solving and decision-making: — makes appropriate decision to modify landing as dictated by ATC and environmental changes.

4.4. Crosswind landing (if suitable conditions)	
OBJECTIVE	To determine that the applicant (same as for normal landing) is able to use the appropriate technique to minimise drift and excessive lateral loads on the undercarriage on landing.
SKILL	To determine that the applicant demonstrates: (a) use of the appropriate crosswind landing techniques to achieve a safe landing.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) the understanding of the different techniques that can be applied to a crosswind approach and landing, appropriate to the aircraft type.

ATTITUDE	Situation awareness: — applies TEM principles to plan a crosswind approach and landing; — makes due allowance for landing performance in crosswind conditions; — considers wind conditions, landing surface and obstructions, and selects the correct touchdown point; — notes any surface conditions, obstructions or other hazards that might hinder a safe landing. Effective communication: — correctly interprets the ATC clearance received and, when necessary, requests clarification, verification, or change. Leadership and teamwork: — liaises with other crew members for the correct operation of the aircraft systems during approach and landing. Effective workload management: — listens to the R/T environment to establish satisfactory awareness of other traffic. Effective problem-solving and decision-making: — makes appropriate decision to modify landing as dictated by ATC and environmental changes.

4.5. Approach and landing with idle power from up to 2 000 feet above the runway (single-engine aircraft only)	
OBJECTIVE	To determine that the applicant is able to: (a) execute a safe glide approach and landing; (b) maintain aircraft control and apply optimum glide performance; (c) identify and select a suitable landing point on the runway; (d) plan descent in order to achieve a safe approach to the selected runway point and configure the aircraft such that a safe landing is assured; (e) manage engine parameters and complete all required checks.
SKILL	To determine that the applicant demonstrates the following: (a) correctly assesses effect of wind on glide performance; (b) reduces to idle power in such a position as to achieve a glide descent and landing on the runway, in an area preselected by the applicant or nominated by the examiner; (c) adjusts pitch attitude in order to maintain the correct gliding airspeed; (d) uses drag and configuration changes to ensure that the touchdown point is within the selected area; (e) applies brakes in order to stop in the shortest distance consistent with safety.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) Flight Manual or other appropriate document: (1) abnormal procedures, (2) limitations; (b) R/T phraseology to obtain the appropriate clearance, and advises ATC of any technical problem.

ATTITUDE	Situation awareness: — considers wind conditions, landing surface and obstructions, and selects the correct touchdown point; — notes any surface conditions, obstructions or other hazards that might hinder a safe landing; — carefully monitors aircraft descent profile. Effective communication: — correctly interprets the ATC clearance received and, when necessary, requests clarification, verification, or change. Leadership and teamwork: — liaises with other crew members for the correct operation of the aircraft systems during approach and landing. Effective workload management: — listens to the R/T environment to establish satisfactory awareness of other traffic. Effective problem-solving and decision-making: — makes appropriate decision to modify landing as dictated by ATC and environmental changes.

4.6. Go-around from minimum height	
OBJECTIVE	To determine that the applicant is able to: (a) execute a timely decision to go around, or when instructed by ATC, or when instructed by the examiner (this may be at any height or time prior to touchdown); (b) apply appropriate power and control aircraft attitude in order to initiate a safe climb maintaining balance and heading; (c) adjust configuration and speed in order to achieve a positive climb at Vy or Vx as appropriate; (d) maintain go-around power until a safe manoeuvring altitude is reached and then adjust to a normal climb configuration and speed; (e) complete all necessary checks and drills.
SKILL	To determine that the applicant demonstrates the following: (a) applies the appropriate power setting for the flight condition and establishes a pitch attitude necessary to obtain the desired performance; (b) retracts the wing flaps/drag devices and landing gear, if appropriate, in the correct sequence and at a safe altitude, and establishes a positive rate of climb and the appropriate airspeed; (c) trims the aircraft as necessary, and maintains the proper ground track during the rejected landing procedure; (d) accomplishes the appropriate checklist items in a timely manner in accordance with approved procedures.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) Flight Manual or other appropriate document: (1) normal procedures, (2) limitations, (3) patterns; (b) Flight Manual or other appropriate document policy for the circumstances to: (1) execute a go-around (stabilisation, visual references, etc.).
ATTITUDE	Situation awareness: — makes appropriate notification when safety of flight is not an issue. Effective communication: — liaises with other crew members for the correct operation of the aircraft systems whilst changing power settings, configuration, and airspeed (MPA); — correctly interprets the ATC clearance received and, when necessary, requests clarification, verification, or change. Leadership and teamwork: — demonstrates proper consultation with other crew members (MPA). Effective workload management: — listens to the R/T environment to establish satisfactory awareness of other traffic. Effective problem-solving and decision-making: — makes a timely decision to reject the landing for actual or simulated circumstances.

4.7. Night go-around and landing (if applicable)	
OBJECTIVE	To determine that the applicant (same as for a normal go-around) is able to: (a) consider and use all airfield and runway lights to achieve a safe circuit pattern and a final approach path in order to land safely.
SKILL	To determine that the applicant demonstrates the following: (a) identifies lighting systems identifying aerodromes, runways, taxiways and obstructions, and pilot-controlled lighting; (b) identifies aircraft lighting systems; (c) identifies personal equipment essential for night flight; (d) applies night orientation, navigation, and chart-reading techniques.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) safety precautions and emergencies peculiar to night flying.
ATTITUDE	Situation awareness: — is aware of the physiological aspects of night flying including the effects of: • changing-light conditions; • coping with illusions; • the pilot's physical condition on visual acuity. — makes appropriate notification when safety of flight is not an issue. Effective communication: — liaises with other crew members for the correct operation of the aircraft systems whilst changing power setting, configuration, and airspeed (MPA); — correctly interprets the ATC clearance received and, when necessary, requests clarification, verification, or change. Leadership and teamwork: — demonstrates proper consultation with other crew members (MPA). Effective workload management: — listens to the R/T environment to establish satisfactory awareness of other traffic. Effective problem-solving and decision-making: — makes a timely decision to reject the landing for actual or simulated circumstances.

4.8. ATC liaison — Compliance, R/T procedures	
OBJECTIVE	To determine that the applicant is able to: (a) obtain and comply with ATC clearances using correct RTF phraseology; (b) adjust circuit pattern/speed in order to maintain spacing with other traffic in the landing pattern; (c) maintain awareness of other traffic through RTF and lookout.
SKILL	To determine that the applicant demonstrates the following: (a) sets the appropriate communication and navigation frequencies and transponder codes in compliance with the ATC clearance; (b) establishes communication with ATC using proper phraseology; (c) uses standard phraseology when reading back clearance; (d) determines that it is possible to comply with ATC clearance; (e) complies, in a timely manner, with all ATC clearances, instructions, and restrictions.
KNOWLEGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) standard ICAO phraseology; (b) pilot–controller responsibilities including tower and en route control, and appropriate clearances; (c) and demonstrates adequate knowledge of two-way communications failure procedures.
ATTITUDE	Situation awareness: — establishes communication with ATC on the correct frequencies and at the appropriate times. Effective communication: — reads back correctly, in a timely manner, the ATC clearance in the sequence received. Leadership and teamwork: — demonstrates correct crew coordination (where applicable). Effective workload management: — copies correctly, in a timely manner, the ATC clearance as issued. Effective problem-solving and decision-making: — interprets correctly the ATC clearance received and, when necessary, requests clarification, verification, or change.

SECTION 5: ABNORMAL AND EMERGENCY PROCEDURES (THIS SECTION MAY BE COMBINED WITH SECTIONS 1 THROUGH 4)	
5.1. Rejected take-off at a reasonable speed	
OBJECTIVE	To determine that the applicant is able to: (a) recognise a situation where the safest course of action is to reject the take-off; (b) take appropriate actions to stop safely within the remaining runway, and inform ATC; (c) consider and demonstrate/discuss the appropriate actions following RTO (e.g. engine shutdown, evacuation, precautions for hot brakes, etc.).
SKILL	To determine that the applicant demonstrates the following: (a) abandons the take-off if any major problem or failure occurs at a point during the take-off where the abort procedure can be initiated and the aircraft can be safely stopped on the remaining runway/stop way; (b) uses spoilers, propeller reverse/thrust reverse, wheel brakes, and other drag/braking devices, as appropriate, maintaining positive control in such a manner as to bring the aircraft to a safe stop; (c) accomplishes the appropriate abnormal/emergency procedures through briefing/checklists as set forth in the Pilot Operating Manual or AFM; (d) completes the appropriate briefing/checklist; (e) informs ATC when practicable; (f) informs passenger(s) when practicable.
KNOWLEGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) Flight Manual or other appropriate document: (1) all systems, (2) limitations, (3) abnormal procedures, (4) emergency procedures; (b) Flight Manual or other appropriate document dedicated to failure during take-off.

ATTITUDE	Situation awareness: — takes into account, prior to beginning the take-off, operational factors which could affect the manoeuvre such as: • aircraft characteristics, • runway length, • surface conditions, • wind, • obstructions, • other related factors that could affect take-off performance and could adversely affect safety. Effective communication: — communicates (MPA) during take-off briefing the operational factors which could affect the take-off (e.g. birds, etc.). Leadership and teamwork: — demonstrates correct crew coordination (where applicable). Effective workload management: — applies appropriate abnormal or emergency procedures and drill in order to contain the abnormal or emergency situation. Effective problem-solving and decision-making: — identifies critical situation and makes timely decision to abandon take-off.

5.2. Simulated engine failure after take-off (single-engine aircraft only)	
OBJECTIVE	To determine that the applicant is able to: (a) maintain aircraft control and minimum safe speeds throughout; (b) identify and select a suitable landing area; (c) configure aircraft as appropriate, taking into consideration its performance; (d) if/when time permits, brief passenger(s), inform ATC, and execute emergency drills as 'touch drills'.
SKILL	To determine that the applicant demonstrates the following: (a) maintains control following engine failure; (b) establishes the recommended glide airspeed; (c) trims the aircraft, and maintains control; (d) simulates feathering the propeller if applicable; (e) carries out the recommended emergency procedure; (f) follows the checklist to verify procedures for securing the engine; (g) demonstrates engine restart in accordance with recommended procedures if appropriate; (h) flies a suitable approach to chosen landing area such that a safe landing is ensured.
KNOWLEGE	To determine that the applicant demonstrates knowledge related but not limited to Flight Manual or other appropriate document: (a) all systems, (b) limitations, (c) abnormal procedures.

ATTITUDE	Situation awareness: — recognises engine failure, and is aware of suitable landing area. Effective communication: — communicates (MPA) to assist with handling the forced landing. Leadership and teamwork: — demonstrates correct crew coordination (where applicable). Effective workload management: — applies appropriate abnormal or emergency procedures, time permitting, to resolve reason for engine failure. Effective problem-solving and decision-making: — identifies critical situation and makes timely decision on suitable forced-landing area.

5.3. Simulated forced landing without power (single-engine aircraft only)	
OBJECTIVE	To determine that the applicant is able to: (a) maintain aircraft control and adopt optimum glide performance; (b) identify and select a suitable landing area; (c) plan the descent in order to achieve a safe approach to chosen landing area and configure the aircraft such that a safe landing is assured; (d) if/when time permits, investigate possible cause of engine failure and take corrective action; (e) brief passenger(s), inform ATC, and carry out any subsequent checks and drills to ensure safe recovery/landing of aircraft, passenger(s) and crew.
SKILL	To determine that the applicant demonstrates the following: (a) maintains positive control throughout the manoeuvre; (b) establishes and maintains the recommended best glide airspeed and configuration during a simulated engine failure; (c) establishes a proper flight circuit to the selected aerodrome or landing area; (d) follows the emergency checklist items appropriate to the aircraft; (e) uses configuration devices, such as landing gear and flaps, in a manner recommended or approved by the manufacturer; (f) flies a suitable approach to chosen landing area such that a safe landing is ensured.
KNOWLEGE	To determine that the applicant demonstrates knowledge related but not limited to Flight Manual or appropriate document: (a) all systems, (b) limitations, (c) abnormal procedures, (d) patterns.

ATTITUDE	Situation awareness: — recognises engine failure, and identifies suitable landing area by utilising: • wind direction and speed (effect on gliding distance), • shape, • size, • slope, • surface, • undershoot (wires), • overshoot (trees). Effective communication: — communicates (MPA) to assist with handling the forced landing; — ensures that emergency call is made. Leadership and teamwork: — demonstrates correct crew coordination (where applicable). Effective workload management: — applies appropriate abnormal or emergency procedures, time permitting, to resolve reason for engine failure. Effective problem-solving and decision-making: — identifies critical situation and makes timely decision on suitable forced-landing area.

5.4. Simulated emergencies **(i) Fire or smoke in flight** **(ii) systems' malfunctions as appropriate**	
OBJECTIVE	To determine that the applicant is able to: (a) correctly diagnose the problem; (b) consider options and decide upon a sound course of action; (c) with reference to a checklist, execute appropriate abnormal or emergency procedures; (d) analyse emergency or abnormal situation in calm, methodical fashion; (e) make sound decisions regarding checks/procedures and formulate appropriate plan for the subsequent conduct of the flight; (f) use a checklist to confirm actions when time permits; (g) review, plan, and execute further actions as appropriate to ensure safe recovery of aircraft, passenger(s) and crew.
SKILL	To determine that the applicant demonstrates use of the following: (a) Flight Manual or other appropriate document: (1) all systems, (2) limitations, (3) abnormal procedures; (b) operator policy dedicated to failure: (1) ICAO R/T emergency phraseology.

KNOWLEGE	The applicant demonstrates knowledge related but not limited to: (a) Flight Manual or other appropriate document: (1) all systems, (2) limitations, (3) abnormal procedures; (b) Flight Manual or other appropriate document policy dedicated to failure: (1) ICAO R/T emergency phraseology.
ATTITUDE	Situation awareness: — reviews causal factors (with other crew members in MPA); — identifies alternative courses of action. Effective communication: — confirms intended plan of action (with other crew members in MPA). Leadership and teamwork: — involves other crew members in the option analysis (MPA). Effective workload management: — applies appropriate abnormal or emergency procedures, time permitting, to resolve emergency or abnormal situation. Effective problem-solving and decision-making: — considers and shares the risks of alternative courses of action.

5.5. Engine shutdown and restart (ME skill test only) (at a safe altitude if performed in the aircraft)	
OBJECTIVE	To determine that the applicant is able to: (a) with reference to a checklist, execute the correct procedures for premeditated engine shutdown and subsequent restart; (b) maintain control of aircraft throughout including heading, balance, and trim; (c) effect drills correctly and without assistance.
SKILL	To determine that the applicant demonstrates the following: (a) maintains positive aircraft control in order to maintain coordinated flight, and properly trims for that condition, sets engine controls, and reduces drag as necessary; (b) maintains the operating engine(s) within the acceptable operating limits; (c) maintains the desired altitude when a constant altitude is specified and is within the capability of the aircraft; (d) maintains the desired airspeed and heading; (e) follows the prescribed aircraft checklist, and verifies the procedures for securing the inoperative engine(s); (f) demonstrates proper engine-restart procedures in accordance with approved procedure/checklist or the manufacturer's recommended procedures and pertinent checklist items.

KNOWLEGE	The applicant demonstrates knowledge related but not limited to: (a) Flight Manual or other appropriate document: (1) all systems, (2) limitations, (3) abnormal procedures, (4) patterns; (b) Flight Manual or other appropriate document policy dedicated to engine failure.
ATTITUDE	Situation awareness: — recognises engine failure and identifies correct engine. Effective communication: — communicates (MPA) on the decision to, if appropriate, attempt restart. Leadership and teamwork: — demonstrates correct crew coordination (where applicable). Effective workload management: — applies appropriate engine shutdown drills, time permitting, to resolve reason for engine failure; — considers restart or diverts single engine. Effective problem-solving and decision-making: — identifies critical situation and makes timely decision on engine restart or diversion.

5.6. ATC liaison — Compliance, R/T procedures	
OBJECTIVE	To determine that the applicant is able to: (a) make appropriate emergency RTF calls informing ATC of situation and assistance required (transmissions prefixed with 'practice' or 'simulated', or given to the examiner but not transmitted).
SKILL	To determine that the applicant demonstrates use of standard phraseology when declaring an emergency, and seeks assistance as appropriate.
KNOWLEGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) standard ICAO phraseology.

ATTITUDE	Situation awareness: — communicates to ATC an emergency state that has occurred. Effective communication: — reads back correctly, in a timely manner, the ATC clearance in the sequence received. Leadership and teamwork: — demonstrates correct crew coordination (where applicable). Effective workload management: — copies correctly, in a timely manner, the ATC clearance as issued. Effective problem-solving and decision-making: — interprets correctly the ATC clearance received and ensures able to comply whilst handling the emergency situation.

SECTION 6: SIMULATED ASYMMETRIC FLIGHT **(THIS SECTION CAN BE COMBINED WITH SECTIONS 1 THROUGH 5)**	
6.1. Simulated engine failure during take-off (at a safe altitude unless conducted in an FFS or FNPT II)	
OBJECTIVE	To determine that the applicant is able to: (a) maintain directional control following simulated engine failure; (b) correctly identify failed engine, confirm failed engine, and complete the published checks and drills; (c) maintain the correct speed, configuration, and trim for optimum performance; (d) comply with ATC instructions.
SKILL	The applicant demonstrates the following: (a) maintains control following engine failure; (b) reduces drag, and verifies the inoperative engine; (c) secures the inoperative engine, if appropriate; (d) simulates feathering the propeller of the inoperative engine, if appropriate; (e) establishes V_{YSE}; if obstructions are present, establishes V_{XSE} or V_{MC} + 10, whichever is greater, until obstructions are cleared, then transitions to $V_{YSE.}$; (f) banks toward the operating engine up to 5 degrees as required for best performance, trims the aircraft, and maintains control; (g) monitors the operating engine and makes adjustments as necessary; (h) carries out the recommended emergency procedure.
KNOWLEGE	The applicant demonstrates knowledge related but not limited to: (a) Flight Manual or other appropriate document: (1) all systems, (2) limitations, (3) abnormal procedures; (b) Flight Manual or other appropriate document dedicated to failure during take-off: (1) in particular, operator engine-out path during take-off.

ATTITUDE	Situation awareness: — recognises engine failure, and confirms correct engine. Effective communication: — communicates (MPA) to assist with handling the shutdown drills. Leadership and teamwork: — demonstrates correct crew coordination (where applicable). Effective workload management: — applies appropriate abnormal or emergency procedures, time permitting, to resolve reason for engine failure. Effective problem-solving and decision-making: — identifies critical situation and makes timely decision on suitable actions to carry out a safe asymmetric landing.

6.2. Asymmetric approach and go-around	
OBJECTIVE	To determine that the applicant is able to: (a) maintain a stable (trimmed) approach in the correct configuration; (b) make a clear decision to land or go around no later than the appropriate committal height; (c) complete asymmetric approach and go-around into visual circuit, circling approach or further instrument approach, maintaining control and correct speeds; (d) reconfigure and trim the aircraft correctly; (e) complete post-take-off/go-around checks.
SKILL	To determine that the applicant demonstrates the following: (a) applies the appropriate power setting for the flight condition and establishes a pitch attitude necessary to obtain the desired performance; (b) establishes a positive rate of climb and climbs at the appropriate airspeed to the correct acceleration altitude; (c) retracts the wing flaps/drag devices and landing gear, if appropriate, in the correct sequence; (d) trims the aircraft as necessary, and maintains the proper ground track and altitudes during the rejected landing procedure; (e) accomplishes the appropriate briefing/checklist items in a timely manner in accordance with approved procedures.
KNOWLEGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) Flight Manual or other appropriate document: (1) all systems, (2) limitations, (3) abnormal procedures, (4) charts; (b) Flight Manual or other appropriate document policy dedicated to approach-stabilisation criteria.

ATTITUDE	Situation awareness: — recognises if approach profile is not stabilised. Effective communication: — communicates (MPA) to assist with handling and liaison with ATC. Leadership and teamwork: — demonstrates correct crew coordination (where applicable). Effective workload management: — applies appropriate abnormal procedures for asymmetric approach and go-around. Effective problem-solving and decision-making: — identifies if critical situation is occurring due to inappropriate approach profile; — makes timely decision to execute go-around.

6.3. Asymmetric approach and full-stop landing	
OBJECTIVE	To determine that the applicant is able to: (a) consider the actual weather and wind conditions, landing surface, and obstructions; (b) maintain a stable (trimmed) approach in the correct configuration; (c) plan and follow a suitable approach pattern and orientation with the landing runway; (d) establish the correct approach configuration adjusting speed and rate of descent to maintain a stabilised approach path; (e) make a clear decision to land or go around no later than the appropriate committal height; (f) select and achieve the appropriate touchdown area at the required speed; (g) adjust descent and round out (flare) to achieve a safe landing with little or no float with the appropriate drift and crosswind correction; (h) maintain control and apply aircraft brakes for a safe roll-out; (i) complete the necessary checks and drills.
SKILL	To determine that the applicant demonstrates the following: (a) establishes the approach and landing configuration appropriate for the runway and meteorological conditions, and adjusts the engine controls as required; (b) completes the applicable pre-landing checklist; (c) maintains a stabilised approach and the desired airspeed; (d) maintains the operating engine(s) within the acceptable operating limits; (e) accomplishes a smooth, positively controlled transition from final approach to touchdown; (f) uses spoilers, propeller reverse, thrust reversers, wheel brakes, and other drag/braking devices, as appropriate, in such a manner to bring the aircraft to a safe stop after landing; (g) maintains positive directional control and crosswind corrections during the post-landing roll; (h) completes the applicable post-landing briefing/checklist items in a timely manner, after clearing the runway, and as recommended by the manufacturer.

KNOWLEGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) Flight Manual or other appropriate document: — all systems, — limitations, — abnormal procedures, — patterns, (b) Flight Manual or other appropriate document policy dedicated to approach stabilisation.
ATTITUDE	Situation awareness: — recognises if approach profile is stabilised in order to lead to a safe asymmetric landing. Effective communication: — communicates (MPA) to assist with handling and liaison with ATC. Leadership and teamwork: — demonstrates correct crew coordination (where applicable). Effective workload management: — applies appropriate abnormal procedures for asymmetric approach and landing. Effective problem-solving and decision-making: — makes appropriate decision at Asymmetric Committal Height (ACH) to commit to final flap selection and landing.

6.4. ATC liaison — Compliance, R/T procedures	
OBJECTIVE	To determine that the applicant is able to: (a) inform ATC of abnormal flight condition and any assistance required; (b) comply with ATC procedures and instructions; (c) adjust traffic pattern with due regard to weather, surface conditions, obstructions, and other air traffic; (d) adjust configuration and circuit pattern with regard to aircraft performance.
SKILL	To determine that the applicant demonstrates the following: (a) uses standard phraseology when declaring an emergency; (b) seeks assistance as appropriate.
KNOWLEGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) standard ICAO phraseology.

ATTITUDE	Situation awareness: — communicates to ATC an emergency state that has occurred. Effective communication: — reads back correctly, in a timely manner, the ATC clearance in the sequence received. Leadership and teamwork: — demonstrates correct crew coordination (where applicable). Effective workload management: — copies correctly, in a timely manner, the ATC clearance as issued. Effective problem-solving and decision-making: — interprets correctly the ATC clearance received and ensures able to comply with the aircraft in an asymmetric configuration.

8.1.6. Pass/fail criteria

Pass marks

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

First attempt

If the applicant is in the process of completing their first attempt at the test/check and they fail an item that they have previously passed, it is now recorded as a fail at attempt number one. This could mean overwriting a previous examiner's entry on the LST/LPC form.

Second attempt

If a previously passed item is to be flown and it is to be assessed, the applicant should be briefed accordingly.

In the event a first attempt is to be completed over more than one flight, no retest of any failed item may be undertaken until all first-attempt items have been completed.

If any items were failed on the first flight, all items not completed on the first attempt must be tested separately, before any retest is undertaken.

At attempt number one, the examiner may use their discretion to repeat any item(s) of the test/check once. The option to repeat any item is not a right of the applicant. As general guidance, the examiner should only exercise their discretion to repeat an item when they consider that the applicant has made a minor error and that the error can be corrected by debriefing. This discretion should not be used if further training is required. If retraining is required, it should be done prior to a retest, i.e. a second attempt. Repeats may not be carried forward to another simulator detail/flight, unless the test was originally planned as a two-day event. Repeats must not be passed on to another examiner. On retest item(s),

an attempt number two must not be repeated. The applicant should be told what they did wrong prior to repeating the item.

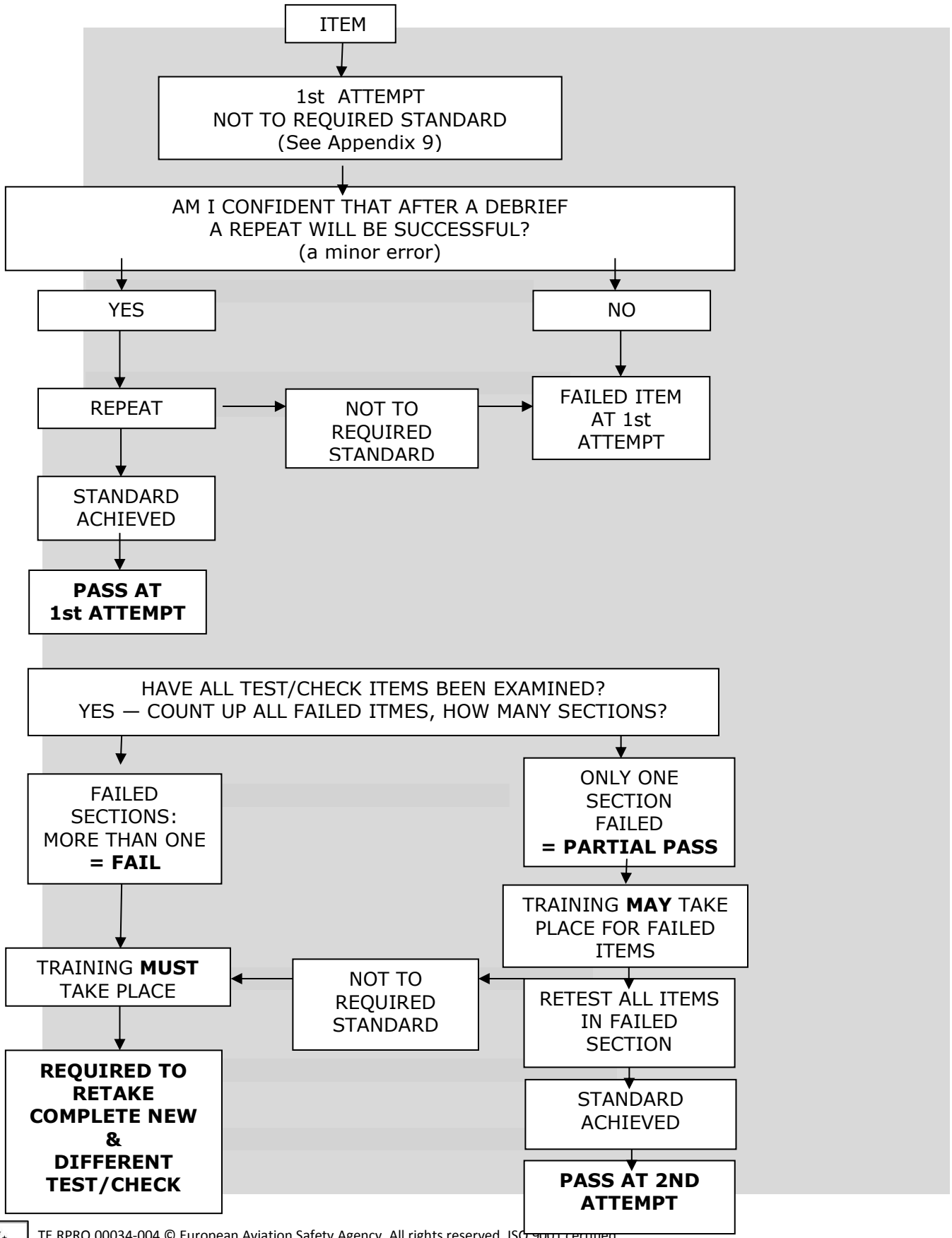
Although technically all items of the test schedule may be repeated once, this is not in the spirit of the repeat discretion. If the applicant's performance is such that several items need to be repeated, they are clearly not up to the required standard and the discretion to repeat should not be exercised further. Repeats are not recorded on the relevant LST/LPC forms, but must be recorded on company paperwork or in the applicant's training file.

If an applicant fails to achieve a satisfactory standard in an item, they should be retested in all items in the failed section. Such retests must be indicated on company training records and also in the LST/LPC form. The examiner may stop the test/check at any stage if it is considered that the applicant's competency requires a complete retest or recheck.

Should the examiner consider that the applicant was not performing satisfactorily due to any external influence or distraction, then the exercise should not be assessed. An example of this may be noisy engineering work outside a simulator.

If pilots present themselves for check and have not declared themselves unfit prior to the test, it is reasonable to assume that they would have presented themselves for a flight. It is not acceptable post-test for them to complain that they were unwell.

The following flow chart can be used as an aide-memoire to assist in determing the result of a test or check.



APPENDIX 9

TRAINING, SKILL TEST AND PROFICIENCY CHECK FOR MPL, ATPL, TYPE AND CLASS RATINGS, AND PROFICIENCY CHECK FOR INSTRUMENT RATINGS

A. General

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

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 Part-21, the syllabus of flight instruction shall comply with this Appendix. The syllabus may be reduced to give credit for previous experience on similar aircraft types, as determined in the operational suitability data established in accordance with Part-21.

5. Except in the case of skill tests for the issue of an ATPL, when so defined in the operational suitability data established in accordance with Part-21 for the specific aircraft type, credit may be given for skill test items common to other types or variants of aircraft for which the pilot is qualified.

CONDUCT OF THE TEST/CHECK

6. The examiner may choose between different skill test or proficiency check scenarios containing simulated relevant operations developed and approved by the competent authority. Full-flight simulators and other training devices, when available, shall be used, as established in this Part.

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

8. Should the applicant choose to terminate a skill test for reasons considered inadequate by the examiner, the applicant shall retake the entire skill test. If the test is terminated for reasons considered adequate by the examiner, only those sections not completed shall be tested in a further flight.

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

10. An applicant shall be required to fly the aircraft from a position where the PIC or co-pilot functions, as relevant, can be performed and to carry out the test as if there was no other crew member present if taking the test/check under single-pilot conditions. Responsibility for the flight shall be allocated in accordance with national regulations.

11. During pre-flight preparation for the test, the applicant is required to determine power settings and speeds. The applicant 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 the applicant in compliance with the Flight manual or other appropriate document for the aircraft used. Decision height/altitude (DH/A), minimum descent heights/altitudes (MDH/A), 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 interest of safety or to avoid unacceptable delay to other traffic.

13. The following matters shall be specifically checked by the examiner:

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

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

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

14. 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 second pilot. If an aircraft is used, the second pilot shall be the examiner or an instructor.

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

16. 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 applicant acts as PF or PM:

(a) management of crew cooperation.

17. The test/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.

18. When the type rating course has included less than 2 hours flight training on the aircraft, the skill test may be conducted in an FFS and may be completed before the flight training on the aircraft. In that case, a certificate of completion of the type rating course, including the flight training on the aircraft, shall be forwarded to the competent authority before the new type rating is entered on the applicant's licence.

Specific requirements for the aircraft category

PASS MARKS

19. In the case of single-pilot aircraft, with the exception of single-pilot high-performance complex aircraft, the applicant shall pass all sections of the skill test or proficiency check. If any item in a section is failed, that section is failed. Failure in more than one section will require the applicant to take the entire test or check again. Any applicant failing only one section, shall take the failed section again. Failure in any section of the retest or recheck, including those sections that have been passed at a previous attempt, will require the applicant to take the entire test or check again. For single-pilot multi-engine aircraft, Section 6 of the relevant test or check, addressing asymmetric flight, shall be passed.

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

FLIGHT TEST TOLERANCES

21. The applicant 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 always assured;

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

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

22. 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 feet;

— starting a go-around at decision height: + 50 feet/– 0 feet;

— minimum descent height/altitude: + 50 feet/–0 feet.

Tracking:

— on radio aids: ± 5 degrees;

— precision approach: half scale deflection, azimuth, and glide path.

Heading:

— all engines operating: ± 5 degrees;

— with simulated engine failure: ± 10 degrees.

Speed:

— all engines operating: ± 5 knots;

— with simulated engine failure: + 10 knots/– 5 knots.

CONTENT OF THE TRAINING/SKILL TEST/PROFICIENCY CHECK

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

(a) The following symbols mean:

P = Trained as PIC or Co-pilot and as Pilot Flying (PF) and Pilot Monitoring.

X = Flight simulators shall be used for this exercise, if available; 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 at any higher level of equipment shown by the arrow (---->).

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

A = Aeroplane

FFS = Full-Flight Simulator

FTD = Flight Training Device (including FNPT II for ME class rating)

(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 the mandatory exercise or a choice where more than one exercise appears.

(f) An FFS or an FNPT II shall be used for practical training for type or multi-engine 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:

(1) the qualification of the FFS or FNPT II as set out in Part-OR;

(2) the qualifications of the instructors;

(3) the amount of FFS or FNPT II training provided on the course; and

(4) the qualifications and previous experience in similar types of the pilot on training.

(g) When a skill test or proficiency check is performed in multi-pilot operations, the type rating shall be restricted to multi-pilot operations.

SINGLE-PILOT AEROPLANES, EXCEPT FOR HIGH-PERFORMANCE COMPLEX AEROPLANES	PRACTICAL TRAINING				CLASS OR TYPE RATING SKILL TEST/ PROFFICIENCY CHECK	
Manoeuvres/Procedures	FTD	FFS	A	Instructor initials when training completed	Chkd in FFS A	Examiner initials when test completed
SECTION 1						
1. Departure 1.1. Pre-flight including: documentation, mass and balance, weather briefing, NOTAM						
1.2. Pre-start checks						
1.2.1. External	P#		P			
1.2.2. Internal			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 crosswind (if conditions available)		P---->	---->		M	
1.7. Climbing: Vx/Vy turns onto headings level off		P---->	---->		M	
1.8. ATC liaison — Compliance, R/T procedures						
SECTION 2						
2. Airwork (VMC) 2.1. Straight and level flight at various airspeeds including flight at critically low airspeed with and without flaps (including approach to VMCA when applicable)		P---->	---->			

SINGLE-PILOT AEROPLANES, EXCEPT FOR HIGH-PERFORMANCE COMPLEX AEROPLANES	PRACTICAL TRAINING				CLASS OR TYPE RATING SKILL TEST/ PROFFICIENCY CHECK	
Manoeuvres/Procedures	FTD	FFS	A	Instructor initials when training completed	Chkd in FFS A	Examiner initials when test completed
2.2. Steep turns (360 degrees left and right at 45-degree 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 (iv) Approach to stall, climbing turn with take-off flap and climb power (single-engine aeroplanes only)		P---->	---->		M	
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						
SECTION 3A						
3A. En route VFR procedures (see B.5 (c) and (d)) 3A.1. flight plan, dead reckoning and map-reading						
3A.2. Maintenance of altitude, heading and speed						
3A.3. Orientation, timing and revision of ETAs						
3A.4. Use of radio navigation aids (if applicable)						
3A.5. Flight management (flight log, routine checks including fuel, systems and icing)						
3A.6. ATC liaison — Compliance, R/T procedures						

SINGLE-PILOT AEROPLANES, EXCEPT FOR HIGH-PERFORMANCE COMPLEX AEROPLANES	PRACTICAL TRAINING				CLASS OR TYPE RATING SKILL TEST/ PROFFICIENCY CHECK	
Manoeuvres/Procedures	FTD	FFS	A	Instructor initials when training completed	Chkd in FFS A	Examiner initials when test completed
SECTION 3B						
3B. 3B.1.* Instrument flight departure IFR		P---->	---->		M	
3B.2.* En route IFR		P---->	---->		M	
3B.3.* Holding procedures		P---->	---->		M	
3B.4.* ILS to DH/A of 200 feet (60 metres) or to procedure minima (autopilot may be used to glide-slope intercept)		P---->	---->		M	
3B.5.* Non-precision approach to MDH/A and MAP		P---->	---->		M	
3B.6.* Flight exercises including simulated failure of the compass and attitude indicator: Rate-1 turns, recoveries from unusual attitudes	P---->	---->	---->		M	
3B.7.* Failure of localiser or glide slope	P---->	---->	---->			
3B.8.* ATC liaison — Compliance, R/T procedures						
Intentionally left blank						
SECTION 4						
4. 4.1. Arrival and landings Aerodrome 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 2 000 feet above the runway (single-engine aeroplanes only)		P---->	---->			

SINGLE-PILOT AEROPLANES, EXCEPT FOR HIGH-PERFORMANCE COMPLEX AEROPLANES		PRACTICAL TRAINING				CLASS OR TYPE RATING SKILL TEST/ PROFFICIENCY CHECK	
Manoeuvres/Procedures		FTD	FFS	A	Instructor initials when training completed	Chkd in FFS A	Examiner initials when test completed
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 procedure						
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 (ii) systems' malfunctions as appropriate	P---->	---->	---->			
5.5.	Engine shutdown and restart (ME skill test only) (at a safe altitude if performed in the aircraft)	P---->	---->	---->			
5.6.	ATC liaison — Compliance, R/T procedure						
SECTION 6							

SINGLE-PILOT AEROPLANES, EXCEPT FOR HIGH-PERFORMANCE COMPLEX AEROPLANES		PRACTICAL TRAINING				CLASS OR TYPE RATING SKILL TEST/ PROFFICIENCY CHECK	
Manoeuvres/Procedures		FTD	FFS	A	Instructor initials when training completed	Chkd in FFS A	Examiner initials when test completed
6.	Simulated asymmetric flight (This Section may be combined with Sections 1 through 5)						
6.1.*	Simulated engine failure during take-off (at a safe altitude unless carried out in an FFS or 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 procedure						

24. 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 PNF for the issue of a type rating as applicable.

X = Simulators shall be used for this exercise, if available; otherwise an aircraft 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 acronyms are used to indicate the training equipment used:

A = Aeroplane

FFS = Full-Flight Simulator

FTD = Flight Training Device

OTDs = Other Training Devices

(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.

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

(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:

(1) the qualification of the FFS or FNPT II;

(2) the qualifications of the instructors;

(3) the amount of FFS or FNPT II training provided on the course; and

(4) the qualifications and previous experience in similar types of the pilot on training.

9. Module 9 — Test standards: Type rating

9.1. Chapter 1 — MPA

9.1.1. Who may test — see the common requirements table in Module 1

The skill tests and proficiency checks for the issue, revalidation, or renewal of type ratings for multi-pilot aeroplanes are one of the TRE(A) and SFE(A) privileges as per FCL.1005.TRE TRE and FCL.1005.SFE SFE.

A TRE(A) or an SFE(A) may test if:

9.1.1.1. the applicant's licence has been issued by the same competent authority as the examiner's; or

9.1.1.2. in the case of an applicant whose competent authority is not the same one that issued the examiner certificate, the examiner shall have reviewed the latest available information containing the relevant national procedures of the applicant's competent authority.

9.1.2. Conduct of test/check (Appendix 9 to Part-FCL)

The examiner may choose between different skill test or proficiency check scenarios containing simulated relevant operations developed and approved by the competent authority. Full-flight simulators and other training devices, when available, shall be used, as established in this Part.

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

Should the applicant choose to terminate a skill test for reasons considered inadequate by the examiner, the applicant shall retake the entire skill test. If the test is terminated for reasons considered adequate by the examiner, only those sections not completed shall be tested in a further flight.

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

An applicant shall be required to fly the aircraft from a position where the PIC or co-pilot functions, as relevant, can be performed and to carry out the test as if there was no other crew member present if taking the test/check under single-pilot conditions. Responsibility for the flight shall be allocated in accordance with national regulations.

During pre-flight preparation for the test, the applicant is required to determine power settings and speeds. The applicant 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 the applicant in compliance with the Flight manual or other appropriate document for the aircraft used. Decision height/altitude (DH/A), minimum descent heights/altitudes (MDH/A), and missed approach point shall be agreed upon with the examiner.

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

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 second pilot. If an aircraft is used, the second pilot shall be the examiner or an instructor.

The applicant shall operate as PF during all sections of the skill test, except for abnormal and emergency procedures, which may be conducted as PF or PNF in accordance with MCC. The applicant for the initial issue of a multi-pilot aircraft type rating or ATPL shall also demonstrate the ability to act as PNF. The applicant may choose either the left or the right-hand seat for the skill test if all items can be executed from the selected seat.

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 applicant acts as PF or PNF:

(a) management of 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.

The test/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.

When the type rating course has included less than 2 hours flight training on the aircraft, the skill test may be conducted in an FFS and may be completed before the flight training on the aircraft. In that case, a certificate of completion of the type rating course, including the flight training on the aircraft, shall be forwarded to the competent authority before the new type rating is entered on the applicant's licence.

9.1.3. Flight test tolerances

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 feet;

— starting a go-around at decision height: + 50 feet/– 0 feet;

— minimum descent height/altitude: + 50 feet/– 0 feet;

— NPA or APV Baro final approach segment: ± 75 feet or as defined in the Flight manual or other appropriate document.

Tracking:

— on radio aids: ± 5 degrees;

— precision approach: half-scale deflection, azimuth, and glide path;

— RNAV (GNSS) NPA and APV Baro approach: ± half required navigation accuracy (RNP) or as defined in the Flight manual or other appropriate document;

— other approaches: ± 5 degrees.

Heading:

— all engines operating: ± 5 degrees;

— with simulated engine failure: ± 10 degrees.

Speed:

— all engines operating: ± 5 knots;

— with simulated engine failure: + 10 knots/– 5 knots.

9.1.4. Content of the test

PHASE OF TEST OR CHECK	
Title of assessed item taken from the Part-FCL schedule	
OBJECTIVE	This cell describes the applicant's proficiency to be assessed by the examiner.
SKILL	This cell describes the competency criteria that the applicant is required to demonstrate: — manual aircraft control; — effective flight path management through proper use of the flight management system guidance and automation; — application of procedures.
KNOWLEDGE	This cell describes the knowledge needed to meet the objective's proficiency requirements.
ATTITUDE	This cell describes the competency criteria encapsulated in airmanship, CRM, and threat and error management such as: — situation awareness; — effective communication; — leadership and teamwork; — effective workload management; — effective problem-solving and decision-making.
General	
In most phases of the flight there are competencies that apply to a group of manoeuvres, e.g. turns, or even to the whole phase. In order to avoid repetition, the common competencies are grouped under the 'General' item heading. Examiners must refer to both the 'General' heading criteria and to the criteria under the specific item being assessed, e.g. 'Turns — General', plus 'Steep turns' as the specific item. Multiple cell borders at the beginning and at the end of the group identify the group.	

Note: It is sometimes possible to place a competence in either of the two rows because physical skills, knowledge, etc., cannot always be clearly separated; this is not critical for assessments. The intention is to assist the examiner in identifying what competencies are required for satisfactory performance of a test item, and to assist them in identifying why an applicant may have failed to achieve a pass in an item.

SECTION 1: FLIGHT PREPARATION	
1.1. Performance calculation	
OBJECTIVE	To determine that the applicant is able to complete the aircraft performance calculation.
SKILL	To determine that the applicant demonstrates the application of operating procedures by using proficiently performance charts, tables, graphs, or other data relating to items such as (but not limited to): (a) accelerate-stop distance; (b) accelerate-go distance; (c) take-off performance — all engines; (d) one engine inoperative; (e) climb performance including climb performance with all engines operating, with one engine inoperative, and with other engine malfunctions as may be appropriate; (f) cruise performance including abnormal and emergency considerations, e.g. drift down; (g) fuel consumption, range, and endurance; (h) go-around from rejected landings; (i) operational factors affecting aircraft performance; (j) airspeeds used during specific phases of the flight; (k) effects of meteorological conditions upon performance characteristics and correct application of these factors to a specific chart, table, graph, or other performance data.
KNOWLEDGE	To determine that the applicant demonstrates knowledge and understanding of: (a) performance as per licence requirements; (b) the adverse effects of exceeding any limitation; (c) the Aircraft Operating Manual (AOM) chapters dedicated to: (1) limitations; (2) performance calculation in general; (3) performance calculation and associated procedures when specific conditions exist (e.g. weather, etc.).
ATTITUDE	To determine that the applicant demonstrates: — situation awareness by identifying the potential threats when specific conditions of calculation and procedures apply; — effective communication; — leadership and teamwork; — effective workload management; — effective problem-solving and decision-making.

SECTION 1: FLIGHT PREPARATION	
1.2. Aircraft external visual inspection; location of each item and purpose of inspection	
OBJECTIVE	To determine that the applicant is able to complete the aircraft external visual inspection.
SKILL	To determine that the applicant demonstrates the ability to apply the procedures outlined in the Aircraft Operating Manual relating to the aircraft external visual inspection, including the use of checklists as appropriate.
KNOWLEGE	To determine that the applicant demonstrates knowledge and understanding of relevant information including: (a) AOM; (b) normal procedures.
ATTITUDE	To determine that the applicant demonstrates: — situation awareness of the aircraft state in its environment by ensuring the safety of personnel and of the aircraft, and by ensuring that the general area around the aircraft is free from hazards; — effective communication; — leadership and teamwork; — effective workload management; — effective problem-solving and decision-making by noting any discrepancies and determining if the aircraft is airworthy and safe for flight, or takes the proper corrective action.

SECTION 1: FLIGHT PREPARATION	
1.3. Cockpit inspection	
OBJECTIVE	To determine that the applicant is able to complete the aircraft cockpit inspection.
SKILL	To determine that the applicant demonstrates the ability to apply the procedures outlined in the AOM relating to the aircraft cockpit inspection, including the use of checklists as appropriate.
KNOWLEDGE	To determine that the applicant demonstrates knowledge and understanding of relevant information including but not limited to: (a) AOM; (b) normal procedures; (c) procedures and limitations for operating the aircraft with inoperative instruments; (d) operational status of the aircraft by locating and explaining the significance and importance of related documents such as: (1) airworthiness and registration certificates; (2) operating limitations; (3) mass-and-balance data; (4) maintenance requirements, tests, and appropriate records applicable to the proposed flight or operation, as well as maintenance that may be performed by the pilot.
ATTITUDE	To determine that the applicant demonstrates: — situation awareness of the aircraft state in its environment by ensuring the safety of personnel and of the aircraft by communicating with ground staff prior to moving any aircraft control surfaces or operating any aircraft hydraulic or electrical system; — effective communication; — leadership and teamwork; — effective workload management; — effective problem-solving and decision-making by noting any discrepancies and determining if the aircraft is airworthy and safe for flight, or takes the proper corrective action.

SECTION 1: FLIGHT PREPARATION	
1.4. Use of checklist prior to starting engines, starting procedures, radio and navigation equipment check, selection and setting of navigation and communication frequencies	
OBJECTIVE	To determine that the applicant is able to apply procedures according to AOM instructions for the checking of radio and navigation equipment, the selection and setting of navigation and communication frequencies, and the starting of the aircraft engine(s) while demonstrating the correct use of the appropriate checklists prior to engine start.
SKILL	To determine that the applicant demonstrates the application of procedures for: (a) the setting and checking of radio and navigation equipment; (b) the use of an auxiliary power unit (APU) or external power source (GPU and/or ASU); (c) starting under various atmospheric conditions, normal and abnormal starting limitations, and the actions required in the event of a malfunction; (d) ensuring that ground safety procedures are followed during the pre-start, start, and post-start phases; (e) ensuring the use of the appropriate ground staff during the start procedures; (f) all items of the start procedures by systematically following the approved briefing/checklist items for the pre-start, start, and post-start phases; (g) the demonstration of sound judgement and operating practices in those circumstances where specific instructions or briefing/checklist items are not published.
KNOWLEDGE	To determine that the applicant demonstrates knowledge of AOM related to: (a) limitations; (b) normal operations; (c) abnormal operations.
ATTITUDE	To determine that the applicant demonstrates: — situation awareness of the aircraft state in its environment ensuring the safety of personnel and of the aircraft by communicating with ground staff prior to commencing engine start; — effective communication by checking that other crew member(s) is (are) briefed and at the same level of information as the PIC is; — leadership and teamwork; — effective workload management by managing interruptions, distractions, variations, and failures effectively; — effective problem-solving and decision-making.

SECTION 1: FLIGHT PREPARATION	
1.5. Taxiing in compliance with air traffic control or examiner instructions	
OBJECTIVE	To determine that the applicant is able to safely taxi/manoeuvre the aircraft on the ground and comply with air traffic control instructions, airport markings, and signals.
SKILL	To determine that the applicant demonstrates manual aircraft control and application of procedures by: (a) obtaining and following appropriate ATC clearance; (b) maintaining smooth, accurate, and positive aircraft control; (c) maintaining proper spacing on other aircraft, obstructions, and persons; (d) accomplishing applicable briefing and checklist items.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related but not limited to: (a) rules related to taxiing; (b) loss of communication; (c) airport or airfield marking and lighting: (1) runway hold lines; (2) localiser and glide slope critical areas; (3) beacons, and other surface control markings and lighting; (d) operator policy relating to taxiing; (e) sterile cockpit concepts; (f) AOM chapters relating to: (1) limitations; (2) normal operations; (3) abnormal operations.
ATTITUDE	To determine that the applicant demonstrates: — situation awareness by dividing attention properly inside and outside the cockpit; — effective communication; — leadership and teamwork by applying correct crew coordination (when applicable); — effective workload management by maintaining constant vigilance and lookout during taxi operations; — effective problem-solving and decision-making.

SECTION 1: FLIGHT PREPARATION	
1.6. Pre-take-off checks	
OBJECTIVE	To determine that the applicant is able to perform pre-take-off procedures and actions.
SKILL	To determine that the applicant demonstrates application of procedures by: (a) accomplishing all items of the pre-take-off checklist; (b) ensuring that radios, instruments, and navigation aids are appropriately checked and set; (c) ensuring that all systems are within their normal operating range as required by the AOM; (d) ensuring that the aircraft is correctly configured for take-off; (e) ensuring that correct crew and passenger briefings are completed; (f) ensuring/confirming that passengers and crew are correctly secured for take-off; (g) obtaining appropriate take-off clearance using standard R/T phraseology; (h) completing the appropriate checklist; (i) ensuring cockpit crew readiness for take-off.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related to: (a) airport or airfield marking and lighting; (b) sterile cockpit concepts; (c) operator policy relating to pre-take-off procedures; (d) AOM relating to: (1) limitations, (2) normal operations, (3) abnormal operations, (4) performance.
ATTITUDE	To determine that the applicant demonstrates: — situation awareness by maintaining constant vigilance and observation of conditions, obstructions or other hazards that might hinder a safe take-off; — effective communication; — leadership and teamwork; — effective workload management by effectively distributing and managing tasks; — effective problem-solving and decision-making by noting any adverse changes of conditions that may affect the aircraft's take-off performance and recalculating performance or cancelling the take-off considering factors such as (but not limited to): • wind, • weight, • temperature, • runway conditions, etc.

SECTION 2: TAKE-OFFS	
2.1. Normal take-offs with different flap settings, including expedited take-offs	
OBJECTIVE	To determine that the applicant is able to conduct normal take-offs using different flap settings (as appropriate to the aircraft), including expedited take-offs as appropriate.
SKILL	To determine that the applicant demonstrates manual aircraft control, application of procedures, and effective flight path management through proper use of the flight management system guidance and automation by: (a) aligning the aircraft on the runway centre line; (b) maintaining longitudinal alignment on the centre line of the runway prior to initiating and during the take-off; (c) correctly setting take-off power; (d) monitoring engine controls, settings, and instruments during take-off to ensure that all predetermined parameters are maintained; (e) using the applicable noise-abatement, departure, and wake-turbulence-avoidance procedures, as required; (f) attaining the desired pitch attitude at the predetermined airspeed to obtain the desired performance; (g) maintaining the appropriate climb attitude; (h) performing or calling for and verifying the accomplishment of gear and flap retractions, power adjustments, and other required pilot-related activities at the required airspeeds within the tolerances established in the AOM; (i) achieving the appropriate airspeeds and climb-segment profiles.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related to: (a) operator policy relating to take-off procedures; (b) AOM relating to: (1) limitations, (2) normal operations, (3) abnormal operations, (4) performance.
ATTITUDE	To determine that the applicant demonstrates: — situation awareness by maintaining constant vigilance and observation of conditions, obstructions or other hazards that might hinder a safe take-off; — effective communication; — leadership and teamwork; — effective workload management by effectively distributing and managing tasks; — effective problem-solving and decision-making.

SECTION 2: TAKE-OFFS	
2.2. Instrument take-off	
OBJECTIVE	To determine that the applicant is able to conduct an instrument take-off in instrument meteorological conditions (simulated or actual).
SKILL	To determine that the applicant demonstrates manual aircraft control, application of procedures, and effective flight path management through proper use of the flight management system guidance and automation devices, and by: (a) transitioning smoothly and accurately from visual meteorological conditions to actual or simulated instrument meteorological conditions; (b) accomplishing the appropriate briefing/checklist items to ensure that the aeroplane systems applicable to the instrument take-off are operating properly; and (c) complying with ATC clearances and instructions issued by ATC (or the examiner simulating ATC).
KNOWLEDGE	To determine that the applicant demonstrates knowledge related to: (a) operator policy relating to take-off procedures; (b) AOM relating to: (1) limitations, (2) normal operations, (3) abnormal operations, (4) performance.
ATTITUDE	To determine that the applicant applies considerations for 'normal take-off' (item 2.1) and demonstrates: — situation awareness by maintaining constant vigilance and observation of conditions, obstructions or other hazards that might hinder a safe take-off; — effective communication; — leadership and teamwork; — effective workload management by effectively distributing and managing tasks; — effective problem-solving and decision-making.

SECTION 2: TAKE-OFFS	
2.3. Crosswind take-off	
OBJECTIVE	To determine that the applicant is able to conduct crosswind take-off.
SKILL	To determine that the applicant demonstrates manual aircraft control, application of procedures, and effective flight path management through proper use of the flight management system guidance and automation outlined in Section 2.1., and by: (a) setting the correct configuration for crosswind take-off, and making suitable adjustments to airspeed as required; (b) applying the controls correctly for the crosswind condition; (c) transitioning smoothly and accurately from the runway into balanced, climbing flight maintaining the runway centre line.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related to: (a) operator policy relating to take-off procedures; (b) AOM relating to: (1) limitations, (2) normal operations, (3) abnormal operations, (4) performance.
ATTITUDE	To determine that the applicant demonstrates: — situation awareness by maintaining constant vigilance and observation of conditions, obstructions or other hazards that might hinder a safe take-off; — effective communication; — leadership and teamwork; — effective workload management by effectively distributing and managing tasks; — effective problem-solving and decision-making.

SECTION 2: TAKE-OFFS	
2.4. Take-off at maximum take-off mass (actual or simulated maximum take-off mass)	
OBJECTIVE	To determine that the applicant is able to conduct a take-off at maximum take-off mass.
SKILL	To determine that the applicant demonstrates manual aircraft control, application of procedures, and effective flight path management through proper use of the flight management system guidance and automation outlined in Section 2.1., and by: (a) applying maximum performance, configuration, power, and airspeeds in accordance with the AFM; (b) setting the correct configuration for a maximum mass take-off, and making suitable adjustments to airspeed as required; (c) positioning and aligning the aeroplane for maximum utilisation of the available take-off area; (d) establishing the pitch attitude for the recommended obstacle clearance airspeed, and maintaining that airspeed until the obstacle is cleared; (e) establishing correct obstacle clearance track during climb.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related to: (a) operator policy relating to take-off procedures; (b) AOM relating to: (1) limitations, (2) normal operations, (3) abnormal operations, (4) performance.
ATTITUDE	To determine that the applicant demonstrates: — situation awareness by maintaining constant vigilance and observation of conditions, obstructions or other hazards that might hinder a safe take-off; — effective communication; — leadership and teamwork; — effective workload management by effectively distributing and managing tasks; — effective problem-solving and decision-making.

SECTION 2: TAKE-OFFS	
2.5.1. Take-offs with simulated engine failure: shortly after reaching V2	
OBJECTIVE	To determine that the applicant is able to safely conduct a take-off in the event the most critical engine fails shortly after reaching V2.
SKILL	To determine that the applicant demonstrates manual aircraft control, application of procedures, and effective flight path management through proper use of the flight management system guidance and automation outlined in Section 2.1., and by: (a) maintaining control of the aircraft and by using the correct climb airspeed following engine failure; (b) verifying the inoperative engine; (c) securing the inoperative engine, if appropriate; (d) monitoring the operating engine and making adjustments as necessary; (e) maintaining the aeroplane alignment with the heading appropriate for the climb performance and terrain clearance when engine failure occurs; (f) adjusting the engine controls as outlined in the AOM; (g) demonstrating the application of the proper procedure for any emergency/abnormal situation (as determined by the examiner) in the appropriate approved AOM; (h) completing the appropriate abnormal/emergency checklist.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related to: (a) operator policy relating to take-off procedures; (b) AOM relating to: (1) limitations, (2) normal operations, (3) abnormal operations, (4) performance.

ATTITUDE	To determine that the applicant demonstrates: — situation awareness by maintaining constant vigilance and observation of conditions, obstructions or other hazards that might hinder a safe take-off; — effective communication by: • confirming fault diagnosis and reviewing causal factors (with other crew members in MPA); • confirming intended plan of action (with other crew members in MPA); • ensuring that correct crew and passenger briefings are completed. — leadership and teamwork by: • involving other crew members in the option analysis (MPA); • considering and sharing the risks of alternative courses of action; • dividing attention properly inside and outside the cockpit. — effective workload management by effectively distributing and managing tasks; — effective problem-solving and decision-making by: • identifying alternative courses of action; • alerting ATC if necessary and obtaining the appropriate level of service.

SECTION 2: TAKE-OFFS	
2.5.2. Take-offs with simulated engine failure: between V1 and V2	
OBJECTIVE	To determine that the applicant is able to safely conduct a take-off in the event the most critical engine fails between V1 and V2.
SKILL	To determine that the applicant demonstrates manual aircraft control, application of procedures, and effective flight path management through proper use of the flight management system guidance and automation outlined in Section 2.1., and by: (a) maintaining control of the aircraft and correct climb airspeed following engine failure; (b) verifying the inoperative engine; (c) securing the inoperative engine, if appropriate; (d) monitoring the operating engine and making adjustments as necessary; (e) maintaining the aeroplane alignment with the heading appropriate for the climb performance and terrain clearance when engine failure occurs; (f) adjusting the engine controls as outlined in the AOM; (g) demonstrating the application of the proper procedure for any emergency/abnormal situation (as determined by the examiner) in the appropriate approved AOM; (h) completing the appropriate abnormal/emergency checklist.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related to: (a) operator policy relating to take-off procedures; (b) AOM relating to: (1) limitations; (2) normal operations; (3) abnormal operations; (4) performance.
ATTITUDE	To determine that the applicant demonstrates: — situation awareness by maintaining constant vigilance and observation of conditions, obstructions or other hazards that might hinder a safe take-off; — effective communication by: • confirming fault diagnosis and reviewing causal factors (with other crew members in MPA) • confirming intended plan of action (with other crew members in MPA); • ensuring that correct crew and passenger briefings are completed; — leadership and teamwork by: • involving other crew members in the option analysis (MPA); • considering and sharing the risks of alternative courses of action; • dividing attention properly inside and outside the cockpit; — effective workload management by effectively distributing and managing tasks; — effective problem-solving and decision-making by: • identifying alternative courses of action; • alerting ATC if necessary and obtaining the appropriate level of service.

SECTION 2: TAKE-OFFS	
2.6 Rejected take-off at a reasonable speed before reaching V1	
OBJECTIVE	To determine that the applicant is able to: (d) recognise a situation where the safest course of action is to reject the take-off; (e) take appropriate actions to stop safely within the remaining runway, and inform ATC; (f) consider and demonstrate/discuss the appropriate actions following RTO (e.g. engine shutdown, evacuation, precautions for hot brakes, etc.).
SKILL	To determine that the applicant demonstrates the following: (g) abandons the take-off if any major problem or failure occurs at a point during the take-off where the abort procedure can be initiated and the aircraft can be safely stopped on the remaining runway/stop way; (h) uses spoilers, propeller reverse/thrust reverse, wheel brakes, and other drag/braking devices, as appropriate, maintaining positive control in such a manner as to bring the aircraft to a safe stop; (i) accomplishes the appropriate abnormal/emergency procedures through briefing/checklists as set forth in the Pilot Operating Manual or AFM; (j) completes the appropriate briefing/checklist; (k) informs ATC when practicable; (l) informs passenger(s) when practicable.
KNOWLEGE	To determine that the applicant demonstrates knowledge related but not limited to: (c) Flight Manual or other appropriate document: (5) all systems, (6) limitations, (7) abnormal procedures; (8) emergency procedures; (d) Flight Manual or other appropriate document dedicated to failure during take-off.
ATTITUDE	To determine that the applicant demonstrates: — situation awareness by maintaining constant vigilance and observation of conditions, obstructions or other hazards that might hinder a safe take-off; — effective communication by: • confirming fault diagnosis and reviewing causal factors (with other crew members in MPA) • confirming intended plan of action (with other crew members in MPA); • ensuring that correct crew and passenger briefings are completed; — leadership and teamwork by: • involving other crew members in the option analysis (MPA); • considering and sharing the risks of alternative courses of action; • dividing attention properly inside and outside the cockpit; — effective workload management by effectively distributing and managing tasks; — effective problem-solving and decision-making by: • identifying alternative courses of action; • alerting ATC if necessary and obtaining the appropriate level of service.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
Aeroplane control — General	
OBJECTIVE	To determine that the applicant exhibits safe control of the aeroplane throughout the flight and conducts any manoeuvres required by the examiner.
SKILL	To determine that the applicant demonstrates manual aircraft control, application of procedures, and effective flight path management through proper use of the flight management system guidance and automation by: (a) limiting the magnitude of control input; (b) maintaining smoothness of control, within the limitations of the airframe and control systems; (c) using correctly the cockpit checklists; (d) following correct procedures for controlling the aircraft with automatic flight control systems, as appropriate.
KNOWLEDE	To determine that the applicant demonstrates knowledge related to: (a) AOM relating to: (1) limitations, (2) normal operations, (3) abnormal operations, (4) performance.
ATTITUDE	To determine that the applicant demonstrates: — situation awareness by: • maintaining adequate lookout before, during and after the execution of any manoeuvre by visual references; • maintaining orientation throughout the manoeuvres; — effective communication by demonstrating correct crew coordination as required by the type of operation (MPA); — leadership and teamwork; — effective workload management by: • managing and monitoring the engine(s) and other aeroplane systems; • dividing attention properly inside and outside the cockpit. — effective problem-solving and decision-making.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.1. Turns with and without spoilers	
OBJECTIVE	To determine that the applicant exhibits safe control of the aeroplane during turns with and without spoilers.
SKILL	To determine that the applicant demonstrates manual aircraft control, application of procedures, and effective flight path management through proper use of the flight management system guidance and automation by: (a) controlling the transition to the turning attitude using proper instrument cross-checks and coordinated control application; (b) turning onto specific visual references and headings by visual references (and solely by reference to instruments where appropriate to the flight); (c) following the correct procedures for controlling the aircraft with/without automatic flight control systems, as appropriate; (d) following the appropriate SOP for the confirmation of intended heading (MPA); (e) establishing the configuration specified by the examiner; (f) maintaining the assigned altitude and airspeed throughout the turn.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related to: (a) AOM relating to: (1) limitations, (2) normal operations, (3) abnormal operations, (4) performance.
ATTITUDE	To determine that the applicant demonstrates: — situation awareness by maintaining adequate lookout before, during and after turning by visual references; — effective communication by liaising with other crew members for lookout (MPA); — leadership and teamwork; — effective workload management through effective orientation throughout the manoeuvre; — effective problem-solving and decision-making.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.2. Tuck under and Mach buffets after reaching the critical Mach number, and other specific flight characteristics of the aeroplane (e.g. Dutch roll)	
OBJECTIVE	To determine that the applicant demonstrates knowledge of, and recognises, the elements related to tuck under and Mach buffets after reaching the critical Mach number, and other specific flight characteristics of the aeroplane (e.g. Dutch roll): Note: An aeroplane should not be used for this exercise.
SKILL	To determine that the applicant demonstrates manual aircraft control, application of procedures, and effective flight path management through proper use of the flight management system guidance and automation outlined in Section 3 'Aeroplane control — General', and by: (a) establishing the recommended configuration and airspeed/Mach, and maintaining that arspeed/Mach; (b) using the proper technique to enter into, operate within, and recover from specific flight situations; (c) recognising critically high airspeed; (d) establishing the recommended configuration and airspeed, and maintains that airspeed; (e) controling the aeroplane smoothly within its limitations; (f) following the appropriate action in accordance with the Flight manual or other appropriate document.
KNOWLEGE	To determine that the applicant demonstrates knowledge related to: (a) AOM relating to: (1) limitations, (2) normal operations, (3) abnormal operations, (4) performance.
ATTITUDE	To determine that the applicant demonstrates: — situation awareness by: • maintaining adequate lookout before, during and after the execution of any manoeuvre by visual references; • dividing attention properly inside and outside the cockpit; — effective communication through effective crew coordination as required by the type of operation (MPA); — leadership and teamwork; — effective workload management by: • managing and monitoring the engine(s) and other aeroplane systems; • maintaining orientation throughout the manoeuvres; — effective problem-solving and decision-making.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.3. Normal operation of systems and controls on engineer's panel	
OBJECTIVE	To determine that the applicant demonstrates adequate knowledge and application of the procedures during normal operation of systems and controls the engineer's panel.
SKILL	To determine that the applicant demonstrates application of procedures by: (a) demonstrating proper use of the aeroplane systems, subsystems, and devices (as may be determined by the examiner) appropriate to the aeroplane; (b) completing the appropriate checklist; (c) following the correct procedures for controlling the aircraft with or without automatic flight control systems, in accordance with the Aircraft/Systems Manual and Operations Manual, as appropriate.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related to: (a) AOM relating to: (1) limitations, (2) normal operations, (3) performance.
ATTITUDE	To determine that the applicant demonstrates: — situation awareness; — effective communication by liaising with other crew members for the correct operation of the aircraft systems; — leadership and teamwork; — effective workload management; — effective problem-solving and decision-making.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.4.0. Engine (propeller, if necessary)	
OBJECTIVE	See 3.3. and 3.6.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.4.1. Pressurisation and air conditioning	
OBJECTIVE	See 3.3. and 3.6.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.4.2. Pitot/static system	
OBJECTIVE	See 3.3. and 3.6.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.4.3. Fuel system	
OBJECTIVE	See 3.3. and 3.6.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.4.4. Electrical system	
OBJECTIVE	See 3.3. and 3.6.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.4.5. Hydraulic system	
OBJECTIVE	See 3.3. and 3.6.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.4.6. Flight control and trim system	
OBJECTIVE	See 3.3. and 3.6.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.4.7. Anti-icing/de-icing system, glare-shield heating	
OBJECTIVE	See 3.3. and 3.6.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.4.8. Autopilot/Flight Director	
OBJECTIVE	See 3.3. and 3.6.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.4.9. Stall-warning devices or stall-avoidance devices, and stability-augmentation devices	
OBJECTIVE	See 3.3. and 3.6.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.4.10. Ground-proximity warning system, weather radar, radio altimeter, transponder	
OBJECTIVE	See 3.3. and 3.6.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.4.11. Radios, navigation equipment, instruments, flight management system	
OBJECTIVE	See 3.3. and 3.6.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.4.12. Landing gear and brakes	
OBJECTIVE	See 3.3. and 3.6.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.4.13. Slat and flap system	
OBJECTIVE	See 3.3. and 3.6.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.4.14. Auxiliary power unit	
OBJECTIVE	See 3.3. and 3.6.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.6. Abnormal and emergency procedures	
OBJECTIVE	To determine that the applicant demonstrates adequate knowledge and application of the procedures during abnormal/emergency procedures.
SKILL	To determine that the applicant demonstrates manual aircraft control, application of procedures, and effective flight path management through proper use of the flight management system guidance and automation by: (a) maintaining control of the aeroplane and safe trajectory; (b) showing correct fault diagnosis; (c) confirming fault diagnosis; (d) demonstrating the proper procedure for any emergency/abnormal situation (as determined by the examiner) in the appropriate approved AFM; (e) completing the appropriate abnormal/emergency checklist; (f) reviewing causal factors; (g) identifying alternative courses of action; (h) ensuring that correct crew and passenger briefings are completed; (i) alerting ATC if necessary, and obtaining the appropriate level of service.

KNOWLEDGE	To determine that the applicant demonstrates knowledge related to: (a) operator policy relating to abnormal and emergency procedures; (b) AOM relating to: (1) limitations, (2) normal operations, (3) abnormal operations, (4) performance.
ATTITUDE	To determine that the applicant demonstrates: — situation awareness by dividing attention properly inside and outside the cockpit; — effective communication by considering and sharing the risks of alternative courses of action; — leadership and teamwork by involving other crew members in the option analysis; — effective workload management by maintaining adequate lookout before, during and after the execution of any manoeuvre by visual references; — effective problem-solving and decision-making by confirming intended course of action.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.6.1. Fire drills, e.g. engine, APU, cabin, cargo compartment, flight deck, wing and electrical fires including evacuation	
OBJECTIVE	To determine that the applicant demonstrates adequate knowledge and application of the procedures related to fire drill.
SKILL	To determine that the applicant demonstrates manual aircraft control and application of procedures outlined in Section 3.6., by: (a) maintaining aeroplane control; (b) performing all actions required by the fire drills; (c) demonstrating the proper procedures in accordance with the approved procedure/ briefing/checklist or the manufacturer's recommended procedures in a timely manner.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related to: (a) operator policy relating to abnormal and emergency procedures; (b) fire detection and extinguishing systems; (c) AOM relating to: (1) limitations, (2) normal operations, (3) abnormal operations, (4) performance.

ATTITUDE	To determine that the applicant demonstrates: — situation awareness by taking care of passenger/crew safety; — effective communication; — leadership and teamwork by identifying source of smoke/fire in a timely manner; — effective workload management; — effective problem-solving and decision-making by initiating emergency descent/ diversion if appropriate.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.6.1. Smoke control and removal	
OBJECTIVE	See 3.3. and 3.6.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.6.3. Engine failures, shutdown, and restart at a safe height	
OBJECTIVE	See 3.3. and 3.6.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.6.4. Fuel dumping	
OBJECTIVE	See 3.3. and 3.6.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.6.4. Fuel dumping	
OBJECTIVE	See 3.3. and 3.6.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.6.5. Wind shear at take-off/landing	
OBJECTIVE	To determine that the applicant is able to accomplish the manoeuvres related to wind shear at take-off/ landing.
SKILL	To determine that the applicant demonstrates manual aircraft control and application of procedures outlined in Section 3.6., by: (a) adjusting aeroplane configuration and speeds as appropriate; (b) performing all the procedures required for wind shear at take-off/landing, and controlling the aeroplane in a smooth, positive, and timely manner; (c) maintaining smooth and positive control within the aeroplane limitations; (d) demonstrating sound judgement and knowledge of the aeroplane manoeuvring capabilities throughout the procedure.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related to: (a) operator policy relating to abnormal and emergency procedures; (b) operator policy relating to adverse weather; (c) wind shear meteorological conditions, wind shear detection systems and wind shear operator policy and procedures; (d) AOM relating to: (1) limitations, (2) normal operations, (3) abnormal operations, (4) performance.
ATTITUDE	See 3.6.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.6.6. Simulated cabin pressure failure/emergency descent	
OBJECTIVE	To determine that the applicant is able to accomplish the manoeuvres related to simulated cabin pressure failure/emergency descent.
SKILL	To determine that the applicant demonstrates manual aircraft control and application of procedures outlined in Section 3.6., and by: (a) performing emergency descent in a smooth, positive, and timely manner without exceeding the limitations; (b) demonstrating proper procedures in accordance with the approved procedure/ briefing/checklist or the manufacturer's recommended procedures and pertinent briefing/checklist items; (c) demonstrating sound judgement and knowledge of the aeroplane manoeuvring capabilities throughout the procedure.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related to: (a) operator policy relating to abnormal and emergency procedures; (b) air conditioning and pressurisation systems; (c) AOM relating to: (1) limitations, (2) normal operations, (3) abnormal operations, (4) performance.
ATTITUDE	See 3.6.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.6.7. Incapacitation of flight crew member	
OBJECTIVE	To determine that the applicant is able to manage incapacitation of flight crew member.
SKILL	To determine that the applicant demonstrates manual aircraft control and application of procedures outlined in Section 3.6., and by: (a) maintaining aeroplane control in a smooth, positive, and timely manner; (b) performing all procedures for incapacitation of flight crew member in accordance with the approved procedure/briefing/checklist or the manufacturer's recommended procedures and pertinent briefing/checklist items.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related to: (a) operator policy relating to abnormal and emergency procedures; (b) AOM relating to: (1) limitations, (2) normal operations, (3) abnormal operations, (4) performance.
ATTITUDE	To determine that the applicant demonstrates: — situation awareness by ensuring safety of flight crew member, and keeps the incapacitated flight crew member clear of aeroplane controls; — effective communication; — leadership and teamwork; — effective workload management; — effective problem-solving and decision-making by identifying flight crew member incapacitation in a timely manner.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.6.8. Other emergency procedures as outlined in the Flight Manual or other appropriate document	
OBJECTIVE	See 3.3. and 3.6.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.6.9. ACAS event	
OBJECTIVE	See 3.3. and 3.6.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.7. Steep turns with a 45-degree bank, 180 to 360 degrees left and right	
OBJECTIVE	To determine that the applicant is able to accomplish steep turns (if applicable to the aeroplane) and understands the factors associated with performance, wing loading, angle of bank, stall speed, pitch, power requirements, and over-banking tendencies.
SKILL	To determine that the applicant demonstrates manual aircraft control, application of procedures, and effective flight path management through proper use of the flight management system guidance and automation, when applicable, by: (a) selecting a safe height as recommended by the manufacturer, training syllabus, or other training directive, or as agreed upon with the examiner; (b) establishing the recommended entry airspeed, both in straight and level flight; (c) rolling into a coordinated 360-degree turn with a bank angle of not less than 45 degrees, and maintains the bank angle in a stable, balanced turn; (d) applying smooth, coordinated pitch, bank, and power adjustments to maintain the specified altitude, attitude, and airspeed; (e) avoiding any indication of an approaching stall, abnormal flight attitude, or exceeding any structural or operating limitation during any part of the manoeuvre; (f) rolling out of the turn, stabilises the aeroplane in straight and level flight or, at the discretion of the examiner, reverses the direction of turn and repeats the manoeuvre in the opposite direction; (g) recovering accurately onto the desired heading and at the desired airspeed for straight and level flight.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related to: (a) AOM relating to: (1) limitations, (2) normal operations, (3) abnormal operations, (4) performance.

ATTITUDE	To determine that the applicant demonstrates: — situation awareness by maintaining adequate lookout before, during and after the turn by visual references; — effective communication by liaising with other crew members for lookout (MPA); — leadership and teamwork; — effective workload management by demonstrating orientation throughout the manoeuvre; — effective problem-solving and decision-making.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.8. Early recognition and countermeasures on approaching stall (up to activation of stall-warning device) in take-off configuration (flaps in take-off position), in cruising flight configuration, and in landing configuration (flaps in landing position, gear extended)	
OBJECTIVE	To determine that the applicant exhibits early recognition and countermeasures to approaching stall.
SKILL	To determine that the applicant demonstrates manual aircraft control, application of procedures outlined in Section 3 'Aeroplane control — General', and by: (a) establishing the recommended configuration and airspeed, and maintains that airspeed; (b) following the appropriate action in accordance with the Flight manual or other appropriate document; (c) controlling the aeroplane smoothly within its limitations.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related to: (a) AOM relating to: (1) limitations, (2) normal operations, (3) abnormal operations, (4) performance.
ATTITUDE	To determine that the applicant demonstrates: — situation awareness by: • ensuring that the aeroplane is in a safe area and clear of hazards prior to accomplishing an approach to a stall; • recognising critically high airspeed; — effective communication; — leadership and teamwork; — effective workload management; — effective problem-solving and decision-making.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.8.1. Recovery from full stall or after activation of stall-warning device in climb, cruise, and approach configuration	
OBJECTIVE	To determine that the applicant exhibits safe recovery from full stall or after activation of stall-warning device in climb, cruise, and approach configuration.
SKILL	To determine that the applicant demonstrates manual aircraft control, application of procedures outlined in Section 3 'Aeroplane control — General', and by: (a) configuring the aeroplane as required by the examiner, from level flight, or descending, as if on an approach path; (b) recovering at the first indication of an impending stall, as appropriate to the aeroplane design, and initiates recovery or as otherwise directed by the examiner; (c) retracting landing gear and flaps as appropriate; (d) completing the appropriate briefing/checklist, including go-around or post-take-off checks.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related to: (a) AOM relating to: (1) limitations, (2) normal operations, (3) abnormal operations, (4) performance.
ATTITUDE	To determine that the applicant demonstrates: — situation awareness by: • ensuring that the aeroplane is in a safe area and clear of hazards prior to accomplishing an approach to a stall; • recognising critically high airspeed; — effective communication; — leadership and teamwork; — effective workload management; — effective problem-solving and decision-making.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.9. Instrument flight procedures **3.9.1.* Adherence to departure and arrival routes and to ATC instructions**	
OBJECTIVE	To determine that the applicant is able to ensure adherence to departure and arrival routes and to ATC instructions during instrument flight procedures.
SKILL	To determine that the applicant demonstrates manual aircraft control, application of procedures, and effective flight path management through proper use of the flight management system guidance and automation by: (a) making correct use of instruments, Flight Director, autopilot, navigation equipment and communication equipment appropriate to the performance of the procedure; (b) intercepting, in a timely manner, all courses, radials, and bearings (QDM/QDR) appropriate to the procedure, route, ATC clearance, or as otherwise directed by the examiner; (c) establishing, where appropriate, a rate of descent consistent with the aeroplane operating characteristics and safety; (d) maintaining the appropriate airspeed, altitude, and headings, and accurately tracks radials, courses, and bearing (QDM/QDR); (e) using current and appropriate navigation publications for the proposed flight; (f) accomplishing the aeroplane briefing/checklist items appropriate to the departure and arrival; (g) establishing communication with ATC using proper phraseology; (h) interpreting correctly the ATC clearance received and, when necessary, requests clarification, verification, or change; (i) complying, in a timely manner, with all ATC clearances, instructions, and restrictions; (j) adhering to airspeed restrictions and adjustments required by regulations, ATC, the Pilot Operating Manual, the AFM, and the examiner; (k) complying with the provisions of the descent profile, STAR, and other arrival procedures, as appropriate; (l) performing the correct altimetry procedures in accordance with the relevant regulations, operational procedures and ATC requirements; (m) completing the appropriate checklist.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related to: (a) R/T phraseology; (b) two-way communications failure procedures; (c) AOM relating to: (1) limitations, (2) normal operations, (3) abnormal operations, (4) performance.

ATTITUDE	To determine that the applicant demonstrates: — situation awareness by taking into account airplane performance, obstacle clearance, etc; — effective communication by ensuring that correct crew and passenger briefings are completed; — leadership and teamwork by liaising with other crew members for the correct operation of the aircraft systems during approach and landing; — effective workload management through effective orientation, division of attention, and proper planning; — effective problem-solving and decision-making.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.9. Instrument flight procedures **3.9.2.* Holding procedures**	
OBJECTIVE	To determine that the applicant is able to accomplish holding procedures during instrument flight procedures.
SKILL	To determine that the applicant demonstrates manual aircraft control, application of procedures, and effective flight path management through proper use of the flight management system guidance and automation outlined in Section 3.9.1., and by: (a) making changes to the recommended holding airspeed appropriate for the aeroplane and holding altitude, so as to cross the holding fix at or below the maximum holding airspeed; (b) using wind-drift correction techniques accurately to maintain the appropriate joining and holding pattern, and to establish and maintain the correct tracks and bearings; (c) maintaining the appropriate airspeed, altitude, and headings accurately to establish and maintain the correct tracks and bearings; (d) recognising arrival at the clearance limit or holding fix; (e) following appropriate entry procedures in accordance with standard operational procedures or as required by ATC or the examiner; (f) complying with ATC reporting requirements; (g) using the correct timing criteria where required by the holding procedure, ATC or the examiner's instructions; (h) making the appropriate adjustments to the procedure timing to allow for the effects of known wind; (i) making the appropriate adjustments in order to arrive over the holding fix as close as possible to the 'expected approach time'.
KNOWLEDGE	To determine that the applicant demonstrates knowledge outlined in Section 3.9.1., and adequate knowledge of holding endurance including but not necessarily limited to fuel on board, fuel flow while holding, fuel required to alternate, etc.

ATTITUDE	To determine that the applicant demonstrates: — situation awareness by taking into account airplane performance, obstacle clearance, etc; — effective communication by ensuring that correct crew and passenger briefings are completed; — leadership and teamwork by liaising with other crew members for the correct operation of the aircraft systems during approach and landing; — effective workload management through effective orientation, division of attention, and proper planning; — effective problem-solving and decision-making.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.9. Instrument flight procedures **3.9.3.* Precision approaches down to a decision height (DH) not less than 60 metres (200 feet)**	
OBJECTIVE	To determine that the applicant is able to accomplish precision approaches down to a decision height (DH) not less than 60 metres (200 feet).

SKILL	To determine that the applicant demonstrates manual aircraft control, application of procedures, and effective flight path management through proper use of the flight management system guidance and automation by: (a) selecting, tuning, identifying, and monitoring the operational status of ground and aeroplane navigation equipment used for the approach; (b) applying the necessary adjustments to the published approach minima criteria for the aeroplane approach category, and with due regard to: (1) NOTAMs; (2) inoperative navigation equipment; (3) inoperative visual aids associated with the landing environment; (4) reported weather conditions; (c) accomplishing the aeroplane briefing/checklist items appropriate to the phase of flight or approach segment, including engine-out approach and landing briefing/checklists; (d) following the published approach procedure in accordance with ATC instructions, or as otherwise directed by the examiner; (e) establishing two-way communication with ATC using the proper communication phraseology and techniques; (f) copying correctly, in a timely manner, the ATC clearance as issued; (g) establishing the appropriate aeroplane configuration and airspeed considering turbulence, wind shear, microburst conditions, or other meteorological and operating conditions; (h) prior to beginning the final approach segment, maintaining the desired altitude, heading, and airspeed, and accurately tracks radials, courses, and bearings in accordance with the approach procedure or as directed by ATC; (i) making appropriate adjustments to the procedure timing to allow for the effects of known wind; (j) intercepting and tracking localiser within the prescribed limits; (k) establishing a predetermined rate of descent at the point where the electronic glide slope begins in order to follow the glide slope, and maintains electronic glide slope within the prescribed limits; (l) demonstrating satisfactory altitude, speed, and heading control with the aircraft in trim such that a stable approach path is achieved and maintained to the approach minima; (m) arriving at DA/DH in such a position that a landing, go-around or circling approach may be accomplished safely; (n) avoiding descent below DA/DH before initiating a missed approach procedure or transitioning to a landing; (o) initiating immediately the missed approach, when at DA/DH, if the required visual references for the runway are not unmistakably visible and identifiable; (p) maintaining localiser and glide slope during the visual descent from DA/DH to a point over the runway where glide slope must be abandoned to accomplish a normal landing; (q) transitioning to a normal landing approach only when the aeroplane is in a position from which a descent to a landing on the runway can be made at a normal rate of descent using normal manoeuvring.

KNOWLEDGE	To determine that the applicant demonstrates knowledge related to: (a) R/T phraseology; (b) two-way communications failure procedures; (c) AOM relating to: (1) limitations, (2) normal operations, (3) abnormal operations, (4) performance.
ATTITUDE	To determine that the applicant demonstrates: — situation awareness through effective orientation throughout the manoeuvre; — effective communication through correct crew coordination as required by the type of operation; — leadership and teamwork by encouraging participation of other crew members in accordance with the approved SOP; — effective workload management; — effective problem-solving and decision-making.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.9. Instrument flight procedures **3.9.4.* Non-precision approach down to MDH/A**	
OBJECTIVE	To determine that the applicant is able to accomplish non-precision approach down to MDH/A.

SKILL	To determine that the applicant demonstrates manual aircraft control, application of procedures, and effective flight path management through proper use of the flight management system guidance and automation by: (a) selecting, tuning, identifying, and monitoring the operational status of ground and aeroplane navigation equipment used for the approach; (b) applying the necessary adjustments to the published approach minima criteria for the aeroplane approach category, and with due regard to: (1) NOTAMs; (2) inoperative navigation equipment; (3) inoperative visual aids associated with the landing environment; (4) reported weather conditions; (c) accomplishing the aeroplane briefing/checklist items appropriate to the phase of flight or approach segment, including engine-out approach and landing briefing/checklists; (d) following the published approach procedure in accordance with ATC instructions, or as otherwise directed by the examiner; (e) establishing two-way communication with ATC using the proper communication phraseology and techniques; (f) copying correctly, in a timely manner, the ATC clearance as issued; (g) establishing the appropriate aeroplane configuration and airspeed considering turbulence, wind shear, microburst conditions, or other meteorological and operating conditions; (h) prior to beginning the final approach segment, maintaining the desired altitude, heading, and airspeed, and accurately tracks radials, courses, and bearings in accordance with the approach procedure or as directed by ATC; (i) making appropriate adjustments to the procedure timing to allow for the effects of known wind; (j) establishing a rate of descent that will ensure arrival at the MDA/H (at or prior to reaching the visual descent point, if published) with the aeroplane in a position from which a descent from MDA/H to a landing on the intended runway can be made at a normal rate using normal manoeuvring; (k) demonstrating satisfactory altitude, speed, and heading control with the aircraft in trim such that a stable approach path is achieved and maintained to the approach minima; (l) executing the missed approach if the required visual references for the intended runway are not unmistakably visible and identifiable at the missed approach point; (m) transitioning to a normal landing approach only when the aeroplane is in a position from which a descent to a landing on the runway can be made at a normal rate of descent using normal manoeuvring.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related to: (a) R/T phraseology; (b) two-way communications failure procedures; (c) AOM relating to: (1) limitations, (2) normal operations, (3) abnormal operations, (4) performance.

ATTITUDE	To determine that the applicant demonstrates: — situation awareness through effective orientation throughout the manoeuvre; — effective communication through correct crew coordination as required by the type of operation; — leadership and teamwork by encouraging participation of other crew members in accordance with the approved SOP; — effective workload management; — effective problem-solving and decision-making.

SECTION 3: FLIGHT MANOEUVRES AND PROCEDURES	
3.9.5. Circling approach under the following conditions: (a)… (b)…	
OBJECTIVE	To determine that the applicant is able to accomplish a circling approach.
SKILL	To determine that the applicant demonstrates manual aircraft control, application of procedures, and effective flight path management through proper use of the flight management system guidance and automation outlined in Section 3.9.3. or 3.9.4., and by: (a) using the appropriate aeroplane configuration for normal and abnormal situations and procedures; (b) manoeuvring the aeroplane, by visual references, after reaching the authorised circling approach altitude in order to maintain a flight path that permits a normal landing on a runway at least 90 degrees from the final approach course, or according to the published procedure; (c) maintaining at least the published minimum circling level throughout the circling procedure until a position is reached from which a descent to a normal landing can be made; (d) maintaining visual contact with the landing threshold throughout the circling procedure; (e) performing the procedure without excessive manoeuvring and without exceeding the normal operating limits of the aeroplane (the angle of bank should not normally exceed 30 degrees); (f) confirming the direction of traffic, and adheres to all restrictions and instructions issued by ATC; (g) maintaining the correct circling pattern, and follows any prescribed tracks in accordance with the published procedure or as directed by ATC or the examiner; (h) turning in the appropriate direction, when a missed approach is dictated during the circling approach, and uses the correct procedure and aeroplane configuration.

KNOWLEDGE	To determine that the applicant demonstrates knowledge related to: (a) circling approach categories, speeds, and procedures; (b) aeroplane manoeuvring capabilities throughout the circling approach; (c) AOM relating to: (1) limitations, (2) normal operations, (3) abnormal operations, (4) performance.
ATTITUDE	To determine that the applicant demonstrates: — situation awareness: • through effective orientation throughout the manoeuvre; • by noting any surface conditions, obstructions, adverse meteorological conditions or other hazards that might hinder a safe landing; • by maintaining adequate lookout for other aeroplanes; — effective communication through correct crew coordination as required by the type of operation; — leadership and teamwork by encouraging participation of other crew members in accordance with the approved SOP; — effective workload management by dividing attention properly inside and outside the cockpit; — effective problem-solving and decision-making.

SECTION 4: MISSED APPROACH PROCEDURES	
4.1. Go-around with all engines operating* after an ILS approach on reaching decision height	
OBJECTIVE	To determine that the applicant is able to accomplish the go-around procedure with all engines operating* after an ILS approach on reaching decision height.

SKILL	To determine that the applicant demonstrates manual aircraft control, effective flight path management and application of procedures by: (a) initiating the go-around procedure promptly by the timely application of power, establishes the proper climb attitude, and reconfigures the aircraft in accordance with the approved procedures; (b) maintaining the desired altitudes, airspeed, and heading, and accurately tracks courses, radials, and bearings; (c) complying with the appropriate missed approach procedure or ATC clearance; (d) using FMS guidance and automation where applicable; (e) accomplishing the appropriate checklist items in a timely manner in accordance with the approved procedures; (f) interpreting correctly the ATC clearance received and, when necessary, requesting clarification, verification, or change; (g) requesting clearance, if appropriate, to the alternate aerodrome, another approach, a holding fix, or as otherwise directed by the examiner.
KNOWLEDGE	To determine that the applicant demonstrates knowledge of the operator policy relating but not limited to: (a) flight procedures; (b) all-weather operations; (c) stabilised approach criteria; (d) visual references; (e) go-around all-engines pattern; (f) airplane limitations.
ATTITUDE	To determine that the applicant demonstrates: — situation awareness by managing the airspace environment, limitations, and restrictions (for example: MSA, obstacle clearance); — effective communication by making appropriate crew notification when safe to do so; — leadership and teamwork; — effective workload management: • through effective fuel management; • by managing the correct operation of the aircraft systems. — effective problem-solving and decision-making by: • rejecting the landing for actual or simulated circumstances; • managing the flight to an alternate if needed.

SECTION 4: MISSED APPROACH PROCEDURES	
4.2. Other missed approach procedures (see Section 4.1.)	
OBJECTIVE	To determine that the applicant is able to perform missed approach procedures in circumstances other than those referred to in Section 4.1.

SKILL	To determine that the applicant demonstrates manual aircraft control and application of procedures by: (a) going around before reaching the Missed Approach Point when applicable (NPA), and executes the appropriate missed approach procedure within the prescribed limits; (b) maintaining the missed approach track within the circling approach area until reaching a safe altitude or joining the original missed approach; (c) complying with non-standard go-around procedures (for example: go-around requiring small change of altitude or high-altitude go-around); (d) informing ATC of the specific circling missed approach track.
KNOWLEDGE	To determine that the applicant demonstrates knowledge of the operator policy relating but not limited to: (a) circling-approach procedures; (b) non-precision approach procedures; (c) non-standard go-around procedures; (d) airspace environment.
ATTITUDE	To determine that the applicant demonstrates: — situation awareness by managing the airspace environment, limitations, and restrictions (for example: MSA, obstacle clearance); — effective communication by making appropriate crew notification when safe to do so; — leadership and teamwork; — effective workload management: • through effective fuel management; • by managing the correct operation of the aircraft systems; — effective problem-solving and decision-making by: • rejecting the landing for actual or simulated circumstances; • managing the flight to an alternate if needed.

SECTION 4: MISSED APPROACH PROCEDURES	
4.3. Manual go-around with the critical engine simulated inoperative after an instrument approach on reaching DH, MDH or MAPt (see Sections 4.1. and 4.2.)	
OBJECTIVE	To determine that the applicant is able to perform a missed approach procedure with the critical engine simulated inoperative after an instrument approach on reaching DH, MDH or MAPt.
SKILL	To determine that the applicant demonstrates manual aircraft control and application of procedures by: (a) applying the appropriate power setting for the flight condition and controlling yaw, and establishes a pitch attitude necessary to obtain the desired performance; (b) establishing a positive rate of climb, and climbs at the appropriate airspeed to the correct acceleration altitude; (c) retracting the wing flaps/drag devices and landing gear, if appropriate, in the correct sequence; (d) trimming the aeroplane as necessary, and maintains the proper ground track and altitudes during the rejected landing procedure; (e) accomplishing the appropriate briefing/checklist items in a timely manner in accordance with the approved procedures.
KNOWLEDGE	To determine that the applicant demonstrates knowledge of the operator policy relating but not limited to: (a) systems' limitations; (b) abnormal procedures; (c) engine-out performances; (d) engine-out patterns.
ATTITUDE	To determine that the applicant demonstrates: — situation awareness by: • monitoring engine-out landing capacity; • monitoring OEI performance, weather, obstacle clearance, etc; — effective communication with crew members and ATC; — leadership and teamwork through effective crew coordination during the go-around and engine-out procedures; — effective workload management; — effective problem-solving and decision-making.

SECTION 4: MISSED APPROACH PROCEDURES	
4.4. Rejected landing at 15 metres (50 feet) above runway threshold and go-around (see Section 4.1. plus the items below)	
OBJECTIVE	To determine that the applicant exhibits the ability to perform a rejected landing procedure.
SKILL	To determine that the applicant demonstrates manual aircraft control and application of procedures by: (a) applying the appropriate power setting for the flight condition, and establishes a pitch attitude necessary to obtain the desired performance; (b) trimming the aeroplane as necessary, and maintains the proper ground track during the rejected landing procedure; (c) retracting the wing flaps/drag devices and landing gear, if appropriate, in the correct sequence and at a safe altitude, and establishes a positive rate of climb and the appropriate airspeed.
KNOWLEDGE	To determine that the applicant demonstrates knowledge of the operator policy relating but not limited to: (a) supplementary procedures if available; (b) restrictions on pitch attitude; (c) procedure for gear and flap retraction.
ATTITUDE	To determine that the applicant demonstrates: — situation awareness by monitoring performance, weather, obstacle clearance, etc; — effective communication with crew members and ATC; — leadership and teamwork through effective crew coordination during the go-around and engine-out procedures; — effective workload management; — effective problem-solving and decision-making.

SECTION 5: LANDINGS	
5.1. Normal landings* also after an ILS approach with transition to visual flight on reaching DH	
OBJECTIVE	To determine that the applicant is able to perform normal landings, also after an ILS, with transition to visual flight on reaching DH.
SKILL	To determine that the applicant demonstrates manual aircraft control and application of procedures by: (a) establishing the recommended approach and landing configuration and airspeed, and adjusts pitch attitude and power as required in order to maintain the correct approach path and airspeed; (b) maintaining a ground track that ensures that the desired traffic circuit will be flown, taking into account any obstructions and ATC or examiner requirements; (c) making proper correction for drift (using existing wind conditions) and maintaining a precise ground track; (d) achieving and maintaining a stabilised approach; (e) considering wind conditions, landing surface and obstructions, and selects the correct touchdown point; (f) accomplishing a smooth, positively controlled transition from final approach to touchdown; (g) achieving a landing within the designated touchdown zone at the correct speed, in the correct attitude, and on the runway centre line; (h) touching down with no side drift and with the aeroplane aligned with the runway centre line; (i) maintaining positive directional control throughout the landing roll; (j) using spoilers, propeller reverse, thrust reverse, wheel brakes, and other drag/braking devices, as appropriate, in such a manner to bring the aeroplane to a safe stop; (k) using correctly the aircraft systems during approach and landing; (l) interpreting the ATC clearance received and, when necessary, requesting clarification, verification, or change; (m) ensuring or confirming that passengers and crew are correctly secured for take-off/ landing; (n) completing the appropriate pre-landing checklist; (o) accomplishing the appropriate post-landing checklist items.

KNOWLEDGE	To determine that the applicant demonstrates knowledge of AOM relating but not limited to: (a) Operations Manual/SOPs as applicable; (b) all-weather operations; (c) stabilised approach criteria; (d) visual references; (e) approach and landing patterns; (f) aircraft limitations, performance limitations; (g) airport markings and lightings; (h) recommended approach angles; (i) wake turbulence; (j) maximum speed for use of high-speed turn-off.
ATTITUDE	To determine that the applicant demonstrates: — situation awareness by noting any surface conditions, obstructions, adverse meteorological conditions or other hazards that might hinder a safe landing; — effective communication by monitoring ATC instructions; — leadership and teamwork; — effective workload management by dividing attention properly inside and outside the cockpit and maintaining adequate lookout for other aeroplanes; — effective problem-solving and decision-making by rejecting the landing for any safety reason.

SECTION 5: LANDINGS	
5.2. Landing with simulated jammed horizontal stabiliser in any out-of-trim position (see Section 5.1. plus the items below)	
OBJECTIVE	To determine that the applicant is able to control the aircraft with jammed stabiliser in any out-of-trim position.
SKILL	To determine that the applicant demonstrates aircraft control and the application of procedures by: (a) maintaining a stabilised approach at an appropriate approach speed in accordance with the Pilot Operating Manual/AFM; (b) maintaining safe aeroplane control in a smooth, positive, and timely manner; (c) confirming fault diagnosis (with other crew members in MPA); (d) reviewing causal factors (with other crew members in MPA).
KNOWLEDGE	To determine that the applicant demonstrates knowledge of the operator policy relating but not limited to: (a) abnormal procedures; (b) jammed stabiliser patterns if available; (c) ATC phraseology to obtain the appropriate clearance and advise ATC of any technical problem.

ATTITUDE	To determine that the applicant demonstrates: — situation awareness by: • making due allowance for landing performance; • noting any surface conditions, obstructions, adverse meteorological conditions or other hazards that might hinder a safe landing; — effective communication with crew members and ATC; — leadership and teamwork through effective crew coordination during the landing; — effective workload management; — effective problem-solving and decision-making.

SECTION 5: LANDINGS	
5.3. Crosswind landings (a/c, if practicable)	
OBJECTIVE	To determine that the applicant exhibits the ability to perform normal landings with crosswind.
SKILL	To determine that the applicant demonstrates application of procedures by: (a) adjusting aeroplane configuration and speeds as appropriate; (b) performing all the procedures required for crosswind landing, and controls the aeroplane in a smooth, positive, and timely manner.
KNOWLEDGE	To determine that the applicant demonstrates knowledge of the operator policy relating but not limited to: (a) landing techniques; (b) hazardous atmospheric conditions; (c) aircraft crosswind limitations.
ATTITUDE	To determine that the applicant demonstrates: — situation awareness with regard to aircraft flight path; — effective communication with crew and ATC by taking into account the crosswind condition and its effect on aircraft stability; — leadership and teamwork; — effective workload management; — effective problem-solving and decision-making.

SECTION 5: LANDINGS	
5.4. Traffic pattern and landing without extended or with partly extended flaps and slats	
OBJECTIVE	To determine that the applicant is able to accomplish the traffic pattern and landing without extended or with partly extended flaps and slats.
SKILL	To determine that the applicant demonstrates aircraft control and application of procedures by: (a) maintaining the appropriate pitch attitude, speeds, and flight path for the configuration, gross weight, surface winds and other applicable operational considerations; (b) performing all the procedures required for landing without flaps or with partly extended flaps and slats, and controls the aeroplane in a smooth, positive, and timely manner; (c) making correct utilisation of all available drag and braking devices after landing in order to bring the aircraft to a safe stop.
KNOWLEDGE	To determine that the applicant demonstrates knowledge of AOM relating but not limited to: (a) systems' limitations; (b) abnormal procedures; (c) flaps/slats abnormal configuration patterns, if available.
ATTITUDE	To determine that the applicant demonstrates: — situation awareness by managing the airspace environment, limitations, and restrictions (for example: MSA, obstacle clearance); — effective communication; — leadership and teamwork; — effective workload management by establishing timely the appropriate landing configuration and speeds as applicable; — effective problem-solving and decision-making by choosing a suitable landing airport taking into account the go-around and landing performance.

SECTION 5: LANDINGS	
5.5. Landing with critical engine simulated inoperative	
OBJECTIVE	To determine that the applicant is able to perform a safe landing with the critical engine inoperative.
SKILL	To determine that the applicant demonstrates manual aircraft control by: (a) establishing the approach and landing configuration appropriate for the runway and weather conditions, and adjusts the engine controls as required; (b) maintaining a stabilised approach and the desired airspeed; (c) maintaining the operating engine(s) within the acceptable operating limits; (d) accomplishing a smooth, positively controlled transition from final approach to touchdown; (e) making correct utilisation of all available drag and braking devices after landing in order to bring the aircraft to a safe stop; (f) maintaining positive directional control and applying crosswind corrections during the post-landing roll.
KNOWLEDGE	To determine that the applicant demonstrates knowledge of AOM relating but not limited to: (a) systems' limitations; (b) abnormal procedures; (c) engine inoperative profile as applicable; (d) engine inoperative go-around and landing performance.
ATTITUDE	To determine that the applicant demonstrates: — situation awareness; — effective communication with crew and ATC taking into account the one-engine-inoperative condition; — leadership and teamwork; — effective workload management by establishing the appropriate landing configuration, profile, and speeds as applicable; — effective problem-solving and decision-making.

SECTION 5: LANDINGS	
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;** — **aeroplanes with four engines: two engines at one side.**	
OBJECTIVE	To determine that the applicant is able to perform a safe landing with two engines inoperative.
SKILL	To determine that the applicant demonstrates manual aircraft control by: (a) establishing the approach and landing configuration appropriate for the runway and weather conditions, and adjusts the engine(s) controls as required; (b) maintaining a stabilised approach and the desired airspeed; (c) maintaining the operating engine(s) within the acceptable operating limits; (d) accomplishing a smooth, positively controlled transition from final approach to touchdown; (e) making correct utilisation of all available drag and braking devices after landing in order to bring the aircraft to a safe stop; (f) maintaining positive directional control and applying crosswind corrections during the post-landing roll.
KNOWLEDGE	To determine that the applicant demonstrates knowledge of AOM relating but not limited to: (a) systems' limitations; (b) abnormal procedures; (c) two-engine-inoperative profile as applicable; (d) two-engine-inoperative go-around and landing performance.
ATTITUDE	To determine that the applicant demonstrates: — situation awareness; — effective communication with crew and ATC taking into account the one-engine-inoperative condition; — leadership and teamwork; — effective workload management by establishing the appropriate landing configuration, profile, and speeds as applicable; — effective problem-solving and decision-making.

SECTION 6: ADDITIONAL AUTHORISATION ON A TYPE RATING FOR INSTRUMENT APPROACHES DOWN TO A DECISION HEIGHT OF LESS THAN 60 METRES (200 FEET) (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 metres (200 feet). 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 metres (200 feet) shall be used.)

6.1. Rejected take-off at minimum authorised RVR

OBJECTIVE	To determine that the applicant is able to perform a safe rejected take-off at minimum authorised RVR.
SKILL	To determine that the applicant demonstrates manual aircraft control and application of procedures by: (a) checking the visual segment (number of lights, RVR mini, etc.) before take-off; (b) setting dedicated thrust (power); (c) maintaining the runway axis with the available visual and instrumental references; (d) abandoning the take-off if any major problem or failure occurs at a point during the take-off where the abort procedure can be initiated and the aeroplane can be safely stopped on the remaining runway/stop way; (e) using spoilers, propeller reverse, thrust reverse, wheel brakes, and other drag/braking devices, as appropriate, and maintains positive control in such a manner as to bring the aeroplane to a safe stop; (f) accomplishing the appropriate engine failure or other procedures and/or briefing/checklists as set forth in the AOM;
KNOWLEDGE	To determine that the applicant demonstrates knowledge related to: (a) operator policy relating to take-off procedures; (b) AOM relating to: (1) limitations, (2) normal operations, (3) abnormal operations, (4) performance; (c) low-speed reject taking into account Vmcg/Vmca and the possibility of runway excursion; (d) all-weather operations.

ATTITUDE	To determine that the applicant demonstrates: — situation awareness by maintaining constant vigilance and observation of conditions, obstructions or other hazards that might hinder a safe take-off; — effective communication by: • considering and sharing the risks of alternative courses of action; • ensuring that correct crew and passenger briefings are completed; • alerting ATC if necessary, and obtaining the appropriate level of service; — leadership and teamwork by: • confirming fault diagnosis (with other crew members in MPA); • reviewing causal factors (with other crew members in MPA); • involving other crew members in the option analysis (MPA); • confirming intended plan of action (with other crew members in MPA). — effective workload management by dividing attention properly inside and outside the cockpit; — effective problem-solving and decision-making by identifying alternative courses of action.

SECTION 6: ADDITIONAL AUTHORISATION ON A TYPE RATING FOR INSTRUMENT APPROACHES DOWN TO A DECISION HEIGHT OF LESS THAN 60 METRES (200 FEET) (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 metres (200 feet). 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 metres (200 feet) shall be used.)**	
6.2. ILS approaches: in simulated instrument flight conditions down to the applicable DH, using flight guidance system **(see Section 5.1. plus the items below)**	
OBJECTIVE	To determine that the applicant is able to perform ILS approaches in simulated instrument flight conditions down to the applicable DH.
SKILL	To determine that the applicant demonstrates effective flight path management by using the appropriate guidance and automation, and demonstrates application of procedures by: (a) checking the qualification of the flight crew; (b) checking the operational status of the aircraft; (c) checking the operational status of the airport (aerodrome); (d) operating in accordance with the appropriate low-visibility SOPs.
KNOWLEDGE	To determine that the applicant demonstrates knowledge of the operator policy relating but not limited to: (a) AOM relating to low-visibility operations: (1) limitations, (2) normal operations, (3) abnormal operations, (4) performance; (b) autoflight and guidance systems; (c) autoflight and guidance limitations; (d) low-visibility profiles; (e) knowledge of crew qualification, as well as of the aircraft and airport requirements applicable to low-visibility operations.
ATTITUDE	To determine that the applicant demonstrates: — enhanced situational awareness of hazards associated with low-visibility operations; — effective ATC and crew communication associated with low-visibility operations; — leadership and teamwork; — effective workload management by managing increased workload due to low-visibility procedures; — effective problem-solving and decision-making by planning for events that my result in a go-around.

SECTION 6: ADDITIONAL AUTHORISATION ON A TYPE RATING FOR INSTRUMENT APPROACHES DOWN TO A DECISION HEIGHT OF LESS THAN 60 METRES (200 FEET) (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 metres (200 feet). 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 metres (200 feet) shall be used.)

6.3. Go-around: after approaches as indicated in Section 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, and ground/airborne equipment failure prior to reaching DH, and go-around with simulated airborne equipment failure

OBJECTIVE	To determine that the applicant is able to perform a go-around after approaches as indicated in Section 6.2. on reaching DH.
SKILL	To determine that the applicant demonstrates manual aircraft control, effective flight path management, and application of procedures by: (a) initiating the go-around procedure promptly by the timely application of power, establishes the proper climb attitude, and reconfigures the aircraft in accordance with the approved procedures; (b) maintaining the desired altitudes, airspeed, and heading, and accurately tracks courses, radials, and bearings; (c) complying with the appropriate missed approach procedure or ATC clearance; (d) using FMS guidance and automation where applicable; (e) accomplishing the appropriate checklist items in a timely manner in accordance with the approved procedures; (f) interpreting correctly the ATC clearance received and, when necessary, requesting clarification, verification, or change; (g) requesting clearance, if appropriate, to the alternate aerodrome, another approach, a holding fix, or as otherwise directed by the examiner; (d) trimming the aeroplane as necessary, and maintaining the proper ground track during the rejected landing procedure; (e) retracting the wing flaps/drag devices and landing gear, if appropriate, in the correct sequence and at a safe altitude, and establishes a positive rate of climb and the appropriate airspeed.
KNOWLEDGE	To determine that the applicant demonstrates knowledge related to operator policy and AOM low-visibility procedures (but not limited to): (a) limitations, (b) normal operations, (c) abnormal operations, (d) performance.

ATTITUDE	To determine that the applicant demonstrates: — enhanced situational awareness of hazards associated with low-visibility operations; — effective ATC and crew communication associated with low-visibility operations; — leadership and teamwork by taking over the automation when systems fail or when limitations are exceeded; — effective workload management by managing increased workload due to low-visibility procedures; — effective problem-solving and decision-making by planning for events that my result in a go-around.

SECTION 6: ADDITIONAL AUTHORISATION ON A TYPE RATING FOR INSTRUMENT APPROACHES DOWN TO A DECISION HEIGHT OF LESS THAN 60 METRES (200 FEET) (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 metres (200 feet). 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 metres (200 feet) shall be used.)**	
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	
OBJECTIVE	To determine that the applicant is able to perform a safe landing with visual reference established at DH.
SKILL	To determine that the applicant demonstrates aircraft control and application of procedures, as applicable to the type of aircraft, by: (a) establishing the recommended approach and landing configuration and airspeed, and adjusts pitch attitude and power as required in order to maintain the correct approach path and airspeed; (b) monitoring that aircraft maintains the proper correction for drift and ground track; (c) achieving and maintaining a stabilised approach; (d) considering wind conditions, landing surface, and obstructions, and ensures that the correct touchdown point is achieved; (e) accomplishing a smooth, positively controlled transition from final approach to touchdown; (f) achieving a landing within the designated touchdown zone at the correct speed, in the correct attitude, and on the runway centre line; (g) touching down with no side drift and with the aeroplane aligned with the runway centre line; (h) maintaining positive directional control throughout the landing roll; (i) using spoilers, propeller reverse, thrust reverse, wheel brakes, and other drag/braking devices, as appropriate, in such a manner to bring the aeroplane to a safe stop; (j) using correctly the aircraft systems during approach and landing; (k) interpreting the ATC clearance received and, when necessary, requesting clarification, verification, or change; (l) ensuring or confirming that passengers and crew are correctly secured for landing; (m) completing the appropriate pre-landing checklist; (n) accomplishing the appropriate post-landing checklist items; (o) taking over the automation when systems fail or when limitations are exceeded.

KNOWLEDGE	To determine that the applicant demonstrates knowledge related to operator policy and AOM low-visibility procedures (but not limited to): (a) limitations, (b) normal operations, (c) abnormal operations, (d) performance.
ATTITUDE	To determine that the applicant demonstrates: — enhanced situational awareness of hazards associated with low-visibility operations; — effective ATC and crew communication associated with low-visibility operations; — leadership and teamwork; — effective workload management by managing increased workload due to low-visibility procedures; — effective problem-solving and decision-making by planning for events that my result in a go-around.

9.1.5. Pass/fail criteria

In the case of multi-pilot and single-pilot high-performance complex aeroplanes, the applicant shall pass all sections of the skill test or proficiency check.

Failure in more than five items will require the applicant to take the entire test or check again. Any applicant failing five or less items shall take the failed items again.

Failure in any item of the retest or recheck, including those items that have been passed at a previous attempt, will require the applicant to take the entire check or test again.

Section 6 is not part of the ATPL or MPL skill test. If the applicant only fails or does not take Section 6, the type rating will be issued without CAT II or CAT III privileges. To extend type-rating privileges to CAT II or CAT III, the applicant shall pass Section 6 on the appropriate type of aircraft.