KENYA CIVIL AVIATION AUTHORITY

Advisory Circular

CAA-AC-PEL009

August 2019

SKILL TEST STANDARDS FOR ISSUANCE OF FLIGHT CREW LICENCES

1.0 PURPOSE

This Advisory Circular provides guidance to individuals, organizations and examiners regarding the determination that an individual's skill level is adequate for the issuance of the following Flight Crew Licences;

1) Private Pilot's Licence
2) Commercial Pilot's Licence
3) Airline Transport Pilot's Licence

2.0 REFERENCES

2.1 The Civil Aviation (Personnel Licensing) Regulations;

3.0 APPLICABILITY

1. These Skill Test Standards are for use by examiners for determination of an individual's fitness to be issued and continue to hold their licence privileges.

2. Flight instructors are expected to use these standards when preparing applicants for their licence skill tests.

3. Applicants should be familiar with these skill test standards and refer to them during their training.

4.0 INTRODUCTORY INFORMATION

4.1 Skill Test Prerequisites

4.1.1 An applicant for any of the Flight Crew licence's Skill Test is required to have met the eligibility requirement as specified in the Civil Aviation (Personnel Licensing) Regulations for each licence in the following categories

1. Age; the applicant should have attained the required age minima for the licence sought;
2. Knowledge test: the applicant should have passed the respective knowledge test prior to applying for the skill test.
3. For international operations, be able to read, write, speak and understand the aviation English at least Level 4 (Operational);

4. Have satisfactorily accomplished the required training and obtained the aeronautical experience prescribed;
5. Possess a current medical certificate prescribed for the licence sought;
6. Have an endorsement from an authorized instructor certifying that the applicant—
    i. Has received and logged training time within 60 days preceding the date of application in preparation for the skill test, and
    ii. Is prepared for the skill test; and
7. Also have an endorsement certifying that the applicant has demonstrated satisfactory knowledge of the subject areas in which the applicant was deficient on the airman knowledge test.

4.2 SKILL LICENCE REQUIREMENTS

4.2.1 These are specified in the Civil Aviation (Personnel Licensing) Regulations for each licence.

4.3 SKILL TEST STANDARDS FORMAT

A. Phases of Flight; This is the title of assessed item taken from schedule and are phases of the skill test arranged in a logical sequence within each standard.

- ❖ They begin with Pre-flight Preparation and end with Postflight Procedures.
- ❖ The examiner, however, may conduct the operational portions of the skill test in any sequence that will result in a complete and efficient test.
- ❖ However, the ground portion of the skill test shall be accomplished before the flight portion.

The Phases of Flight discussed in the Test Standards are:

1 Pre-flight procedures
2 Take off and departure procedure
3 General handling
4 Enroute procedures
5 Abnormal and emergency procedures
6 Instrument procedures
7 Arrival and landing procedures
8. Night operations (applies to all phases of flight)

B. Objective: This describes that which is to be determined by the examiner.
This section lists the elements that must be satisfactorily performed to demonstrate competency in a task. The Objective includes:

1) Specifically, what the applicant should be able to do;
2) Conditions under which the Task is to be performed; and
3) Acceptable performance standards.

They are grouped in the following categories:

a. Technical: This describes competence criteria that involve the applicant demonstrating knowledge & skills in operating systems or controlling the aeroplane.

b. Procedural: This cell describes competence criteria in complying with procedures, operating manuals, ATC clearances, published procedures and checklists.

c. Non-technical: This cell describes competence criteria encapsulated by Airmanship, CRM, decision making, awareness, threat and error management etc.

d. General: In most phases of flight there are competencies that apply to a group of manoeuvres e.g. turns, or even 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 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 end of the group identify the group.

4.4 Special Emphasis Areas

4.4.1 Examiners shall also place special emphasis upon areas of aircraft operations considered critical to flight safety. Among these are—

1) Positive aircraft control;
2) Positive exchange of the flight controls procedure (who is flying the aeroplane);
3) Stall/spin awareness;
4) Collision avoidance;
5) Wake turbulence avoidance;
6) Land and Hold Short Operations (LAHSO);
7) Runway incursion avoidance;
8) Controlled flight into terrain (CFIT);
9) Aeronautical decision making (ADM) and risk management;
10) Checklist usage; and
11) Other areas deemed appropriate to any phase of this skill test.

5.0 Skill test Standards:

PRE-FLIGHT PROCEDURES	
Licences	
OBJECTIVE	To determine that the applicant exhibits knowledge of the elements related to licence and documents by explaining:
PROCEDURAL	Pilot licence privileges and limitations. Medical certificate class and duration and how to renew it. Pilot logbook or flight records
Flight Documents	
OBJECTIVE	To determine that the applicant exhibits knowledge of the elements related to flight preparation, with regard to:
PROCEDURAL	Airworthiness and registration certificates. Operating limitations, placards, and instrument markings. Weight and balance data and equipment list. Airworthiness directives, compliance records, maintenance requirements, and appropriate records.
NONTECHNICAL	NOTAMS
Weather information	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of the elements related to aviation weather information by obtaining, reading, and analysing the applicable items such as-
PROCEDURAL	Weather reports and forecasts. Pilot and radar reports. Surface analysis charts. Radar summary charts. Significant weather prognostics. Winds and temperatures aloft. Freezing level charts Stability charts. Severe weather outlook charts. Tables and conversion graphs. SIGMETs. ATIS and VOLMET reports. Correctly analyses the assembled weather information pertaining to the proposed route of flight and destination aerodrome, and determines whether an alternate aerodrome is required, and, if required, whether the selected alternate aerodrome meets the regulatory requirement. Makes a competent “go/no-go” decision based on available weather information.
NONTECHNICAL	Completes the appropriate checklist.
National Airspace System	

OBJECTIVE	To determine that the applicant exhibits knowledge of the elements related to the National Airspace System by explaining:
PROCEDURAL	Basic VFR Weather Minimums - for all classes of airspace. Airspace classes – their boundaries and specifications IFR/VFR for the following : Classes A, B, C, D, E, F, G. Special use airspace and other airspace areas.
Preparation of Flight Plan	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of the elements by presenting and explaining a pre-planned flight as previously assigned by the examiner (pre-planning at examiner's discretion). The Examiner must ensure that the Applicant: - *Note; The flight should be planned using marginal weather conditions and conform to the regulatory requirements for flight rules within the airspace in which the flight will be conducted.*
TECHNICAL	Exhibits adequate knowledge of the aeroplane's performance capabilities by calculating the estimated time en-route and total fuel requirement based upon such factors as-
PROCEDURAL	Power settings. Operating altitude or flight level. Wind. Fuel reserve requirements. Selects and correctly interprets the current and applicable en-route charts, maps, SID (standard instrument departure), STAR (standard terminal arrival), and standard instrument approach procedure charts, as appropriate to the flight. Obtains and correctly interprets applicable NOTAM information. Determines the calculated performance is within the aeroplane's capability and operating limitations. Completes and files a flight plan in a manner that accurately reflects the conditions of the proposed flight.

Mass and Balance Calculation	
OBJECTIVE	To determine that the applicant:
TECHNICAL	Computes the centre-of-gravity location for a specific load condition (as specified by the examiner), including adding, removing, or shifting mass. Determines if the computed centre of gravity is within the forward and aft centre-of-gravity limits, and that lateral fuel balance is within limits for take-off and landing.
PROCEDURAL	Demonstrates good planning and knowledge of procedures in applying operational factors affecting aeroplane performance.
Performance Calculation	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of performance and limitations, including:
TECHNICAL	A thorough knowledge of the adverse effects of exceeding any limitation. Proficient use of (as appropriate to the aeroplane) performance charts, tables, graphs, or other data relating to items such as: Accelerate-stop distance. Accelerate-go distance. Take-off performance-all engines, engine(s) inoperative. Climb performance including segmented climb performance; with all engines operating-with one or more engine(s) inoperative, and with other engine malfunctions as may be appropriate. Service ceiling-all engines, engine(s) inoperative(s), including drift down, if appropriate. Cruise performance. Fuel consumption, range, and endurance. Descent performance. Go-around from rejected landings. Operational factors affecting aeroplane performance.
NONTECHNICAL	Other performance data appropriate to the test aeroplane. Describing (as appropriate to the aeroplane) the airspeeds used during specific phases of flight. Describing the effects of meteorological conditions upon performance characteristics and correctly applies these factors to a specific chart, table, graph or other performance data.
Theoretical Knowledge	
OBJECTIVE	*To determine that the applicant exhibits adequate knowledge appropriate to the aeroplane; its systems and components; its normal, abnormal, and emergency procedures; and uses the correct terminology with regard to the following items:* Note: Applicants must exhibit adequate knowledge of the contents of the Pilot's Operating Handbook or AFM with regard to the systems and components listed ; the Minimum Equipment List (MEL), if appropriate; and the Operations Specifications, if applicable
TECHNICAL	The examiner is expected to question the applicant on a selection from the following list. Landing gear-indicators, brakes, antiskid, tyres, nose-wheel steering, and shock absorbers. Engine-controls and indications, induction system, carburettor and fuel injection, turbocharging, cooling, fire detection/protection, mounting points, turbine wheels, compressors, and de-icing, anti-icing, and other related components. Propellers-type, controls, feathering/unfeathering, auto feather, negative torque sensing, synchronising, and synchrophasing.

	Fuel system-capacity; drains; pumps; controls; indicators; cross feeding; transferring; jettison; fuel grade, colour and additives; fuelling and defueling procedures; and substitutions, if applicable. Oil system-capacity, grade, quantities, and indicators. Hydraulic system-capacity, pumps, pressure, reservoirs, grade, and regulators. Electrical system-alternators, generators, battery, circuit breakers and protection devices, controls, indicators, and external and auxiliary power sources and ratings. Environmental systems heating, cooling, ventilation, oxygen and pressurisation, controls, indicators, and regulating devices. Avionics and communications-autopilot; flight director; Electronic Flight Indicating Systems (EFIS); Flight Management System(s) (FMS); Radar; Inertial Navigation Systems (INS); Global Positioning System (GPS); VOR, NDB, ILS/MLS, RNAV systems and components; indicating devices; transponder; emergency locator transmitter, TCAS, EGPWS. Ice protection-anti-ice, de-ice, pitot-static system protection, propeller, windshield, wing and tail surfaces. Crewmember and passenger equipment-oxygen system, survival gear, emergency exits, evacuation procedures and crew duties, and quick donning oxygen mask for crewmembers and passengers. Flight controls-ailerons, elevator(s), rudder(s), winglets, control tabs, balance tabs, stabiliser, flaps, spoilers, and leading edge flaps/slats and trim systems. Pitot-static system with associated instruments and the power source for the flight instruments.
Inspection of Aeroplane and Equipment	
OBJECTIVE	To determine that the applicant exhibits knowledge of the following elements: *NOTE: If a flight engineer is a required crewmember for a particular type aeroplane, the actual visual inspection may be waived. The actual visual inspection may be replaced by using an approved pictorial means that realistically portrays the location and detail of inspection items. On aeroplanes requiring a flight engineer, a candidate must demonstrate adequate knowledge of the flight engineer functions for the safe completion of the flight if the flight engineer becomes ill or incapacitated during a flight.*
TECHNICAL	Required instruments and equipment for day VFR.(night if applicable) Procedures and limitations for operating the aeroplane with inoperative instruments. Exhibits adequate knowledge of the pre-flight inspection procedures including: The purpose of inspecting the items which must be checked How to detect possible defects.
PROCEDURAL	The corrective action to take. Process for obtaining an MEL to include a letter of authorisation. When a special flight permit would be required. Procedures for obtaining a special flight permit. Exhibits adequate knowledge of the operational status of the aeroplane by locating and explaining the significance and importance of related documents such as: Airworthiness and registration certificates. Operating limitations, handbooks, and manuals. Mass and balance data. Maintenance requirements, tests, and appropriate records applicable to the proposed flight or operation; and maintenance that may be performed by the pilot Uses the checklist to inspect the aeroplane externally and internally.

	Verifies the aeroplane is safe for flight by emphasising (as appropriate) the need to look at and explain the purpose of inspecting items such as: Engine, including controls and indicators. Fuel quantity, grade, type, contamination safeguards, and servicing procedures. Oil quantity, grade, and type. Hydraulic fluid quantity, grade, type, and servicing procedures. Oxygen quantity, pressures, servicing procedures, and associated systems and equipment for crew and passengers. Hull, landing gear, float devices, brakes, and steering system. Tires for condition, inflation, and correct mounting, where applicable. Fire protection/detection systems for proper operation, servicing, pressures, and discharge indications. Pneumatic system pressures and servicing. Ground environmental systems for proper servicing and operation. **(Reserved)** Flight control systems including trim, spoilers, and leading/trailing edge. Anti-ice, de-ice systems, servicing, and operation. Co-ordinates with ground crew and ensures adequate clearance prior to moving any devices such as door, hatches, and flight control surfaces. Complies with the provisions of the appropriate Operations Specifications, if applicable, as they pertain to the particular aeroplane and operation. Demonstrates proper operation of all applicable aeroplane systems. Notes any discrepancies, determines if the aeroplane is airworthy and safe for flight, or takes the proper corrective action. Checks the general area around the aeroplane for hazards to the safety of the aeroplane and personnel. Makes a correct passenger and departure briefing Performs all items up to start procedures by systematically following the check list items.
Engine starting	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of the correct engine start procedures including:
PROCEDURAL	Use of an auxiliary power unit (APU) or external power source (GPU and/or ASU). Starting under various atmospheric conditions, normal and abnormal starting limitations, and the proper action required in the event of a malfunction. Ensuring the ground safety procedures are followed during the before-start, start, and after-start phases. Ensuring the use of appropriate ground crew personnel during the start procedures. All items of the start procedures by systematically following the approved briefing/checklist items for the before-start, start, and after-start phases. Demonstrates sound judgement and operating practices in those instances where specific instructions or briefing/checklist items are not published. Completes the appropriate briefing/checklist.

TAKE – OFF AND DEPARTURE PROCEDURES (Take-off)	
Taxiing	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of safe taxi procedures:
TECHNICAL	Demonstrates proficiency by maintaining correct and positive aeroplane control. Maintains proper spacing on other aeroplane, obstructions, and persons.
PROCEDURAL	Exhibits adequate knowledge of safe taxi procedures (as appropriate to the aeroplane including push-back or powerback, as may be applicable). Accomplishes the applicable briefing/checklist items and performs recommended procedures. Complies with instructions issued by ATC (or the examiner simulating ATC). Observes runway hold lines, localizer and glide slope critical areas, beacons, and other surface control markings and lighting.
NONTECHNICAL	Maintains constant vigilance and lookout during taxi operation. Demonstrates correct crew co-ordination (MPA) Divides attention properly inside and outside cockpit. Obtains appropriate clearance before crossing/entering active runways.
Before Take-off	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of the pre-take-off procedures and actions:
TECHNICAL	Ensures that all systems are within their normal operating range prior to beginning, during the performance of, and at the completion of those checks required by the approved checklist. Ensures that the aeroplane is correctly configured for take-off
PROCEDURAL	Exhibits adequate knowledge of the pre-take-off checks by stating the reason for checking the items outlined on the checklist and explaining how to detect possible malfunctions. Explains, as may be requested by the examiner, any normal or abnormal system-operating characteristic or limitation and the corrective action for a specific malfunction. Determines the aeroplane's take-off performance, considering such factors as wind, density altitude, weight, temperature, pressure altitude, and runway condition and length. Completes the appropriate checklist.
NONTECHNICAL	Divides attention properly inside and outside cockpit. Determines if the aeroplane is safe for the proposed flight or requires maintenance. Ensures that correct crew and passenger briefings are completed Ensures or confirms that passengers, crew etc are correctly secured for take-off. Obtains appropriate take-off clearance using standard R/T phraseology Notes any surface conditions, obstructions or other hazards that might hinder a safe takeoff.
Take-off (General)	
OBJECTIVE	To determine the Applicant exhibits adequate knowledge of normal takeoffs and climbs including (as appropriate to the aeroplane) airspeeds, configurations, and emergency/ abnormal procedures.
TECHNICAL	Aligns the aeroplane on the runway centreline. Applies the controls correctly to maintain longitudinal alignment on the centreline of the runway prior to initiating and during the take-off. Correctly sets take-off power.

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PROCEDURAL	Exhibits adequate knowledge of the pre-take-off checks by stating the reason for checking the items outlined on the checklist and explaining how to detect possible malfunctions. Explains, as may be requested by the examiner, any normal or abnormal system-operating characteristic or limitation and the corrective action for a specific malfunction. Determines the aeroplane's take-off performance, considering such factors as wind, density altitude, weight, temperature, pressure altitude, and runway condition and length. Completes the appropriate checklist.
NONTECHNICAL	Divides attention properly inside and outside cockpit. Determines if the aeroplane is safe for the proposed flight or requires maintenance. Ensures that correct crew and passenger briefings are completed Ensures or confirms that passengers, crew etc are correctly secured for take-off. Obtains appropriate take-off clearance using standard R/T phraseology Notes any surface conditions, obstructions or other hazards that might hinder a safe takeoff.
	Adjusts the controls to attain the desired pitch attitude at the predetermined airspeed to obtain the desired performance. Maintains the appropriate climb attitude. Performs or calls for and verifies 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 Pilot's Operating Handbook or AFM. Adjusts the engine controls as recommended by the approved guidance for the existing conditions. Achieves the appropriate airspeeds and climb segment airspeeds.

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PROCEDURAL	Exhibits adequate knowledge of safe taxi procedures (as appropriate to the aeroplane including push-back or powerback, as may be applicable). Accomplishes the applicable briefing/checklist items and performs recommended procedures. Complies with instructions issued by ATC (or the examiner simulating ATC). Observes runway hold lines, localizer and glide slope critical areas, beacons, and other surface control markings and lighting.
NONTECHNICAL	Maintains constant vigilance and lookout during taxi operation. Demonstrates correct crew co-ordination (MPA) Divides attention properly inside and outside cockpit. Obtains appropriate clearance before crossing/entering active runways.
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PROCEDURAL	Exhibits adequate knowledge of the pre-take-off checks by stating the reason for checking the items outlined on the checklist and explaining how to detect possible malfunctions. Explains, as may be requested by the examiner, any normal or abnormal system-operating characteristic or limitation and the corrective action for a specific malfunction. Determines the aeroplane's take-off performance, considering such factors as wind, density altitude, weight, temperature, pressure altitude, and runway condition and length. Completes the appropriate checklist.
NONTECHNICAL	Divides attention properly inside and outside cockpit. Determines if the aeroplane is safe for the proposed flight or requires maintenance. Ensures that correct crew and passenger briefings are completed Ensures or confirms that passengers, crew etc are correctly secured for take-off. Obtains appropriate take-off clearance using standard R/T phraseology Notes any surface conditions, obstructions or other hazards that might hinder a safe takeoff.
	Maintains desired heading.
PROCEDURAL	Verifies and correctly applies correction for the existing wind component to the takeoff performance. Completes required checks prior to starting takeoff to verify the expected engine performance. Performs all required pre-takeoff checks. Monitors engine controls, settings, and instruments during takeoff to ensure all predetermined parameters are maintained.

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NONTECHNICAL	Maintains constant vigilance and lookout during taxi operation. Demonstrates correct crew co-ordination (MPA) Divides attention properly inside and outside cockpit. Obtains appropriate clearance before crossing/entering active runways.
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OBJECTIVE	To determine that the applicant exhibits adequate knowledge of the pre-take-off procedures and actions:
TECHNICAL	Ensures that all systems are within their normal operating range prior to beginning, during the performance of, and at the completion of those checks required by the approved checklist. Ensures that the aeroplane is correctly configured for take-off
PROCEDURAL	Exhibits adequate knowledge of the pre-take-off checks by stating the reason for checking the items outlined on the checklist and explaining how to detect possible malfunctions. Explains, as may be requested by the examiner, any normal or abnormal system-operating characteristic or limitation and the corrective action for a specific malfunction. Determines the aeroplane's take-off performance, considering such factors as wind, density altitude, weight, temperature, pressure altitude, and runway condition and length. Completes the appropriate checklist.
NONTECHNICAL	Divides attention properly inside and outside cockpit. Determines if the aeroplane is safe for the proposed flight or requires maintenance. Ensures that correct crew and passenger briefings are completed Ensures or confirms that passengers, crew etc are correctly secured for take-off. Obtains appropriate take-off clearance using standard R/T phraseology Notes any surface conditions, obstructions or other hazards that might hinder a safe takeoff.
	Uses the applicable noise abatement and wake turbulence avoidance procedures, as required. Completes the appropriate briefing and checklist.
NONTECHNICAL	Correct crew co-ordination as required by type of operation (MPA) Correctly assesses aeroplane acceleration during take-off. Correctly assesses take-off and climb hazards particularly those related to obstacles.
Instrument Take-off see Take-off (General)	

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PROCEDURAL	Exhibits adequate knowledge of safe taxi procedures (as appropriate to the aeroplane including push-back or powerback, as may be applicable). Accomplishes the applicable briefing/checklist items and performs recommended procedures. Complies with instructions issued by ATC (or the examiner simulating ATC). Observes runway hold lines, localizer and glide slope critical areas, beacons, and other surface control markings and lighting.
NONTECHNICAL	Maintains constant vigilance and lookout during taxi operation. Demonstrates correct crew co-ordination (MPA) Divides attention properly inside and outside cockpit. Obtains appropriate clearance before crossing/entering active runways.
Before Take-off	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of the pre-take-off procedures and actions:
TECHNICAL	Ensures that all systems are within their normal operating range prior to beginning, during the performance of, and at the completion of those checks required by the approved checklist. Ensures that the aeroplane is correctly configured for take-off
PROCEDURAL	Exhibits adequate knowledge of the pre-take-off checks by stating the reason for checking the items outlined on the checklist and explaining how to detect possible malfunctions. Explains, as may be requested by the examiner, any normal or abnormal system-operating characteristic or limitation and the corrective action for a specific malfunction. Determines the aeroplane's take-off performance, considering such factors as wind, density altitude, weight, temperature, pressure altitude, and runway condition and length. Completes the appropriate checklist.
NONTECHNICAL	Divides attention properly inside and outside cockpit. Determines if the aeroplane is safe for the proposed flight or requires maintenance. Ensures that correct crew and passenger briefings are completed Ensures or confirms that passengers, crew etc are correctly secured for take-off. Obtains appropriate take-off clearance using standard R/T phraseology Notes any surface conditions, obstructions or other hazards that might hinder a safe takeoff.
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of an instrument takeoff with instrument meteorological conditions simulated at or before reaching an altitude of 100 feet (30 meters) AGL:
TECHNICAL	Sets the applicable radios/flight instruments to the desired setting prior to initiating the takeoff. Transitions smoothly and accurately from visual conditions to actual or simulated instrument meteorological meteorological conditions.
PROCEDURAL	Accomplishes the appropriate briefing/checklist items to ensure that the aeroplane systems applicable to the instrument takeoff are operating Complies

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PROCEDURAL	Exhibits adequate knowledge of safe taxi procedures (as appropriate to the aeroplane including push-back or powerback, as may be applicable). Accomplishes the applicable briefing/checklist items and performs recommended procedures. Complies with instructions issued by ATC (or the examiner simulating ATC). Observes runway hold lines, localizer and glide slope critical areas, beacons, and other surface control markings and lighting.
NONTECHNICAL	Maintains constant vigilance and lookout during taxi operation. Demonstrates correct crew co-ordination (MPA) Divides attention properly inside and outside cockpit. Obtains appropriate clearance before crossing/entering active runways.
Before Take-off	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of the pre-take-off procedures and actions:
TECHNICAL	Ensures that all systems are within their normal operating range prior to beginning, during the performance of, and at the completion of those checks required by the approved checklist. Ensures that the aeroplane is correctly configured for take-off
PROCEDURAL	Exhibits adequate knowledge of the pre-take-off checks by stating the reason for checking the items outlined on the checklist and explaining how to detect possible malfunctions. Explains, as may be requested by the examiner, any normal or abnormal system-operating characteristic or limitation and the corrective action for a specific malfunction. Determines the aeroplane's take-off performance, considering such factors as wind, density altitude, weight, temperature, pressure altitude, and runway condition and length. Completes the appropriate checklist.
NONTECHNICAL	Divides attention properly inside and outside cockpit. Determines if the aeroplane is safe for the proposed flight or requires maintenance. Ensures that correct crew and passenger briefings are completed Ensures or confirms that passengers, crew etc are correctly secured for take-off. Obtains appropriate take-off clearance using standard R/T phraseology Notes any surface conditions, obstructions or other hazards that might hinder a safe takeoff.
	with ATC clearances and instructions issued by ATC (or the examiner simulating ATC).properly.
NONTECHNICAL	Takes into account, prior to beginning the takeoff, operational factors which could affect the manoeuvre such as Takeoff Warning Inhibit Systems or other aeroplane characteristics, runway length, surface conditions, wind, wake turbulence, obstructions, and other related factors that could adversely affect safety.
Crosswind Take-off see Take-off (General)	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of crosswind takeoff and climb techniques:

TAKE – OFF AND DEPARTURE PROCEDURES (Take-off)	
Taxiing	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of safe taxi procedures:
TECHNICAL	Demonstrates proficiency by maintaining correct and positive aeroplane control. Maintains proper spacing on other aeroplane, obstructions, and persons.
PROCEDURAL	Exhibits adequate knowledge of safe taxi procedures (as appropriate to the aeroplane including push-back or powerback, as may be applicable). Accomplishes the applicable briefing/checklist items and performs recommended procedures. Complies with instructions issued by ATC (or the examiner simulating ATC). Observes runway hold lines, localizer and glide slope critical areas, beacons, and other surface control markings and lighting.
NONTECHNICAL	Maintains constant vigilance and lookout during taxi operation. Demonstrates correct crew co-ordination (MPA) Divides attention properly inside and outside cockpit. Obtains appropriate clearance before crossing/entering active runways.
Before Take-off	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of the pre-take-off procedures and actions:
TECHNICAL	Ensures that all systems are within their normal operating range prior to beginning, during the performance of, and at the completion of those checks required by the approved checklist. Ensures that the aeroplane is correctly configured for take-off
PROCEDURAL	Exhibits adequate knowledge of the pre-take-off checks by stating the reason for checking the items outlined on the checklist and explaining how to detect possible malfunctions. Explains, as may be requested by the examiner, any normal or abnormal system-operating characteristic or limitation and the corrective action for a specific malfunction. Determines the aeroplane's take-off performance, considering such factors as wind, density altitude, weight, temperature, pressure altitude, and runway condition and length. Completes the appropriate checklist.
NONTECHNICAL	Divides attention properly inside and outside cockpit. Determines if the aeroplane is safe for the proposed flight or requires maintenance. Ensures that correct crew and passenger briefings are completed Ensures or confirms that passengers, crew etc are correctly secured for take-off. Obtains appropriate take-off clearance using standard R/T phraseology Notes any surface conditions, obstructions or other hazards that might hinder a safe takeoff.
	NOTE: If no crosswind condition exists, the use of proper techniques may be orally checked.
PROCEDURAL	Sets correct configuration for cross wind take-off and makes suitable adjustments to airspeed as required. Applies the controls correctly for the cross wind condition, to maintain longitudinal alignment on the centreline of the runway prior to initiating and during the takeoff. Transitions smoothly and accurately from the runway, into balanced, climbing flight maintaining the runway centreline.

TAKE – OFF AND DEPARTURE PROCEDURES (Take-off)	
Taxiing	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of safe taxi procedures:
TECHNICAL	Demonstrates proficiency by maintaining correct and positive aeroplane control. Maintains proper spacing on other aeroplane, obstructions, and persons.
PROCEDURAL	Exhibits adequate knowledge of safe taxi procedures (as appropriate to the aeroplane including push-back or powerback, as may be applicable). Accomplishes the applicable briefing/checklist items and performs recommended procedures. Complies with instructions issued by ATC (or the examiner simulating ATC). Observes runway hold lines, localizer and glide slope critical areas, beacons, and other surface control markings and lighting.
NONTECHNICAL	Maintains constant vigilance and lookout during taxi operation. Demonstrates correct crew co-ordination (MPA) Divides attention properly inside and outside cockpit. Obtains appropriate clearance before crossing/entering active runways.
Before Take-off	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of the pre-take-off procedures and actions:
TECHNICAL	Ensures that all systems are within their normal operating range prior to beginning, during the performance of, and at the completion of those checks required by the approved checklist. Ensures that the aeroplane is correctly configured for take-off
PROCEDURAL	Exhibits adequate knowledge of the pre-take-off checks by stating the reason for checking the items outlined on the checklist and explaining how to detect possible malfunctions. Explains, as may be requested by the examiner, any normal or abnormal system-operating characteristic or limitation and the corrective action for a specific malfunction. Determines the aeroplane's take-off performance, considering such factors as wind, density altitude, weight, temperature, pressure altitude, and runway condition and length. Completes the appropriate checklist.
NONTECHNICAL	Divides attention properly inside and outside cockpit. Determines if the aeroplane is safe for the proposed flight or requires maintenance. Ensures that correct crew and passenger briefings are completed Ensures or confirms that passengers, crew etc are correctly secured for take-off. Obtains appropriate take-off clearance using standard R/T phraseology Notes any surface conditions, obstructions or other hazards that might hinder a safe takeoff.
NONTECHNICAL	Ensures operation of the aircraft within the airframe limitations as determined by the Pilots' Operating Handbook / AFM and Operations Manual, as appropriate
Short field Operations see Take-off (General)	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of short-field take-off and initial climb:

TAKE – OFF AND DEPARTURE PROCEDURES (Take-off)	
Taxiing	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of safe taxi procedures:
TECHNICAL	Demonstrates proficiency by maintaining correct and positive aeroplane control. Maintains proper spacing on other aeroplane, obstructions, and persons.
PROCEDURAL	Exhibits adequate knowledge of safe taxi procedures (as appropriate to the aeroplane including push-back or powerback, as may be applicable). Accomplishes the applicable briefing/checklist items and performs recommended procedures. Complies with instructions issued by ATC (or the examiner simulating ATC). Observes runway hold lines, localizer and glide slope critical areas, beacons, and other surface control markings and lighting.
NONTECHNICAL	Maintains constant vigilance and lookout during taxi operation. Demonstrates correct crew co-ordination (MPA) Divides attention properly inside and outside cockpit. Obtains appropriate clearance before crossing/entering active runways.
Before Take-off	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of the pre-take-off procedures and actions:
TECHNICAL	Ensures that all systems are within their normal operating range prior to beginning, during the performance of, and at the completion of those checks required by the approved checklist. Ensures that the aeroplane is correctly configured for take-off
PROCEDURAL	Exhibits adequate knowledge of the pre-take-off checks by stating the reason for checking the items outlined on the checklist and explaining how to detect possible malfunctions. Explains, as may be requested by the examiner, any normal or abnormal system-operating characteristic or limitation and the corrective action for a specific malfunction. Determines the aeroplane's take-off performance, considering such factors as wind, density altitude, weight, temperature, pressure altitude, and runway condition and length. Completes the appropriate checklist.
NONTECHNICAL	Divides attention properly inside and outside cockpit. Determines if the aeroplane is safe for the proposed flight or requires maintenance. Ensures that correct crew and passenger briefings are completed Ensures or confirms that passengers, crew etc are correctly secured for take-off. Obtains appropriate take-off clearance using standard R/T phraseology Notes any surface conditions, obstructions or other hazards that might hinder a safe takeoff.
TECHNICAL	Sets correct configuration for short field take-off and makes suitable adjustments to airspeed as required. Taxies into the take-off position so as to allow maximum utilisation of available take-off area and aligns the aeroplane on the runway centreline. Rotates at the recommended airspeed, lifts off and accelerates to the recommended obstacle clearance airspeed or $V_{X.}$ Establishes the pitch attitude for the recommended obstacle clearance airspeed, or V_X and maintains that airspeed until the obstacle is cleared, or until the aeroplane is 50 feet (20 meters) above the surface whichever is greater.

TAKE – OFF AND DEPARTURE PROCEDURES (Take-off)	
Taxiing	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of safe taxi procedures:
TECHNICAL	Demonstrates proficiency by maintaining correct and positive aeroplane control. Maintains proper spacing on other aeroplane, obstructions, and persons.
PROCEDURAL	Exhibits adequate knowledge of safe taxi procedures (as appropriate to the aeroplane including push-back or powerback, as may be applicable). Accomplishes the applicable briefing/checklist items and performs recommended procedures. Complies with instructions issued by ATC (or the examiner simulating ATC). Observes runway hold lines, localizer and glide slope critical areas, beacons, and other surface control markings and lighting.
NONTECHNICAL	Maintains constant vigilance and lookout during taxi operation. Demonstrates correct crew co-ordination (MPA) Divides attention properly inside and outside cockpit. Obtains appropriate clearance before crossing/entering active runways.
Before Take-off	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of the pre-take-off procedures and actions:
TECHNICAL	Ensures that all systems are within their normal operating range prior to beginning, during the performance of, and at the completion of those checks required by the approved checklist. Ensures that the aeroplane is correctly configured for take-off
PROCEDURAL	Exhibits adequate knowledge of the pre-take-off checks by stating the reason for checking the items outlined on the checklist and explaining how to detect possible malfunctions. Explains, as may be requested by the examiner, any normal or abnormal system-operating characteristic or limitation and the corrective action for a specific malfunction. Determines the aeroplane's take-off performance, considering such factors as wind, density altitude, weight, temperature, pressure altitude, and runway condition and length. Completes the appropriate checklist.
NONTECHNICAL	Divides attention properly inside and outside cockpit. Determines if the aeroplane is safe for the proposed flight or requires maintenance. Ensures that correct crew and passenger briefings are completed Ensures or confirms that passengers, crew etc are correctly secured for take-off. Obtains appropriate take-off clearance using standard R/T phraseology Notes any surface conditions, obstructions or other hazards that might hinder a safe takeoff.
	After clearing the obstacle, accelerates to and maintains best rate of climb airspeed or V_y, Maintains takeoff power to a safe manoeuvring altitude. Maintains directional control and proper wind-drift correction throughout the takeoff and climb.
PROCEDURAL	Determines maximum performance, configuration, power and airspeeds in accordance with Operations Manual or AFM.

TAKE – OFF AND DEPARTURE PROCEDURES (Take-off)	
Taxiing	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of safe taxi procedures:
TECHNICAL	Demonstrates proficiency by maintaining correct and positive aeroplane control. Maintains proper spacing on other aeroplane, obstructions, and persons.
PROCEDURAL	Exhibits adequate knowledge of safe taxi procedures (as appropriate to the aeroplane including push-back or powerback, as may be applicable). Accomplishes the applicable briefing/checklist items and performs recommended procedures. Complies with instructions issued by ATC (or the examiner simulating ATC). Observes runway hold lines, localizer and glide slope critical areas, beacons, and other surface control markings and lighting.
NONTECHNICAL	Maintains constant vigilance and lookout during taxi operation. Demonstrates correct crew co-ordination (MPA) Divides attention properly inside and outside cockpit. Obtains appropriate clearance before crossing/entering active runways.
Before Take-off	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of the pre-take-off procedures and actions:
TECHNICAL	Ensures that all systems are within their normal operating range prior to beginning, during the performance of, and at the completion of those checks required by the approved checklist. Ensures that the aeroplane is correctly configured for take-off
PROCEDURAL	Exhibits adequate knowledge of the pre-take-off checks by stating the reason for checking the items outlined on the checklist and explaining how to detect possible malfunctions. Explains, as may be requested by the examiner, any normal or abnormal system-operating characteristic or limitation and the corrective action for a specific malfunction. Determines the aeroplane's take-off performance, considering such factors as wind, density altitude, weight, temperature, pressure altitude, and runway condition and length. Completes the appropriate checklist.
NONTECHNICAL	Divides attention properly inside and outside cockpit. Determines if the aeroplane is safe for the proposed flight or requires maintenance. Ensures that correct crew and passenger briefings are completed Ensures or confirms that passengers, crew etc are correctly secured for take-off. Obtains appropriate take-off clearance using standard R/T phraseology Notes any surface conditions, obstructions or other hazards that might hinder a safe takeoff.
Take-off at Maximum Mass see Take-off (General)	
OBJECTIVE	To determine that the applicant exhibits knowledge of the elements of takeoff and climb at maximum take-off mass:
TECHNICAL	Sets correct configuration for maximum mass take-off and makes suitable adjustments to airspeed as required. Positions and aligns the aeroplane for maximum utilisation of available takeoff area.

TAKE – OFF AND DEPARTURE PROCEDURES (Take-off)	
Taxiing	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of safe taxi procedures:
TECHNICAL	Demonstrates proficiency by maintaining correct and positive aeroplane control. Maintains proper spacing on other aeroplane, obstructions, and persons.
PROCEDURAL	Exhibits adequate knowledge of safe taxi procedures (as appropriate to the aeroplane including push-back or powerback, as may be applicable). Accomplishes the applicable briefing/checklist items and performs recommended procedures. Complies with instructions issued by ATC (or the examiner simulating ATC). Observes runway hold lines, localizer and glide slope critical areas, beacons, and other surface control markings and lighting.
NONTECHNICAL	Maintains constant vigilance and lookout during taxi operation. Demonstrates correct crew co-ordination (MPA) Divides attention properly inside and outside cockpit. Obtains appropriate clearance before crossing/entering active runways.
Before Take-off	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of the pre-take-off procedures and actions:
TECHNICAL	Ensures that all systems are within their normal operating range prior to beginning, during the performance of, and at the completion of those checks required by the approved checklist. Ensures that the aeroplane is correctly configured for take-off
PROCEDURAL	Exhibits adequate knowledge of the pre-take-off checks by stating the reason for checking the items outlined on the checklist and explaining how to detect possible malfunctions. Explains, as may be requested by the examiner, any normal or abnormal system-operating characteristic or limitation and the corrective action for a specific malfunction. Determines the aeroplane's take-off performance, considering such factors as wind, density altitude, weight, temperature, pressure altitude, and runway condition and length. Completes the appropriate checklist.
NONTECHNICAL	Divides attention properly inside and outside cockpit. Determines if the aeroplane is safe for the proposed flight or requires maintenance. Ensures that correct crew and passenger briefings are completed Ensures or confirms that passengers, crew etc are correctly secured for take-off. Obtains appropriate take-off clearance using standard R/T phraseology Notes any surface conditions, obstructions or other hazards that might hinder a safe takeoff.
	Establishes the pitch attitude for the recommended obstacle clearance airspeed, or V_X and maintains that airspeed until the obstacle is cleared, or until the aeroplane is 50 feet (20 meters) above the surface. Establishes correct obstacle clearance track during climb.
PROCEDURAL	Determines maximum performance, configuration, power and airspeeds in accordance with Operations Manual or AFM.

TAKE – OFF AND DEPARTURE PROCEDURES (Take-off)	
Taxiing	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of safe taxi procedures:
TECHNICAL	Demonstrates proficiency by maintaining correct and positive aeroplane control. Maintains proper spacing on other aeroplane, obstructions, and persons.
PROCEDURAL	Exhibits adequate knowledge of safe taxi procedures (as appropriate to the aeroplane including push-back or powerback, as may be applicable). Accomplishes the applicable briefing/checklist items and performs recommended procedures. Complies with instructions issued by ATC (or the examiner simulating ATC). Observes runway hold lines, localizer and glide slope critical areas, beacons, and other surface control markings and lighting.
NONTECHNICAL	Maintains constant vigilance and lookout during taxi operation. Demonstrates correct crew co-ordination (MPA) Divides attention properly inside and outside cockpit. Obtains appropriate clearance before crossing/entering active runways.
Before Take-off	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of the pre-take-off procedures and actions:
TECHNICAL	Ensures that all systems are within their normal operating range prior to beginning, during the performance of, and at the completion of those checks required by the approved checklist. Ensures that the aeroplane is correctly configured for take-off
PROCEDURAL	Exhibits adequate knowledge of the pre-take-off checks by stating the reason for checking the items outlined on the checklist and explaining how to detect possible malfunctions. Explains, as may be requested by the examiner, any normal or abnormal system-operating characteristic or limitation and the corrective action for a specific malfunction. Determines the aeroplane's take-off performance, considering such factors as wind, density altitude, weight, temperature, pressure altitude, and runway condition and length. Completes the appropriate checklist.
NONTECHNICAL	Divides attention properly inside and outside cockpit. Determines if the aeroplane is safe for the proposed flight or requires maintenance. Ensures that correct crew and passenger briefings are completed Ensures or confirms that passengers, crew etc are correctly secured for take-off. Obtains appropriate take-off clearance using standard R/T phraseology Notes any surface conditions, obstructions or other hazards that might hinder a safe takeoff.
TAKE-OFF AND DEPARTURE PROCEDURES (Aerodrome Departure)	
ATC Clearances	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of the elements related to ATC clearances and pilot/controller responsibilities to include tower en-route control and clearance ***NOTE: The ATC clearance may be an actual or simulated ATC clearance based upon the flight plan.***
TECHNICAL	Sets the appropriate communication and navigation frequencies and transponder codes in compliance with the ATC clearance.

TAKE – OFF AND DEPARTURE PROCEDURES (Take-off)	
Taxiing	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of safe taxi procedures:
TECHNICAL	Demonstrates proficiency by maintaining correct and positive aeroplane control. Maintains proper spacing on other aeroplane, obstructions, and persons.
PROCEDURAL	Exhibits adequate knowledge of safe taxi procedures (as appropriate to the aeroplane including push-back or powerback, as may be applicable). Accomplishes the applicable briefing/checklist items and performs recommended procedures. Complies with instructions issued by ATC (or the examiner simulating ATC). Observes runway hold lines, localizer and glide slope critical areas, beacons, and other surface control markings and lighting.
NONTECHNICAL	Maintains constant vigilance and lookout during taxi operation. Demonstrates correct crew co-ordination (MPA) Divides attention properly inside and outside cockpit. Obtains appropriate clearance before crossing/entering active runways.
Before Take-off	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of the pre-take-off procedures and actions:
TECHNICAL	Ensures that all systems are within their normal operating range prior to beginning, during the performance of, and at the completion of those checks required by the approved checklist. Ensures that the aeroplane is correctly configured for take-off
PROCEDURAL	Exhibits adequate knowledge of the pre-take-off checks by stating the reason for checking the items outlined on the checklist and explaining how to detect possible malfunctions. Explains, as may be requested by the examiner, any normal or abnormal system-operating characteristic or limitation and the corrective action for a specific malfunction. Determines the aeroplane's take-off performance, considering such factors as wind, density altitude, weight, temperature, pressure altitude, and runway condition and length. Completes the appropriate checklist.
NONTECHNICAL	Divides attention properly inside and outside cockpit. Determines if the aeroplane is safe for the proposed flight or requires maintenance. Ensures that correct crew and passenger briefings are completed Ensures or confirms that passengers, crew etc are correctly secured for take-off. Obtains appropriate take-off clearance using standard R/T phraseology Notes any surface conditions, obstructions or other hazards that might hinder a safe takeoff.
PROCEDURAL	Determines that it is possible to comply with ATC clearance. Uses standard phraseology when reading back clearance.
NONTECHNICAL	Copies correctly, in a timely manner, the ATC clearance as issued. Interprets correctly the ATC clearance received and, when necessary, requests clarification, verification, or change. Reads back correctly, in a timely manner, the ATC clearance in the sequence received.
IFR/VFR Departures	

TAKE – OFF AND DEPARTURE PROCEDURES (Take-off)	
Taxiing	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of safe taxi procedures:
TECHNICAL	Demonstrates proficiency by maintaining correct and positive aeroplane control. Maintains proper spacing on other aeroplane, obstructions, and persons.
PROCEDURAL	Exhibits adequate knowledge of safe taxi procedures (as appropriate to the aeroplane including push-back or powerback, as may be applicable). Accomplishes the applicable briefing/checklist items and performs recommended procedures. Complies with instructions issued by ATC (or the examiner simulating ATC). Observes runway hold lines, localizer and glide slope critical areas, beacons, and other surface control markings and lighting.
NONTECHNICAL	Maintains constant vigilance and lookout during taxi operation. Demonstrates correct crew co-ordination (MPA) Divides attention properly inside and outside cockpit. Obtains appropriate clearance before crossing/entering active runways.
Before Take-off	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of the pre-take-off procedures and actions:
TECHNICAL	Ensures that all systems are within their normal operating range prior to beginning, during the performance of, and at the completion of those checks required by the approved checklist. Ensures that the aeroplane is correctly configured for take-off
PROCEDURAL	Exhibits adequate knowledge of the pre-take-off checks by stating the reason for checking the items outlined on the checklist and explaining how to detect possible malfunctions. Explains, as may be requested by the examiner, any normal or abnormal system-operating characteristic or limitation and the corrective action for a specific malfunction. Determines the aeroplane's take-off performance, considering such factors as wind, density altitude, weight, temperature, pressure altitude, and runway condition and length. Completes the appropriate checklist.
NONTECHNICAL	Divides attention properly inside and outside cockpit. Determines if the aeroplane is safe for the proposed flight or requires maintenance. Ensures that correct crew and passenger briefings are completed Ensures or confirms that passengers, crew etc are correctly secured for take-off. Obtains appropriate take-off clearance using standard R/T phraseology Notes any surface conditions, obstructions or other hazards that might hinder a safe takeoff.
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of VFR or IFR departure procedures:
TECHNICAL	Makes correct use of Instruments, flight director, autopilot, navigation equipment and communication equipment appropriate to the performance of the procedure. Intercepts, in a timely manner, all courses, radials, and bearings (QDM/QDR's) appropriate to the procedure, route, ATC clearance, or as directed by the examiner. Maintains the appropriate airspeed, altitude, headings. Performs the aeroplane briefing/checklist items appropriate to the departure.

TAKE – OFF AND DEPARTURE PROCEDURES (Take-off)	
Taxiing	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of safe taxi procedures:
TECHNICAL	Demonstrates proficiency by maintaining correct and positive aeroplane control. Maintains proper spacing on other aeroplane, obstructions, and persons.
PROCEDURAL	Exhibits adequate knowledge of safe taxi procedures (as appropriate to the aeroplane including push-back or powerback, as may be applicable). Accomplishes the applicable briefing/checklist items and performs recommended procedures. Complies with instructions issued by ATC (or the examiner simulating ATC). Observes runway hold lines, localizer and glide slope critical areas, beacons, and other surface control markings and lighting.
NONTECHNICAL	Maintains constant vigilance and lookout during taxi operation. Demonstrates correct crew co-ordination (MPA) Divides attention properly inside and outside cockpit. Obtains appropriate clearance before crossing/entering active runways.
Before Take-off	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of the pre-take-off procedures and actions:
TECHNICAL	Ensures that all systems are within their normal operating range prior to beginning, during the performance of, and at the completion of those checks required by the approved checklist. Ensures that the aeroplane is correctly configured for take-off
PROCEDURAL	Exhibits adequate knowledge of the pre-take-off checks by stating the reason for checking the items outlined on the checklist and explaining how to detect possible malfunctions. Explains, as may be requested by the examiner, any normal or abnormal system-operating characteristic or limitation and the corrective action for a specific malfunction. Determines the aeroplane's take-off performance, considering such factors as wind, density altitude, weight, temperature, pressure altitude, and runway condition and length. Completes the appropriate checklist.
NONTECHNICAL	Divides attention properly inside and outside cockpit. Determines if the aeroplane is safe for the proposed flight or requires maintenance. Ensures that correct crew and passenger briefings are completed Ensures or confirms that passengers, crew etc are correctly secured for take-off. Obtains appropriate take-off clearance using standard R/T phraseology Notes any surface conditions, obstructions or other hazards that might hinder a safe takeoff.
PROCEDURAL	Uses the current and appropriate navigation publications for the proposed flight. Establishes communications with ATC, using proper phraseology. Complies, in a timely manner, with all ATC clearances, instructions, and restrictions. Exhibits adequate knowledge of two-way communications failure procedures. Adheres to airspeed restrictions and adjustments required by regulations, ATC, the Pilot's Operating Handbook, the AFM, and the examiner.

TAKE – OFF AND DEPARTURE PROCEDURES (Take-off)	
Taxiing	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of safe taxi procedures:
TECHNICAL	Demonstrates proficiency by maintaining correct and positive aeroplane control. Maintains proper spacing on other aeroplane, obstructions, and persons.
PROCEDURAL	Exhibits adequate knowledge of safe taxi procedures (as appropriate to the aeroplane including push-back or powerback, as may be applicable). Accomplishes the applicable briefing/checklist items and performs recommended procedures. Complies with instructions issued by ATC (or the examiner simulating ATC). Observes runway hold lines, localizer and glide slope critical areas, beacons, and other surface control markings and lighting.
NONTECHNICAL	Maintains constant vigilance and lookout during taxi operation. Demonstrates correct crew co-ordination (MPA) Divides attention properly inside and outside cockpit. Obtains appropriate clearance before crossing/entering active runways.
Before Take-off	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of the pre-take-off procedures and actions:
TECHNICAL	Ensures that all systems are within their normal operating range prior to beginning, during the performance of, and at the completion of those checks required by the approved checklist. Ensures that the aeroplane is correctly configured for take-off
PROCEDURAL	Exhibits adequate knowledge of the pre-take-off checks by stating the reason for checking the items outlined on the checklist and explaining how to detect possible malfunctions. Explains, as may be requested by the examiner, any normal or abnormal system-operating characteristic or limitation and the corrective action for a specific malfunction. Determines the aeroplane's take-off performance, considering such factors as wind, density altitude, weight, temperature, pressure altitude, and runway condition and length. Completes the appropriate checklist.
NONTECHNICAL	Divides attention properly inside and outside cockpit. Determines if the aeroplane is safe for the proposed flight or requires maintenance. Ensures that correct crew and passenger briefings are completed Ensures or confirms that passengers, crew etc are correctly secured for take-off. Obtains appropriate take-off clearance using standard R/T phraseology Notes any surface conditions, obstructions or other hazards that might hinder a safe takeoff.
	Complies with the provisions of the climb profile, SID, and other departure procedures, as appropriate. Performs correct altimetry procedures, in accordance with the regulations, operational procedures and ATC requirements. Completes the appropriate checklist.
NONTECHNICAL	Interprets correctly the ATC clearance received and, when necessary, requests clarification, verification, or change. Demonstrates terrain awareness, orientation, division of attention, and proper planning. Ensures that correct crew and passenger briefings are completed.

TAKE – OFF AND DEPARTURE PROCEDURES (Take-off)	
Taxiing	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of safe taxi procedures:
TECHNICAL	Demonstrates proficiency by maintaining correct and positive aeroplane control. Maintains proper spacing on other aeroplane, obstructions, and persons.
PROCEDURAL	Exhibits adequate knowledge of safe taxi procedures (as appropriate to the aeroplane including push-back or powerback, as may be applicable). Accomplishes the applicable briefing/checklist items and performs recommended procedures. Complies with instructions issued by ATC (or the examiner simulating ATC). Observes runway hold lines, localizer and glide slope critical areas, beacons, and other surface control markings and lighting.
NONTECHNICAL	Maintains constant vigilance and lookout during taxi operation. Demonstrates correct crew co-ordination (MPA) Divides attention properly inside and outside cockpit. Obtains appropriate clearance before crossing/entering active runways.
Before Take-off	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of the pre-take-off procedures and actions:
TECHNICAL	Ensures that all systems are within their normal operating range prior to beginning, during the performance of, and at the completion of those checks required by the approved checklist. Ensures that the aeroplane is correctly configured for take-off
PROCEDURAL	Exhibits adequate knowledge of the pre-take-off checks by stating the reason for checking the items outlined on the checklist and explaining how to detect possible malfunctions. Explains, as may be requested by the examiner, any normal or abnormal system-operating characteristic or limitation and the corrective action for a specific malfunction. Determines the aeroplane's take-off performance, considering such factors as wind, density altitude, weight, temperature, pressure altitude, and runway condition and length. Completes the appropriate checklist.
NONTECHNICAL	Divides attention properly inside and outside cockpit. Determines if the aeroplane is safe for the proposed flight or requires maintenance. Ensures that correct crew and passenger briefings are completed Ensures or confirms that passengers, crew etc are correctly secured for take-off. Obtains appropriate take-off clearance using standard R/T phraseology Notes any surface conditions, obstructions or other hazards that might hinder a safe takeoff.
	Liaises with other crewmembers for correct operation of the aircraft systems during departure. (MPA) Demonstrates orientation, division of attention, and proper planning. In VMC, demonstrates adequate lookout and traffic avoidance.

GENERAL HANDLING OR MANOEUVRES	
Normal Operation of All Systems	
OBJECTIVE	To determine that the applicant possesses adequate knowledge of the normal and abnormal procedures of the systems, subsystems, and devices relative to the aeroplane type (as may be determined by the examiner)
TECHNICAL	Demonstrates the proper use of the aeroplane systems, subsystems, and devices (as may be determined by the examiner) appropriate to the aeroplane.
PROCEDURAL	Completes the appropriate checklist Follow 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
NONTECHNICAL	Liaise with other crewmembers for correct operation of the aircraft systems.
Aeroplane control (General)	
OBJECTIVE	To determine that the Applicant exhibits safe control of the aeroplane throughout the flight and any manoeuvres required by the examiner: *Note: Where skill/proficiency test requires Instrument flight to be demonstrated, Simulated IMC conditions must be generated by a means acceptable to the Examiner. This method is to be agreed with the applicant, before flight.*
TECHNICAL	Exhibits safe control of the aeroplane by observing: Magnitude of control input Smoothness of control, within the limitations of the airframe and control systems.
PROCEDURAL	Demonstrates correct use of cockpit check lists Demonstrates management and monitoring of engine(s) and other aeroplane systems. Follows correct procedures for controlling the aircraft with automatic flight control systems, in accordance with the Pilots' Operating Handbook / AFM and Operations manual, as appropriate.
NONTECHNICAL	Maintains adequate lookout, before, during and after execution of any manoeuvre by visual references. Demonstrates correct crew co-ordination as required by type of operation (MPA). Divides attention properly inside and outside cockpit. Demonstrates orientation throughout the manoeuvres. Ensures that correct crew and passenger briefings are completed.
Turns (General)	
OBJECTIVE	To determine that the Applicant exhibits safe control of the aeroplane by reference to visual attitudes (and by instruments where appropriate to the flight) and is able to;
TECHNICAL	Transition to the turning attitude, using proper instrument crosschecks and co-ordinated control application. Turn onto specific visual references and headings by visual references (and solely by reference to instruments where appropriate to the flight).
PROCEDURAL	Follow correct procedures for the controlling the aircraft with/without automatic flight control systems, in accordance with the Aircraft / Systems Manual and Operations manual, as appropriate

GENERAL HANDLING OR MANOEUVRES	
Normal Operation of All Systems	
OBJECTIVE	To determine that the applicant possesses adequate knowledge of the normal and abnormal procedures of the systems, subsystems, and devices relative to the aeroplane type (as may be determined by the examiner)
TECHNICAL	Demonstrates the proper use of the aeroplane systems, subsystems, and devices (as may be determined by the examiner) appropriate to the aeroplane.
PROCEDURAL	Completes the appropriate checklist Follow 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
NONTECHNICAL	Liaise with other crewmembers for correct operation of the aircraft systems.
Aeroplane control (General)	
OBJECTIVE	To determine that the Applicant exhibits safe control of the aeroplane throughout the flight and any manoeuvres required by the examiner: *Note: Where skill/proficiency test requires Instrument flight to be demonstrated, Simulated IMC conditions must be generated by a means acceptable to the Examiner. This method is to be agreed with the applicant, before flight.*
TECHNICAL	Exhibits safe control of the aeroplane by observing: Magnitude of control input Smoothness of control, within the limitations of the airframe and control systems.
PROCEDURAL	Demonstrates correct use of cockpit check lists Demonstrates management and monitoring of engine(s) and other aeroplane systems. Follows correct procedures for controlling the aircraft with automatic flight control systems, in accordance with the Pilots' Operating Handbook / AFM and Operations manual, as appropriate.
NONTECHNICAL	Maintains adequate lookout, before, during and after execution of any manoeuvre by visual references. Demonstrates correct crew co-ordination as required by type of operation (MPA). Divides attention properly inside and outside cockpit. Demonstrates orientation throughout the manoeuvres. Ensures that correct crew and passenger briefings are completed.
NONTECHNICAL	Maintain adequate lookout, before, during and after turning by visual references. Demonstrate orientation throughout the manoeuvre Liaise with other crew members for lookout (MPA) Follow appropriate SOP for the confirmation of intended heading (MPA).
Medium Turns (30º bank) see Aeroplane Control (General) & Turns (General)	
OBJECTIVE	To determine that the applicant exhibits safe control of the aircraft during level, constant airspeed, medium (30° bank) turns and;
TECHNICAL	Establishes the configuration specified by the examiner. Maintains the assigned altitude and airspeed throughout the turn

Steep Turns (45º bank or More) see Aeroplane Control (General) & Turns (General)	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of steep turns (if applicable to the aeroplane) and the factors associated with performance, wing loading, angle of bank, stall speed, pitch, power requirements, and over-banking tendencies:
TECHNICAL	Selects a safe height as recommended by the manufacturer, training syllabus, or other training directive, or as agreed with the Examiner. Establishes the recommended entry airspeed, in straight and level flight. Rolls into a co-ordinated turn of 360º with a bank angle of not less than 45º. Maintains the bank angle in a stable, balanced turn. Applies smooth co-ordinated pitch, bank, and power adjustments to maintain the specified altitude, attitude and airspeed. Avoids any indication of an approaching stall, abnormal flight attitude, or exceeding any structural or operating limitation during any part of the manoeuvre. Rolls 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. Recovers accurately onto the desired heading and at the desired airspeed for straight and level flight.
Aeroplane Specific Handling Including Critical Mach No., Buffet and Tuck Under. see Aeroplane Control (General)	
OBJECTIVE	To determine that the applicant exhibits 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 may not be used for this exercise**
TECHNICAL	Establishes the recommended configuration and airspeed/Mach, and maintain that airspeed/Mach Uses proper technique to enter into, operate within, and recover from, specific flight situations.

Straight and level flight at constant speed and with speed changes: see Aeroplane Control (General)	
OBJECTIVE	To determine that the Applicant exhibits safe control of the aircraft, by reference to visual attitudes (and by instruments where appropriate) in balanced, straight and level flight:
TECHNICAL	Maintains altitude, heading and balance, by visual references (and solely by reference to instruments, if applicable to flight) using correct instrument confirmation, and co-ordinated control application. Maintains altitude, heading and balance, whilst accelerating / decelerating to specific speeds, as determined by the Aircraft Flight, Operations or Training manual, or as specified by the Examiner. Maintains altitude, heading and balance, at different airspeeds, power settings and configurations as determined by the Aircraft Flight / Operations or Training manuals or as specified by the Examiner.
Climbs (General) see Aeroplane Control (General)	
OBJECTIVE	To determine that the applicant exhibits knowledge of the elements related to climbing at different speeds and configurations, by visual references (and solely by reference to instruments, if applicable to flight) throughout all operational levels of the aeroplane:
TECHNICAL	Transitions to the climb power setting and pitch attitude, on an assigned heading, using proper instrument crosschecks and interpretation, and co-ordinated control application.

	Demonstrates climbing at correct airspeed, to specific altitudes / levels, in straight flight, and whilst turning onto specific headings. Levels off at the assigned altitude or level and establishes straight and level cruise.
PROCEDURAL	Applies correct altimeter setting procedures as appropriate to the level change required.
NONTECHNICAL	Uses correct RT phraseology for level change requests and instructions from ATC Follows appropriate procedure for the confirmation of intended level (MPA)
Climbing at Vy: see Aeroplane Control (General) and Climbs (General)	
OBJECTIVE	To determine that the applicant exhibits knowledge of the performance elements relevant to climbing the best rate of climb in accordance with the Pilots' Operating Handbook / AFM:
TECHNICAL	Establishes best rate of climb speed and configuration, specified in the Pilots' Operating Handbook / AFM.
PROCEDURAL	Demonstrates knowledge of climb performance and procedures.
Climbing at Vx: see Aeroplane Control (General) and Climbs (General)	
OBJECTIVE	To determine that the applicant exhibits knowledge of the performance elements relevant to climbing at the best angle of climb (obstacle clearance climb) in accordance with the Pilots' Operating Handbook / AFM:
TECHNICAL	Establishes best angle of climb speed and configuration, specified in the Pilots' Operating Handbook / AFM. Turns onto specified headings whilst preserving the best angle of climb. Transitions to climbing flight at best rate or other configuration, as determined by the examiner.
PROCEDURAL	Demonstrates knowledge of obstacle clearance climb requirements
Flight at Critically High Airspeed: see Aeroplane Control (General)	
OBJECTIVE	To determine that the applicant exhibits knowledge of the elements related to critically high airspeeds.
TECHNICAL	Recognises the critical high airspeed. Establishes the recommended configuration and airspeed, and maintains that airspeed Controls aeroplane smoothly within aeroplane limitations.
PROCEDURAL	Follows the appropriate action in accordance with the flight manual

Flight at Critically Low Airspeed: see Aeroplane Control (General)	
OBJECTIVE	To determine that the applicant exhibits knowledge of the elements related to critically low airspeed.
TECHNICAL	Recognises the critical low airspeed. Establishes the recommended configuration and airspeed, and maintains that airspeed and desired heading Controls aeroplane smoothly within aeroplane limitations.
PROCEDURAL	Follows the appropriate action in accordance with the flight manual
Stalling General: see Aeroplane Control (General)	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of the factors which influence stall characteristics, including the use of various drag configurations, power settings, pitch attitudes, mass, and bank angles. Also, exhibits adequate knowledge of the proper procedure for resuming normal flight:
TECHNICAL	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 Recognizes and announces the first indication of a stall appropriate to the specific aeroplane design and initiates recovery as directed by the examiner. Recovers to a reference airspeed, altitude and heading, allowing only the acceptable altitude or airspeed loss, and heading deviation using manufacturers recommended technique. Demonstrates smooth, positive control during entry, approach to a stall, and recovery.
PROCEDURAL	Selects an entry altitude in accordance with 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 aeroplane and the configuration, at the discretion of the examiner Completes appropriate before stalling checklist.
NONTECHNICAL	Ensures the aeroplane is in a safe area and clear of hazards prior to accomplishing an approach to a stall.

Full Stall & Recovery in the Clean Configuration see Aeroplane Control (General) and Stalling (General)	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of the full stall and recovery with entry from level flight with gear and flaps retracted:
TECHNICAL	Maintains level flight and desired heading on entry. Recovers at the first sign of the full stall or as directed by examiner.
Approach to Stall & Recovery in Different Configurations: see Aeroplane Control (General) and Stalling (General)	
OBJECTIVE	To determine that the applicant exhibits knowledge of the elements related to manoeuvring during slow flight and approaching a stall in various configurations:
TECHNICAL	Configures the aeroplane as required by the examiner, from level flight, or descending as if on an approach path. Recovers at the first indication of an impending stall as appropriate to aeroplane design, and initiates recovery or as directed by the examiner. Retracts gear and flaps as appropriate.
PROCEDURAL	Selects an entry altitude in accordance with AFM or POH. Completes the appropriate briefing/checklist including go-around or after take-off checks.
Descent With and Without Power: see Aeroplane Control (General)	
OBJECTIVE	To determine that the applicant exhibits knowledge of the elements related to visual attitude/instrument flying during straight, constant airspeed and constant rate descents:
TECHNICAL	Establishes the descent configuration Transitions to the descent pitch attitude and power setting on an assigned heading using proper instrument crosscheck and interpretation, and co-ordinated control application. Level off at the assigned altitude with correct co-ordination of power, attitude and balance. Achieves straight and level flight at the assigned altitude, at the correct speed, heading and in trim.
PROCEDURAL	Apply correct changes to altimeter settings as appropriate to the level change required. Use correct RT phraseology for level change requests and instructions from ATC.

Recovery from Unusual Attitudes (visual and instrument flying): see Aeroplane Control (General)	
OBJECTIVE	To determine that the applicant exhibits knowledge of the elements related to attitude flying during recovery from unusual attitudes. **Note: includes recovery from spiral dive.**
TECHNICAL	Recovers promptly to a stabilised level flight attitude using smooth, co-ordinated control application in the correct sequence using visual attitude flying or instruments as required. Avoids exceeding airframe limitations.
NONTECHNICAL	Demonstrates orientation, division of attention, and proper planning. Recognises unusual flight attitudes.
Limited Panel Instrument Flying: see Aeroplane Control (General)	

OBJECTIVE	To determine that the applicant exhibits knowledge of the elements related to attitude instrument flying with limited panel during straight-and-level flight, straight, constant airspeed climbs, straight constant airspeed descents, turns to headings and unusual attitudes solely by reference to the basic flight instruments to simulate a system failure, a failure of the vacuum- and gyro-powered instruments (e.g. the attitude and heading indicators) using proper instrument crosscheck and interpretation, and co-ordinated control application.
TECHNICAL	Does not exceed airframe limitations. Turns using no more than rate 1. When making small heading corrections with the magnetic compass — as when tracking a VOR radial or localizer — use timed turns Does not chase instrument indications or is not overcontrolling Maintains a proper instrument scan. Maintains heading altitude and airspeed within the prescribed limits
PROCEDURAL	Turns on the pitot heat well before flying in cloud or visible precipitation no matter what the temperature. Opens a dedicated alternate source of static air for the aeroplane's pitot-static instruments. Completes the appropriate checklist. Use correct R/T procedures with ATC.
NONTECHNICAL	Demonstrates orientation, division of attention, and proper planning.

EN-ROUTE PROCEDURES	
Flight Planning	
OBJECTIVE	To determine that the applicant exhibits knowledge of flight planning by planning a VFR navigation flight as assigned by the examiner. The flight shall be planned using latest forecast/actual weather.
TECHNICAL	Plots a course for the intended route of flight. Identifies airspace, obstructions, and terrain features. Selects easily identifiable en route checkpoints. Selects the most favourable altitudes. Computes headings, flight time, and fuel requirements. Selects appropriate navigation systems/facilities and communication frequencies. Confirms availability of alternate aerodromes.
PROCEDURAL	Uses appropriate current aeronautical charts. Extracts and records pertinent information from NOTAM'S, the Aerodrome/Facility Directory, and other flight publications. Completes a navigation log and files a VFR flight plan.
VFR Navigation (Dead reckoning, Map reading and Orientation)	
OBJECTIVE	To determine that the applicant exhibits knowledge of the elements related VFR navigation.
TECHNICAL	Follows the pre-planned track solely by reference to landmarks. Identifies landmarks by relating surface features to chart symbols. Navigates by means of pre-computed headings, groundspeeds, and elapsed time. Verifies the aeroplane's position in relation to the flight-planned route. Correctly assesses track error and makes suitable adjustments to heading. Arrives at the en route checkpoints and destination at the revised ETA.
PROCEDURAL	Corrects for and records the differences between pre-flight fuel, groundspeed, and heading and time calculations and those determined en route. Completes all appropriate checklists. Uses correct altimetry procedures.
NONTECHNICAL	Divides attention properly inside and outside cockpit. Demonstrates orientation, division of attention, and proper planning. Maintains adequate lookout for other air traffic.
Navigation Systems & Radar Services	
OBJECTIVE	To determine that the applicant exhibits knowledge of the elements related to navigation systems and radar services.
TECHNICAL	Locates the aeroplane's position using radials, bearing (QDM/QDR's), DME range or co-ordinates, as appropriate. Intercepts and tracks a given radial or bearing (QDM/QDR), if appropriate. Recognises and describes the indication of station passage, if appropriate. Recognises signal loss and takes appropriate action.
PROCEDURAL	Selects, identifies and checks the appropriate navigation system/facility. Uses proper communication procedures when utilising ATC radar services Completes all appropriate checklists Uses the appropriate level of service for phase of flight
Lookout & Collision Avoidance	
OBJECTIVE	To determine that the applicant exhibits collision avoidance by adequate lookout. In IMC makes suitable use of radar services or other sources of traffic information to avoid collision.

EN-ROUTE PROCEDURES	
TECHNICAL	Uses proper visual scanning technique. Understands relationship between poor visual scanning habits and increased collision risk. Uses TCAS or other collision avoidance equipment if fitted. Takes appropriate avoiding action if required.
NONTECHNICAL	Correctly divides attention inside and outside the cockpit. Correctly shares lookout and collision avoidance task with other crew members Uses correct R/T procedure for collision avoidance. Uses correct TCAS procedure where appropriate. Requests correct level of radar service appropriate to flight conditions. Avoids situations that involve the greatest collision risk.

Maintenance of Altitude, Heading & Speed	
OBJECTIVE	To determine that the applicant is able to fly accurately while carrying out other activities such as navigation.
TECHNICAL	Maintains straight-and-level flight by visual attitude flying (or solely by reference to instruments in IMC) using proper instrument crosscheck and interpretation, and co-ordinated control application. Maintains the applicable airspeed, headings and altitude
PROCEDURAL	Completes checklist items
NONTECHNICAL	Demonstrates correct crew co-ordination
Altimeter Setting	
OBJECTIVE	To determine that the applicant applies correct altimeter setting procedures:
PROCEDURAL	Applies correct altimeter sub scale settings for each stage of flight Carries out altimeter checks and altitude call–out in accordance with Operations Manual.
NONTECHNICAL	Demonstrates correct crew co-ordination as required by type of operation (MPA)
Timing & Revision of ETA's	
OBJECTIVE	To determine that the applicant correctly assesses and adjusts timing (ETA) **Note: also see VFR Navigation**
TECHNICAL	Ensures arrival at navigation point at ETA ± 3 minutes.
PROCEDURAL	Monitors flight progress and uses flight plan to give estimated time of arrival (ETA) at navigation points. Revises ETA when appropriate.
Monitoring of Flight Progress, Flight Log, Fuel Usage, Instrument Monitoring	
OBJECTIVE	To determine that the applicant can maintain good cockpit management, monitor the flight and keep suitable records.
PROCEDURAL	Maintains a flight log of Clearances, position fixes, times, ETAs, fuel states, and information as required by Operating Procedures, such that the flight may be reconstructed from the log after landing.
NONTECHNICAL	Manages cockpit duties in an efficient manner. Ensures correct division of crew duties.(MPA) Monitors fuel usage. Monitors aircraft systems and instruments.
Observation of Weather Conditions	
OBJECTIVE	To determine that the applicant is able to assess weather conditions, decide whether flight may continue in accordance with VFR, or plan and execute alternative action.

TECHNICAL	Exhibits adequate knowledge of the elements of observation of weather conditions and obtaining pre-flight weather briefings and in-flight weather information.
PROCEDURAL	Complies with Operations Manual or aircraft manual weather limitations.
NONTECHNICAL	Exhibits adequate assessment when VFR flight is proposed and sky conditions or visibilities are present, or forecast, that would make flight under VFR doubtful. Exhibits adequate assessment of winds aloft. Exhibits adequate assessment of current and reported weather conditions. Makes satisfactory GO/NO GO or in-flight decisions based on correct assessment of weather conditions. Plans and correctly executes weather avoidance when necessary in-flight.
Diversion to Alternate Destination/Aerodrome	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of planning and executing a diversion from pre-planned track to an alternative destination/aerodrome. **Note: Diversion to a new destination is normally initiated by the examiner**
TECHNICAL	Maintains the applicable airspeed, headings and altitude Exhibits adequate navigational skill to reach destination within time limit.
PROCEDURAL	Completes the appropriate checklist. Obtains appropriate ATC service. Completes flight log. Complies with Operations Manual procedures.
NONTECHNICAL	Selects an appropriate alternate aerodrome if necessary. Plans a suitable route to the new destination. Diverts promptly toward the new destination Makes an accurate estimate of heading, groundspeed, arrival time, and fuel consumption to the alternate aerodrome/destination
Intercepting & Tracking Radio Navigation Aids (VOR, NDB, DME)	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of the use of Radio Navigation aids, and is able to intercept and maintain specified bearings or radials or tracks.
TECHNICAL	Intercepts and tracks a specific bearing/radial (QDM/QDR) to or from the NDB facility, using appropriate interception procedures. Intercepts and tracks a specific DME arc if required, using appropriate interception procedures. Maintains, while intercepting and tracking, the applicable airspeed, headings and altitude. Applies proper correction for wind to maintain track.
PROCEDURAL	Correctly tunes and identifies the facility. Correctly sets cockpit displays (HSI, RMI etc.) Correctly monitors the facility for failure (failure flags, coding etc as appropriate) Recognises facility failure, and, when required, reports the failure to ATC. Determines accurately the relative bearing (QDM/QDR) of the VOR/ NDB facility. Determines the aircraft position relative to the facility. Completes the appropriate checklist.
NONTECHNICAL	Correctly utilises crew to operate equipment and identify navigational aids (MPA).

Ice Protection Procedures	
OBJECTIVE	To determine that the applicant exhibits knowledge of the elements related to ice protection equipment and procedures.
TECHNICAL	Inspects all surfaces of the aeroplane with emphasis on ice. Clears all surfaces of ice before flight Operates anti/de-icing equipment correctly.
PROCEDURAL	Taxies and accomplishes the before take-off check adhering to good operating practice for flight into icing conditions. Performs take-off and climb, cruise, descent and landing with emphasis on correct procedures in icing conditions. Completes all appropriate briefing/checklists.
NONTECHNICAL	Monitors ice accretion during flight. Plans and executes ice avoidance if necessary. Demonstrates correct crew co-ordination as required by type of operation.
ATC Liaison – Compliance, RT Procedures – Airmanship (applies to all phases of flight)	
OBJECTIVE	To determine that the applicant uses correct R/T procedures, complies with ATC instructions and conducts the flight efficiently and safely.
TECHNICAL	Operates radio equipment correctly. Operates transponder correctly.
PROCEDURAL	Uses ICAO R/T phraseology. Speaks clearly on R/T. Reads back clearances correctly. Complies with ATC clearances or instructions.
NONTECHNICAL	Manages flight safely with due regard to weather, other traffic and procedures – *see description of Airmanship on page*****

Abnormal and Emergency Procedures (General)	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of the abnormal/emergency procedures (as may be determined by the examiner) relating to the particular aeroplane type. **Notes:** 1. Examiner selects suitable malfunctions in accordance with the test schedule and aeroplane type. It is strictly forbidden to disengage circuit breakers to simulate any kind of system failure(s) /malfunctions(s) in the aeroplane. 2. Depending on the aeroplane used these items may be checked by other means i.e. oral or by 'touch-drills' if required for safety. 3. While simulating engine failure on a multi engine aeroplane, the examiner or the safety pilot must be able to cope with a real failure on another engine. 4. The examiner or the safety pilot must also know the alarm inhibitions and the inefficacy of a continuous alarm due to any *failure simulation.*
TECHNICAL	Maintains control of aeroplane
PROCEDURAL	Demonstrates the proper procedure for any emergency/abnormal situation (as determined by the examiner) in the appropriate approved AFM. Completes the appropriate abnormal/emergency checklist.
NONTECHNICAL	Shows correct fault diagnosis Confirms fault diagnosis (with other crew members in MPA) Reviews causal factors (with other crew members in MPA) Identifies alternative courses of action Involves other crew members in option analysis (MPA) Considers and shares the risks of alternative courses of action Confirms intended plan of action (with other crew members in MPA) Ensures that correct crew and passenger briefings are completed Divides attention properly inside and outside cockpit. Maintains adequate lookout, before, during and after execution of any manoeuvre by visual references. Alerts ATC if necessary and obtains appropriate level of service

Rejected Take-off: see Abnormal and Emergency Procedures (General)	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of the technique and procedure for accomplishing a rejected takeoff after engine/system(s) failure/warnings, including related safety factors. **Note:** if no FTD available a rejected take-off reasonable speed must be determined (e.g. 50% of VMCA) giving due consideration to aeroplane characteristics, runway length, surface conditions, wind direction, brake heat energy, and any other factors that might adversely affect safety.
TECHNICAL	Abandons the takeoff if any major problem or failure occurs at a point during the takeoff where the abort procedure can be initiated and the aeroplane can be safely stopped on the remaining runway/stop way. 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 aeroplane to a safe stop.
PROCEDURAL	Accomplishes the appropriate engine failure or other procedures and/or briefing/checklists as set forth in the Pilot's Operating Handbook or AFM. Completes the appropriate briefing/checklist.
NONTECHNICAL	Takes into account, prior to beginning the takeoff, operational factors, which could affect the manoeuvre such as Takeoff Warning Inhibit Systems or other aeroplane characteristics, runway length, surface conditions, wind, obstructions, and other related factors that could affect takeoff performance and could adversely affect safety. Identifies critical situation and makes timely decision to abandon take-off. Informs ATC when practicable.

Simulated Engine Failure Between V1 & V2 (ME Aeroplanes Simulator Only): see Abnormal and Emergency Procedures (General)	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of the procedures used during engine failure on takeoff, the appropriate reference airspeeds, and the specific pilot actions required. **Simulator only:** On a multi-engine aeroplane with published V_1, V_R, and/or V_2 speeds (performance Class A), the failure of the most critical engine should be simulated at a point: After V_1 and prior to V_2; or As close as possible after V_1 when V_1 and V_2 or V_1 and V_R are identical.
TECHNICAL	Maintains the aeroplane alignment with the heading appropriate for climb performance and terrain clearance when engine failure occurs. Adjusts the engine controls as recommended by the approved guidance for the existing conditions.
PROCEDURAL	Completes required checks prior to starting takeoff to verify the expected engine performance.
NONTECHNICAL	Takes into account, prior to beginning the takeoff, operational factors which could affect the manoeuvre such as Take-off Warning Inhibit Systems or other aeroplane characteristics, runway length, surface conditions, wind, wake turbulence, obstructions, and other related factors that could adversely affect safety. Identifies critical situation and makes timely decision to continue take-off.
Simulated Engine Failure After Take- off, (SE Aeroplane Only): see Abnormal and Emergency Procedures (General)	
OBJECTIVE	To determine that the candidate exhibits knowledge of the elements related to engine failure after take-off.
TECHNICAL	Maintains control following engine failure Establishes the recommended glide airspeed. Trims the aeroplane, and maintains control. Simulates feathering the propeller if applicable. Flies a suitable approach to chosen landing area such that a safe landing would not be in doubt.
PROCEDURAL	Carries out the recommended emergency procedure. Follows the checklist to verify procedures for securing the engine. Demonstrates engine restart in accordance with recommended procedures if appropriate
NONTECHNICAL	Recognises engine failure. Attempts to determine the reason for the engine malfunction, if appropriate. Selects a suitable landing area, noting any surface conditions, obstructions or other hazards that might hinder a safe landing.
Simulated Engine Failure After Take-off, ME Aeroplane Only : see Abnormal and Emergency Procedures (General)	
OBJECTIVE	To determine that the candidate exhibits knowledge of the elements related to engine failure after take-off.

TECHNICAL	Maintains control following engine failure. Reduces drag, and verifies the inoperative engine. Secures the inoperative engine, if appropriate. Simulates feathering the propeller of the inoperative engine, if appropriate. Establishes V_{YSE}; if obstructions are present, establishes V_{XSE} or V_{MC} +10, whichever is greater, until obstructions are cleared, then transitions to $V_{YSE...}$ Banks toward the operating engine up to 5° as required for best performance, trims the aeroplane and maintains control. Monitors the operating engine and makes adjustments as necessary.
PROCEDURAL	Carries out the recommended emergency procedure.
NONTECHNICAL	Recognises engine failure promptly, and correctly identifies inoperative engine. Assesses the aeroplane's performance capabilities and makes suitable decision to continue climb, return to aerodrome or prepare for a forced landing.

Simulated Engine Failure, Shutdown and Restart at Safe Height (ME Aeroplanes Only) see Abnormal and Emergency Procedures (General)	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of the flight characteristics and controllability associated with manoeuvring with engine(s) inoperative. To determine that the applicant can demonstrate an engine restart in flight. ***Note: These procedures must be initiated at a safe height***
TECHNICAL	Maintains positive aeroplane control to maintain co-ordinated flight, and properly trims for that condition. Sets engine controls, reduces drag as necessary Maintains the operating engine(s) within acceptable operating limits. Maintains desired altitude when a constant altitude is specified and is within the capability of the aeroplane. Maintains the desired airspeed and heading.
PROCEDURAL	Follows the prescribed aeroplane checklist, and verifies the procedures for securing the inoperative engine(s). Demonstrates proper engine restart procedures in accordance with approved procedure/checklist or the manufacturer's recommended procedures and pertinent checklist items.
NONTECHNICAL	Correctly identifies and verifies the inoperative engine(s) after the failure Determines the cause for the engine(s) failure and if a restart is a viable option.
Simulated Engine Failure During Approach (ME Aeroplanes Only) see Abnormal and Emergency Procedures (General)	
OBJECTIVE	To determine that the applicant exhibits knowledge of the elements related to an approach and landing with an inoperative engine.
TECHNICAL	Maintains crosswind correction and directional control throughout the approach and landing. Sets the engine controls, reduces drag, and identifies and verifies the inoperative engine after simulated engine failure. Simulates feathering the propeller of the inoperative engine, if appropriate. Establishes the recommended best engine inoperative approach landing configuration, and airspeed. Monitors the operating engine and makes adjustments as necessary. Maintains a stabilised approach and the recommended approach airspeed until landing is assured. Makes smooth, timely, and correct control application during the round out and touchdown. Touches down smoothly at the predetermined zone, with no drift, and with the aeroplane's longitudinal axis aligned with and over the runway centreline.
PROCEDURAL	Carries out the recommended emergency procedure.
NONTECHNICAL	Recognises engine failure promptly, and correctly identifies inoperative engine. Considers the wind conditions, landing surface, and obstructions, and selects the most suitable touchdown point.
Asymmetric Approach (ME Aeroplane Only): see Abnormal and Emergency Procedures (General)	
OBJECTIVE	To determine that the applicant exhibits knowledge of the elements related to a published instrument approach with one engine inoperative (by reference to instruments). *Note: see* **'Instrument Approach Procedures'** *for assessment of instrument procedures and apply the additional criteria for asymmetric approaches.*
TECHNICAL	Establishes and maintains the recommended flight attitude and configuration for the best performance for all manoeuvring necessary for the instrument approach procedure. Maintains a stabilised approach and the recommended approach airspeed until landing is assured.

	Monitors the operating engine(s) and makes adjustments as necessary.
PROCEDURAL	Complies with the published approach procedure. Applies additional allowance to approach minima as required for asymmetric condition.
NONTECHNICAL	Displays efficient cockpit management procedures throughout the approach.

Go-around with Engine(s) (Simulated) Inoperative (ME Aeroplane Only): see Abnormal and Emergency Procedures (General)	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of a go-around procedure with one engine simulated inoperative, including the conditions that dictate a rejected landing, the importance of a timely decision, the recommended airspeeds.
TECHNICAL	Applies the appropriate power setting for the flight condition and establishes a pitch attitude necessary to obtain the desired performance. Establishes a positive rate of climb and climb at the appropriate airspeed to the correct acceleration altitude. Retracts the wing flaps/drag devices and landing gear, if appropriate, in the correct sequence. Trims the aeroplane as necessary, and maintains the proper ground track and altitudes during the rejected landing procedure.
PROCEDURAL	Accomplishes the appropriate briefing/checklist items in a timely manner in accordance with approved procedures.
NONTECHNICAL	Makes a timely decision to reject the landing for actual or simulated circumstances and makes appropriate notification when safety-of-flight is not an issue.
Landing with Engine(s) (Simulated) Inoperative (ME Aeroplane Only): see Abnormal and Emergency Procedures (General)	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of the flight characteristics and controllability associated with manoeuvring to a landing with (a) engine(s) inoperative (or simulated inoperative) including the controllability factors associated with manoeuvring, and the applicable emergency procedures.
TECHNICAL	Establishes the approach and landing configuration appropriate for the runway and meteorological conditions; and adjusts the engine controls as required. Maintains a stabilised approach and the desired airspeed Maintains the operating engine(s) within acceptable operating limits Accomplishes a smooth, positively controlled transition from final approach to touchdown. Uses spoilers, propeller reverse, thrust reversers, wheel brakes, and other drag/braking devices, as appropriate, in such a manner to bring the aeroplane to a safe stop after landing. Maintains positive directional control and crosswind corrections during the after-landing roll.
PROCEDURAL	Completes the applicable before landing checklist. Completes the applicable after-landing briefing/checklist items in a timely manner, after clearing the runway, and as recommended by the manufacturer.
Emergency & Survival Equipment: see Abnormal and Emergency Procedures (General)	
OBJECTIVE	To determine that the applicant exhibits knowledge of the elements related to emergency equipment and survival gear appropriate to the aeroplane provided for the flight test. Note: Examiner questions applicant on location and use of emergency equipment.
TECHNICAL	Location in the aeroplane. Method of operation or use. Servicing requirements. Method of safe storage. Equipment and survival gear appropriate for operation in various climates and topographical environments

Simulated Forced Landing (SE Aeroplane Only): see Abnormal and Emergency Procedures (General)	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of the flight characteristics, approach and forced (emergency) landing procedures, and related procedures to use in the event of an engine failure (as appropriate to the aeroplane). NOTE: No simulated engine failure shall be given by the examiner in an aeroplane when an actual touchdown could not be safely completed should it become necessary.
TECHNICAL	Maintains positive control throughout the manoeuvre. Establishes and maintains the recommended best glide airspeed and configuration during a simulated engine failure. Establishes a proper flight circuit to the selected aerodrome or landing area. Uses configuration devices such as landing gear and flaps in a manner recommended by the manufacturer and/or approved. Flies a suitable approach to chosen landing area such that a safe landing would not be in doubt.
PROCEDURAL	Follows the emergency checklist items appropriate to the aeroplane
NONTECHNICAL	Selects a suitable aerodrome or landing area, which is within the performance capability of the aeroplane. Takes into account altitude, wind, terrain, obstructions, and other pertinent operational factors. Determines the cause for the simulated engine failure (if altitude permits) and if a restart is a viable option.
Simulated Precautionary Landing (With Power) – (SE Aeroplane Only): see Abnormal and Emergency Procedures (General)	
OBJECTIVE	To determine that the applicant exhibits knowledge of the elements related to lost procedures and precautionary forced landing with power.
TECHNICAL	Maintains the appropriate heading, and if necessary, climbs. Establishes a proper flight circuit to the selected aerodrome or landing area. Flies a suitable approach to chosen landing area such that a safe landing would not be in doubt.
NONTECHNICAL	Selects the best course of action when given a lost situation. Attempts to identify nearest prominent landmark(s). Uses available navigation aids and/or contacts an appropriate facility for assistance. Plans a precautionary landing if deteriorating weather and/or fuel exhaustion is impending. Selects a suitable aerodrome or landing area, which is within the performance capability of the aeroplane.
Fire Drills: see Abnormal and Emergency Procedures (General)	
OBJECTIVE	To determine that the applicant possesses adequate knowledge of the emergency procedures (as may be determined by the examiner) relating to the particular aeroplane type.
TECHNICAL	Demonstrates proper procedures in accordance with approved procedure/briefing/checklist or the manufacturer's recommended procedures
PROCEDURAL NONTECHNICAL	Identifies source of smoke/fire in a timely manner. Takes care of passenger/crew safety. Initiates emergency descent/diversion if appropriate.
Wind shear During Take-off & Landing: see Abnormal and Emergency Procedures (General)	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of wind shear at take-off/landing.

TECHNICAL	Demonstrates sound judgement and knowledge of the aeroplane manoeuvring capabilities throughout the procedure. Adjusts aeroplane configuration and speeds as appropriate. Maintains smooth and positive control within aeroplane limitations.
PROCEDURAL	Performs all procedures required for wind shear at take-off/landing and aeroplane control in a smooth, positive, and timely manner.
Simulated Cabin Pressure Failure/Emergency Descent: See Abnormal and Emergency Procedures (General)	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge (simulated) cabin pressure failure/emergency descent.
TECHNICAL	Demonstrates sound judgement and knowledge of the aeroplane manoeuvring capabilities throughout the procedure. Performs emergency descent in a smooth, positive, and timely manner without exceeding limitations.
PROCEDURAL	Demonstrates proper procedures in accordance with approved procedure/briefing/checklist or the manufacturer's recommended procedures and pertinent briefing/checklist items.
Incapacitation of Flight Crew Member (only for MPA): see Abnormal and Emergency Procedures (General)	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of incapacitation of flight crewmember.
TECHNICAL	Maintains aeroplane control in a smooth, positive, and timely manner.
PROCEDURAL	Performs all procedures for incapacitation of flight crewmember in accordance with approved procedure/briefing/checklist or the manufacturer's recommended procedures and pertinent briefing/checklist items.

Arrival Procedures and Instrument Procedures (General)	
OBJECTIVE	To determine that the applicant, In actual or simulated instrument conditions, exhibits adequate knowledge of En Route Low and High Altitude Charts, STARS, Instrument Approach Procedure Charts, and related pilot and controller responsibilities.
TECHNICAL	Makes correct use of Instruments, flight director, autopilot, navigation equipment and communication equipment appropriate to the performance of the procedure. Intercepts, in a timely manner, all courses, radials, and bearings (QDM/QDR's) appropriate to the procedure, route, ATC clearance, or as directed by the examiner. Establishes, where appropriate, a rate of descent consistent with the aeroplane operating characteristics and safety. Maintains the appropriate airspeed- altitude, headings and accurately tracks radials, courses, and bearing (QDM/QDR's).
PROCEDURAL	Uses the current and appropriate navigation publications for the proposed flight. Performs the aeroplane briefing/checklist items appropriate to the arrival. Establishes communications with ATC, using proper phraseology. Complies, in a timely manner, with all ATC clearances, instructions, and restrictions. Exhibits adequate knowledge of two-way communications failure procedures. Adheres to airspeed restrictions and adjustments required by regulations, ATC, the Pilot's Operating Handbook, the AFM, and the examiner. Complies with the provisions of the descent profile, STAR, and other arrival procedures, as appropriate. Performs correct altimetry procedures, in accordance with the regulations, operational procedures and ATC requirements. Completes the appropriate checklist.
NONTECHNICAL	Interprets correctly the ATC clearance received and, when necessary, requests clarification, verification, or change. Demonstrates terrain awareness, orientation, division of attention, and proper planning. Ensures that correct crew and passenger briefings are completed Liaises with other crew members for correct operation of the aircraft systems during approach and landing Demonstrates orientation, division of attention, and proper planning
Setting Navigation Aids and Identification of Facilities: see Arrival Procedures and Instrument Procedures (General)	
OBJECTIVE	To determine that the applicant correctly selects and identifies all navigation and communications equipment, instrument references, flight director and associated navigational aids, for descent and arrival and exhibits adequate knowledge of the Morse Code.
TECHNICAL	Tunes and identifies navigational facilities as appropriate to the procedure. Correctly selects Navigational aids to flight instruments such as HSI, RMI, OBS, flight director, autopilot etc. as appropriate. Demonstrates adequate knowledge of Morse Code to identify aids. Demonstrates correct use of course indicators to indicate QDM/QDR. Demonstrates correct use of communications equipment including SSR equipment.
NONTECHNICAL	Monitors Navigation equipment for signal/equipment failure.
Approach & Landing Briefing, Including Descent, Approach & Landing Checks :	

see Arrival Procedures and Instrument Procedures (General)	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of approach and landing briefings, whether single or multi-pilot, including descent, approach and landing checks. ***NOTES:*** The approach briefing should include weather considerations and confirmation of instrument approach procedure minima. All procedures, checks and drills in preparation for landing and for missed approach. The briefing shall include appropriate corrections for PEC and temperature adjustments, as well as performance considerations and reference speeds to be used. The applicant shall be required also, to ensure that the passengers receive a safety briefing.
TECHNICAL	Demonstrates sound judgement and consideration of the aeroplane manoeuvring capabilities throughout the briefings. Performs all procedures required and maintains aeroplane control in a smooth, positive, and timely manner.
PROCEDURAL	Presents proper briefings in accordance with the operator's standard, approved procedures or the manufacturer's recommended procedures for the correct operation of the aircraft systems.
NONTECHNICAL	Involves other crew members in the briefing and correctly follows correct SOP for confirmation of the intended approach procedure, approach minima and missed approach procedure. Demonstrates orientation, division of attention and proper planning for the approach and landing phase. Includes due consideration for missed approach procedures and diversion planning, in the briefing.
Holding Procedures: see Arrival Procedures and Instrument Procedures (General)	
OBJECTIVE	To determine that the applicant, In actual or simulated instrument conditions, exhibits adequate knowledge of and proficiency in holding procedures for standard and non-standard, published and non-published IFR holding patterns.
TECHNICAL	Changes to the recommended holding airspeed appropriate for the aeroplane and holding altitude, so as to cross the holding fix at or below maximum holding airspeed. Uses wind-drift correction techniques accurately to maintain the appropriate joining and holding pattern and to establish and maintain the correct tracks and bearings. Maintains the appropriate airspeed, altitude and headings accurately to establish and maintain the correct tracks and bearings. Demonstrates adequate knowledge of holding endurance, including, but not necessarily limited to, fuel on board, fuel flow while holding, fuel required to alternate, etc.

PROCEDURAL	Recognises arrival at the clearance limit or holding fix. Follows appropriate entry procedures in accordance with standard operational procedures or as required by ATC or the examiner. Complies with ATC reporting requirements. Uses the correct timing criteria where required by the holding procedure, ATC or the examiner's instructions. Makes appropriate adjustments to the procedure timing, to allow for the effects of known wind. Makes appropriate adjustments in order to arrive over the holding fix as close as possible to the "Expected Approach Time".
Instrument Approaches (General)	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of altitude, speed and heading control and performs a stabilised approach in the correct configuration.
TECHNICAL	Establishes the appropriate aeroplane configuration and airspeed considering turbulence, wind shear, microburst conditions, or other meteorological and operating conditions. Prior to beginning the final approach segment, maintains the desired altitude, heading and airspeed and accurately tracks radials, courses, and bearings, in accordance with the approach procedure or as directed by ATC. Demonstrates 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. Transitions 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.
PROCEDURAL	Selects, tunes, identifies, and monitors the operational status of ground and aeroplane navigation equipment used for the approach. Advises ATC anytime the applicant is unable to comply with a clearance. Completes the aeroplane briefing/checklist items appropriate to the phase of flight or approach segment, including engine out approach and landing briefing/checklists. Follows the published approach procedure in accordance with ATC instructions, or as directed by the examiner. Makes appropriate adjustments to the procedure timing, to allow for the effects of known wind. Applies the necessary adjustments to the published approach minima criteria for the aeroplane approach category, and with due regard for NOTAMS Inoperative navigation equipment Inoperative visual aids associated with the landing environment. Reported weather conditions Completes the appropriate briefing/checklist.

NONTECHNICAL	Establishes two-way communications with ATC using the proper communications phraseology and techniques. Copies correctly, in a timely manner, the ATC clearance as issued. Ensures that correct crew and passenger briefings are completed Ensures or confirms that passengers, crew etc are correctly secured for landing. Demonstrates correct crew co-ordination as required by type of operation Demonstrates orientation throughout the manoeuvre Encourages participation of other crewmembers in accordance with approved SOP.

Precision approach	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge and skill in accomplishing the precision instrument approach procedures, as determined by the examiner, with all engines operating, and / or with one engine inoperative, where applicable. **NOTE:** Precision approaches, using aeroplane NAVAID equipment for centreline and glide slope guidance may be accomplished in simulated or actual instrument conditions to Decision Altitude/Height (DA/DH) and must be flown without the use of an autopilot. Where the approach is required to be flown with one engine inoperative, simulated engine shut-down must be completed before the final approach segment. This engine out condition should be preserved until completion of the landing run or throughout the go-around procedure. For ILS displays with a normal scale, the approach should be contained within a half scale deflection of the localizer and glide slope indications. For aircraft with an expanded scale display of the localizer, the approach should be contained within the full scale deflection of the localizer and half scale deflection of the glide slope indications.
TECHNICAL	Intercepts and tracks localizer within prescribed limits. Establishes a predetermined rate of descent at the point where the electronic glide slope begins, in order to follow the glide slope. Maintains electronic glide slope within prescribed limits. *Arrives at the DA/DH in such a position that a landing, go-around or circling approach may be accomplished safely.* Avoids descent below the DA/DH before initiating a missed approach procedure or transitioning to a landing. Initiates immediately the missed approach, when at the DA/DH, if the required visual references for the runway are not unmistakably visible and identifiable. Maintains localizer 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.
PROCEDURAL	See Instrument Approaches General
NONTECHNICAL	See Instrument Approaches General

Non Precision approach: see Instrument Approaches (General)	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge and skill in accomplishing the non-precision instrument approach procedures, as determined by the examiner, with all engines operating, and / or with one engine inoperative, where applicable.
TECHNICAL	Establishes 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. Executes the missed approach if the required visual references for the intended runway are not unmistakably visible and identifiable at the missed approach point.
PROCEDURAL	Demonstrates adequate judgement and knowledge of the aeroplane. performance in order to comply with published approach procedures equipment used for the approach.
Circling Approach: see Instrument Approaches (General)	
Go-Around & Missed approach: see Instrument Approaches (General)	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge and skill in the application of missed approach procedures associated with standard instrument procedures.
TECHNICAL	Initiates the missed approach procedure promptly by the timely application of power, establishes the proper climb attitude, and re-configures the aircraft in accordance with the approved procedures. Maintains the desired altitudes, airspeed, heading and accurately tracks courses, radials, and bearings.
PROCEDURAL	Follows the recommended aeroplane briefing/checklist items appropriate to the go-around procedure for the aeroplane used. Complies with the appropriate missed approach procedure or ATC clearance
NONTECHNICAL	Requests clearance, if appropriate, to the alternate aerodrome, another approach, a holding fix, or as directed by the examiner. Interprets correctly the ATC clearance received and, when necessary, requests clarification, verification, or change.
ARRIVAL AND LANDING PROCEDURES	
Aerodrome Arrival Procedures	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of the appropriate arrival procedures and relevant pilot and controller responsibilities, and makes proper reference to the appropriate navigation publications and charts.
TECHNICAL	Maintains the appropriate airspeed- altitude, headings Exhibits adequate knowledge of two-way communications failure procedures.
PROCEDURAL	Uses the current and appropriate navigation publications for the proposed arrival routeing. Complies in a timely manner with ATC instructions and airspace restrictions. Performs the aeroplane briefing / checklist items appropriate to the arrival. Performs correct altimetry procedures, in accordance with the regulations, operational procedures and ATC requirements. Completes the appropriate checklist.
NONTECHNICAL	Establishes communications with ATC, using proper phraseology.

Non Precision approach: see Instrument Approaches (General)	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge and skill in accomplishing the non-precision instrument approach procedures, as determined by the examiner, with all engines operating, and / or with one engine inoperative, where applicable.
TECHNICAL	Establishes 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. Executes the missed approach if the required visual references for the intended runway are not unmistakably visible and identifiable at the missed approach point.
PROCEDURAL	Demonstrates adequate judgement and knowledge of the aeroplane. performance in order to comply with published approach procedures equipment used for the approach.
Circling Approach: see Instrument Approaches (General)	
Go-Around & Missed approach: see Instrument Approaches (General)	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge and skill in the application of missed approach procedures associated with standard instrument procedures.
TECHNICAL	Initiates the missed approach procedure promptly by the timely application of power, establishes the proper climb attitude, and re-configures the aircraft in accordance with the approved procedures. Maintains the desired altitudes, airspeed, heading and accurately tracks courses, radials, and bearings.
PROCEDURAL	Follows the recommended aeroplane briefing/checklist items appropriate to the go-around procedure for the aeroplane used. Complies with the appropriate missed approach procedure or ATC clearance
NONTECHNICAL	Requests clearance, if appropriate, to the alternate aerodrome, another approach, a holding fix, or as directed by the examiner. Interprets correctly the ATC clearance received and, when necessary, requests clarification, verification, or change.
	Interprets correctly the ATC clearance received and, when necessary, requests clarification, verification, or change. Demonstrates terrain awareness, orientation, division of attention, and proper planning. Liaises with other crewmembers for correct operation of the aircraft systems throughout the arrival phase. Divides attention properly inside and outside cockpit. Ensures that correct crew and passenger briefings are completed Liaises with other crew members for lookout (where appropriate)
All landings (Including Normal Landing) General	
OBJECTIVE	To determine that the applicant exhibits satisfactory knowledge and skill in the execution of landings, with due regard for recommended approach angles, airspeed, configuration, performance limitations, wake turbulence, and safety factors (as appropriate to the aeroplane).
TECHNICAL	Establishes the recommended approach and landing configuration and airspeed, and adjusts pitch attitude and power as required, to maintain the correct approach path and airspeed.

Non Precision approach: see Instrument Approaches (General)	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge and skill in accomplishing the non-precision instrument approach procedures, as determined by the examiner, with all engines operating, and / or with one engine inoperative, where applicable.
TECHNICAL	Establishes 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. Executes the missed approach if the required visual references for the intended runway are not unmistakably visible and identifiable at the missed approach point.
PROCEDURAL	Demonstrates adequate judgement and knowledge of the aeroplane. performance in order to comply with published approach procedures equipment used for the approach.
Circling Approach: see Instrument Approaches (General)	
Go-Around & Missed approach: see Instrument Approaches (General)	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge and skill in the application of missed approach procedures associated with standard instrument procedures.
TECHNICAL	Initiates the missed approach procedure promptly by the timely application of power, establishes the proper climb attitude, and re-configures the aircraft in accordance with the approved procedures. Maintains the desired altitudes, airspeed, heading and accurately tracks courses, radials, and bearings.
PROCEDURAL	Follows the recommended aeroplane briefing/checklist items appropriate to the go-around procedure for the aeroplane used. Complies with the appropriate missed approach procedure or ATC clearance
NONTECHNICAL	Requests clearance, if appropriate, to the alternate aerodrome, another approach, a holding fix, or as directed by the examiner. Interprets correctly the ATC clearance received and, when necessary, requests clarification, verification, or change.
	Maintains a ground track that ensures the desired traffic circuit will be flown, taking into account any obstructions and ATC or examiner requirements. Makes proper correction for drift, (using existing wind conditions) and maintains a precise ground track. Achieves and maintains a stabilised approach. Accomplishes a smooth, positively controlled transition from final approach to touchdown. Achieves a landing within the designated touchdown zone, at the correct speed, in the correct attitude and on the runway centreline. Touches down with no side drift and with the aeroplane aligned with the runway centreline. Maintains positive directional control throughout the landing roll. Uses 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.
PROCEDURAL	Completes the appropriate pre-landing checklist Completes the appropriate after-landing checklist items.

Non Precision approach: see Instrument Approaches (General)	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge and skill in accomplishing the non-precision instrument approach procedures, as determined by the examiner, with all engines operating, and / or with one engine inoperative, where applicable.
TECHNICAL	Establishes 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. Executes the missed approach if the required visual references for the intended runway are not unmistakably visible and identifiable at the missed approach point.
PROCEDURAL	Demonstrates adequate judgement and knowledge of the aeroplane. performance in order to comply with published approach procedures equipment used for the approach.
Circling Approach: see Instrument Approaches (General)	
Go-Around & Missed approach: see Instrument Approaches (General)	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge and skill in the application of missed approach procedures associated with standard instrument procedures.
TECHNICAL	Initiates the missed approach procedure promptly by the timely application of power, establishes the proper climb attitude, and re-configures the aircraft in accordance with the approved procedures. Maintains the desired altitudes, airspeed, heading and accurately tracks courses, radials, and bearings.
PROCEDURAL	Follows the recommended aeroplane briefing/checklist items appropriate to the go-around procedure for the aeroplane used. Complies with the appropriate missed approach procedure or ATC clearance
NONTECHNICAL	Requests clearance, if appropriate, to the alternate aerodrome, another approach, a holding fix, or as directed by the examiner. Interprets correctly the ATC clearance received and, when necessary, requests clarification, verification, or change.
NONTECHNICAL	Ensures or confirms that passengers and crew are correctly secured for take-off / landing. Correctly interprets the ATC clearance received and, when necessary, requests clarification, verification or change Liaises with other crew members for correct operation of the aircraft systems during approach and landing. Considers the wind conditions, landing surface and obstructions, and selects the correct touch down point. Listens to the RT environment to establish satisfactory awareness of other traffic Demonstrates orientation, division of attention, and proper planning Divides attention properly inside and outside cockpit. Maintains adequate look-out for other aeroplanes Notes any surface conditions, obstructions or other hazards that might hinder a safe take-off / landing. Shows consideration for other aeroplanes on the ground and in the air.

Short Field Approach & Landing: See All Landings General	
OBJECTIVE	To determine that the applicant exhibits satisfactory knowledge and skill in the execution of a short-field approach and landing.
TECHNICAL	Maintains a stabilised approach and achieves the recommended approach airspeed, or in its absence at 1.3 V_{SO}, with gust factor applied. Achieves a landing, accurately within the runway touchdown zone. Applies brakes, spoilers, reverse thrust and / or such other devices for the slowing of the aircraft in accordance with the manufacturers recommendations, to stop in the shortest distance consistent with safety and the certificated performance of the aircraft.
Flapless Landing: See All Landings General	
OBJECTIVE	To determine that the applicant exhibits satisfactory knowledge and skill in the execution of a safe landing without flaps or with slats /flaps malfunction.
TECHNICAL	Maintains a stabilised approach at an appropriate approach speed, in accordance with the Pilot's Operating Handbook / AFM Accomplishes a smooth, positively controlled transition from final approach to touchdown.
NONTECHNICAL	Makes due allowance for landing performance in the no flap/no slat configuration.
Approach and Landing with Idle Power (Single Engine Aeroplanes Only): See All Landings General	
OBJECTIVE	To determine that the applicant exhibits satisfactory knowledge and skill in the execution of a safe landing with the engine at idle power.
TECHNICAL	Reduces to idle power in such a position as to achieve a glide descent and landing on the runway, in an area pre-selected by the applicant or nominated by the examiner.
NONTECHNICAL	Uses correct RT phraseology to obtain the appropriate clearance and advise ATC of any technical problem.
Landing with simulated jammed horizontal stabiliser in any out-of-trim position: See All Landings General	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of the factors which influence control of the aircraft with jammed stabilizer, in any out-of-trim position, including the use of various drag configurations, power settings, pitch attitudes, weights, and bank angles.
TECHNICAL	Demonstrates sound judgement and knowledge of the aeroplane manoeuvring capabilities throughout the procedure. Maintains safe aeroplane control in a smooth, positive, and timely manner.
PROCEDURAL	Demonstrates proper procedures in accordance with approved procedure/briefing/checklist or the manufacturer's recommended procedures and pertinent briefing/checklist items.
NONTECHNICAL	Demonstrates satisfactory situation / problem analysis Involves other crew members in problem analysis (MPA) Shows correct fault diagnosis Confirms fault diagnosis (with other crew members in MPA) Reviews causal factors (with other crew members in MPA) Identifies alternative courses of action, if appropriate Involves other crew members in option analysis (MPA) Confirms intended plan of action (with other crew members in MPA) Uses correct RT phraseology to obtain the appropriate clearance and advise ATC of any technical problem.
Touch and go	
OBJECTIVE	To determine that the applicant exhibits knowledge of the elements related to a touch and go including the importance of a timely decision to continue or to stop on the runway.

TECHNICAL	Establishes the recommended take-off configuration and applies take-off power, to transition safely to a normal or short field take-off, as appropriate to the aircraft type and the conditions Maintains directional control and drift correction. Establishes a safe climb in the correct configuration and at the correct speed.
PROCEDURAL	Complies with the appropriate traffic pattern and noise abatement procedures.
NONTECHNICAL	Makes a timely decision to discontinue the landing.
Go-around from low height	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge and skill in a rejected landing procedure, including the conditions that dictate a rejected landing, the importance of a timely decision, the recommended airspeeds, and also the appropriate re-configuration procedure. **NOTE:**The manoeuvre may be combined with visual, instrument, circling, or missed approach procedures, but instrument conditions need not be simulated below 100 feet (30 meters) above the runway. This manoeuvre should be initiated in the landing configuration, when approximately 50 feet (15 meters) above the runway and approximately over the runway threshold or as recommended.
TECHNICAL	Applies the appropriate power setting for the flight condition and establishes a pitch attitude necessary to obtain the desired performance. Retracts the wing flaps/drag devices and landing gear, if appropriate, in the correct sequence and at a safe altitude, establishes a positive rate of climb and the appropriate airspeed Trims the aeroplane as necessary, and maintains the proper ground track during the rejected landing procedure.
PROCEDURAL	Accomplishes the appropriate checklist items in a timely manner in accordance with approved procedures.
NONTECHNICAL	Makes a timely decision to reject the landing for actual or simulated circumstances and makes appropriate notification when safety-of-flight is not an issue. Demonstrates proper consultation with other crew members (MPA) Liaises with other crew members for 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.
After Landing and taxiing	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of safe after landing and taxi procedures as appropriate.
TECHNICAL	Demonstrates proficiency by maintaining correct and positive control. Maintains proper spacing on other aeroplane, obstructions, and persons. Maintains the appropriate speed Maintains constant vigilance and aeroplane control during the taxi operation.
PROCEDURAL	Accomplishes the applicable briefing/checklist items and performs the recommended procedures. Complies with instructions issued by ATC (or the examiner simulating ATC). Observes runway hold lines, localizer and glide slope critical areas, and other surface control markings and lighting. Completes the appropriate checklist.

NONTECHNICAL	Demonstrates correct crew co-ordination as required by type of operation (MPA) Ensures that correct crew and passenger briefings are completed Liaises with other crew members for lookout (MPA) Divides attention properly inside and outside cockpit.
Parking and Securing	
OBJECTIVE	To determine that the applicant exhibits adequate knowledge of parking and securing aeroplane procedures.
TECHNICAL	Correctly parks and secures aeroplane.
PROCEDURAL	Completes the aeroplane flight records including flight time records and discrepancies.

NIGHT OPERATIONS APPLICABLE TO ALL FLIGHT PHASES	
Night Preparation	
OBJECTIVE	To determine that the applicant exhibits knowledge of the elements related to night operations by explaining:
TECHNICAL	Lighting systems identifying aerodromes, runways, taxiways and obstructions, and pilot controlled lighting. Aeroplane lighting systems. Personal equipment essential for night flight. Night orientation, navigation, and chart reading techniques.
PROCEDURAL	Safety precautions and emergencies peculiar to night flying.
NONTECHNICAL	Physiological aspects of night flying including the effects of changing light conditions, coping with illusions, and how the pilot's physical condition affects visual acuity.
Night Operation including Night circuit, go-around and landing with landing lights off	
OBJECTIVE	To determine that the applicant exhibits knowledge of the elements related to night flight.
TECHNICAL	Inspects the interior and exterior of the aeroplane with emphasis on those items essential for night flight. Taxies adhering to good operating practice for night conditions. Performs take-offs and climbs with emphasis on correct visual and instrument references. Navigates and maintains orientation. Approaches, lands, and taxies, adhering to good operating practices for night conditions.
PROCEDURAL	Completes all appropriate briefing/checklists.

End of Advisory Circular

Kenya Civil Aviation Authority