Trinidad and Tobago
Civil Aviation Authority

TTCAA Advisory Circular

Subject: PRIVATE PILOT LICENCE SKILL TEST STANDARDS
TTCAA Advisory Circular TAC-PEL056
Date: 06/10/02

FOREWORD

1. (1) The TTCAA has developed skill test standards for airmen licences and ratings and these are published as TTCAA Advisory Circulars (TACs). This TAC establishes the standards for the private pilot licence skill tests for the aeroplane category and the single-engine and multi-engine classes. Although helicopter and powered lift categories are included in this document, they are only at the "in development" stage at this time. TTCAA inspectors and designated pilot flight test examiners shall conduct skill tests in compliance with these standards. Flight instructors and applicants should find these standards helpful in skill test preparation. Other TACs have been developed for other airmen licences and can be obtained from the TTCAA website: www.caa.gov.tt.

(2) Terms, such as "shall" and "must" are directive in nature and when used in this document indicate that an action is mandatory. Guidance information is described in terms of "should" and "may" indicating the actions are desirable or permissive, but not mandatory.

(3) The TTCAA gratefully acknowledges the valuable assistance provided by the FAA in the development of these skill test standards (STS).

(4) The Trinidad and Tobago Civil Aviation Regulations (TTCARs) can be obtained from the Trinidad and Tobago Government Printery, Victoria Avenue, Port of Spain, Trinidad. TTCAR No.1, Part II and Part III cover the requirements for personnel licencing.

(5) This TAC may be downloaded from the TTCAA website at http://www.caa.gov.tt. Subsequent changes to this TAC will also be available on TTCAA web site.

(6) Comments regarding this publication should be sent to:

The Trinidad and Tobago Civil Aviation Authority
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National Mail Centre Golden Grove Road,
Piarco,
Republic of Trinidad and Tobago.

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Director General of Civil Aviation

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CONTENTS

AREAS OF OPERATION

PURPOSE

1. The purpose of this TTCAA Advisory Circular (TAC) is to prescribe the standards that shall be used by TTCAA inspectors and designated flight test examiners when conducting private pilot—aeroplane (PPL) skill tests. Flight instructors are expected to use this document when preparing applicants for skill tests. Applicants should be familiar with this document and refer to these standards during their training.

GENERAL

2. (1) An applicant for a Trinidad and Tobago Private Pilot licence is required under TTCAR No.1 to demonstrate to the Authority through a skill test, his ability to perform as a pilot in command of an aircraft, the relevant procedures and manoeuvres prescribed by the TTCARs, with a degree of competence appropriate to the privileges granted to the holder of a Private Pilot Licence. This TAC has been published by the TTCAA to establish the standards for the Private Pilot Licence skill tests for the aeroplane category and the single-engine and multi-engine classes. TTCAA inspectors and designated flight test examiners shall conduct skill tests in compliance with these standards. Flight instructors and applicants should find these standards helpful in preparing students for the required skill test for a Trinidad and Tobago Private Pilot Licence.

SKILL TEST STANDARDS CONCEPT

3. TTCAR No.1 specifies the areas of operation in which knowledge and skill must be demonstrated by the applicant before the issue of a private pilot licence or rating. The TTCARs provide the flexibility to permit the TTCAA to publish STSs containing the areas of operation and specific tasks in which pilot competency shall be demonstrated. The TTCAA shall revise this STS whenever it is determined that changes are needed in the interest of safety. Adherence to the provisions of the TTCARs and the STS is mandatory for the evaluation of private pilot applicants.

SKILL TEST DESCRIPTION

General

4. (1) This TAC contains the private pilot STS for:

(a) Aeroplane-Single-Engine Land and Sea (Appendix 1)

(b) Aeroplane-Multi-Engine Land and Sea (Appendix 2)

(2) The Private Pilot-Aeroplane Skill Test Standards includes the areas of operation and tasks for the issue of an initial private pilot licence and for the addition of category ratings and/or class ratings to that licence.

Areas of Operation

5. Areas of operation are phases of the skill test arranged in a logical sequence within each standard. They begin with Preflight Preparation and end with Postflight Procedures. The inspector or flight test examiner may conduct 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.

Tasks

6. Tasks are titles of knowledge areas, flight procedures, or manoeuvres appropriate to an area of operation. The abbreviation(s) within parentheses immediately following a task refer to the category and/or class aircraft appropriate to that task. The meaning of each abbreviation is as follows:

(a) ASEL: Aeroplane-Single-Engine Land;

(b) AMEL: Aeroplane-Multi- Engine Land;

(c) ASES: Aeroplane-Single-Engine Sea;

(d) AMES: Aeroplane-Multi-Engine Sea.

Note: *When administering a skill test based on Appendixes 1 and 2 of this TAC, the tasks appropriate to the class of aeroplane (ASEL, ASES, AMEL, or AMES) used for the test shall be included in the plan of action. The absence of a class indicates the task is for all classes.*

Note

7. **"NOTE"** is used to emphasize special considerations required in the area of operation or task.

Reference

8. (1) Reference identifies the publication(s) that describe(s) the task. Descriptions of tasks are not included in these standards because this information can be found in the current issue of the listed reference. Publications other than those listed may be used for references if their content conveys substantially the same meaning as the referenced publications.

(2) These skill test standards are based on the following references:

(a) TTCAR No.1:33; and

(b) TTCAR No.1:Schedule 3, Part B and C

Objective

9. (1) The Objective lists the elements that must be satisfactorily performed to demonstrate competency in a task.

(2) The Objective includes:

(a) Specifically what the applicant should be able to do;

(b) Conditions under which the task is to be performed; and

(c) Acceptable performance standards.

Abbreviations

10. The following abbreviations have the meanings shown:

ADM	Aeronautical Decision Making
ADF	Automatic Direction Finder
AGL	Above Ground Level
AMEL	Aeroplane-Multi-Engine Land
AMES	Aeroplane-Multi-Engine Sea
ASEL	Aeroplane-Single-Engine Land
ASES	Aeroplane-Single-Engine Sea
ATS	Air Traffic Service

CAA	Civil Aviation Authority
CDI	Course Deviation Indicator
CFIT	Controlled Flight into Terrain
CRM	Crew Resource Management
DH/DA	Decision Height/Decision Altitude
ETA	Estimated Time of Arrival
MDA	Minimum Descent Attitude
MEL	Minimum Equipment List
METAR	Aviation Routine Weather Report
NOTAM	Notice to Airmen
RMI	Radio Magnetic Indicator
STS	Skill Test Standards
TAF	Terminal Area Forecast
TTCAA	Trinidad and Tobago Civil Aviation Authority
TTCAR	Trinidad and Tobago Civil Aviation Regulations
VFR	Visual Flight Rules

USE OF SKILL TEST STANDARDS

11. (1) The TTCAA requires that all private pilot skill tests be conducted in accordance with the appropriate private pilot STS and the policies set forth herein. Applicants shall be evaluated in all tasks included in the areas of operation of the appropriate STS (unless otherwise noted).

(2) An applicant who holds at least a private pilot licence seeking an additional aeroplane category rating and/or class rating at the private pilot level, shall be evaluated in the areas of operation and tasks listed in the *Additional Rating Task Table*. At the discretion of the flight test examiner, an evaluation of the applicant's competence in the remaining areas of operation and tasks may be conducted.

(3) If the applicant holds two or more category or class ratings at the private level, and the ratings table indicates differing required tasks, the "least restrictive" entry applies. For example, if *"All*" and *"None"* are indicated for one area of operation, the *"None"* entry applies. If *"B"* and *"B, C"* are indicated, the *"B"* entry applies.

(4) In preparation for each skill test, the flight test examiner shall develop a written "plan of action." The "plan of action" shall include all tasks in each area of operation, unless noted otherwise. If the elements in one task have already been evaluated in another task, they need not be repeated. For example, the "plan of action" need not include evaluating the applicant on complying with markings, signals, and clearances at the end of the flight, if that element was sufficiently observed at the beginning of the flight. Any task selected for evaluation during a skill test shall be evaluated in its entirety.

(5) The flight test examiner is not required to follow the precise order in which the areas of operation and tasks appear in this document. The flight test examiner may change the sequence or combine tasks with similar Objectives to have an orderly and efficient flow of the skill test. For example, Radio Communications and ATS Light Signals may be combined with Traffic Patterns. The flight test examiner's "plan of action" shall include the order and combination of tasks to be demonstrated by the applicant in a manner that will result in an efficient and valid test.

(6) The flight test examiner is expected to use good judgment in the performance of simulated emergency procedures. The use of the safest means for simulation is expected. Consideration must be given to local conditions, both meteorological and topographical, at the time of the test, as well as the applicant's workload, and the condition of the aircraft used. If the procedure being evaluated would jeopardize safety, it is expected that the applicant will simulate that portion of the manoeuvre.

SPECIAL EMPHASIS AREAS

12. (1) Flight test examiners shall place special emphasis upon areas of aircraft operations considered critical to flight safety. Among these are:

(a) Positive aircraft control;

(b) Positive exchange of the flight controls procedure (who is flying the aeroplane);

(c) Stall/spin awareness;

(d) Collision avoidance;

(e) Wake turbulence avoidance;

(f) Land and Hold Short Operations (LAHSO);

(g) Runway incursion avoidance;

(h) Controlled flight into terrain (CFIT);

(i) Aeronautical decision making (ADM);

(j) Checklist usage; and

(k) Other areas deemed appropriate to any phase of the skill test.

(2) Although these areas may not be specifically addressed under each task, they are essential to flight safety and will be evaluated during the skill test. In all instances, the applicant's actions will relate to the complete situation.

REMOVAL OF THE "AEROPLANE MULTI-ENGINE VFR ONLY" LIMITATION

13. The removal of the "Aeroplane Multi-engine VFR Only" limitation, at the private pilot licence level, requires an applicant to satisfactorily perform the following areas of operation and tasks from the private AMEL and AMES STS in a multi-engine aeroplane that has a manufacturer's published VMC speed.

(a) AREA OF OPERATION XI: MULTI-ENGINE OPERATIONS

(i) TASK C: ENGINE FAILURE DURING FLIGHT (by reference to instruments);

(ii) TASK D: INSTRUMENT APPROACH-ONE ENGINE INOPERATIVE (by reference to instruments)

REMOVAL OF THE "LIMITED TO CENTER THRUST" LIMITATION

14. The removal of the "Limited to Center Thrust" limitation at the private pilot licence level requires an applicant to satisfactorily perform the following areas of operation and tasks from the private AMEL and AMES PTS in a multi-engine aeroplane that has a manufacturer's published Vmc speed.

(a) AREA OF OPERATION I: PREFLIGHT PREPARATION

(i) TASK H: PRINCIPLES OF FLIGHT-ENGINE INOPERATIVE

(b) AREA OF OPERATION X: EMERGENCY OPERATIONS

(i) TASK B: ENGINE FAILURE DURING TAKEOFF BEFORE Vmc (simulated)

(ii) TASK C: ENGINE FAILURE AFTER LIFT-OFF (simulated)

(iii) TASK D: APPROACH AND LANDING WITH AN INOPERATIVE ENGINE (simulated)

(c) AREA OF OPERATION XI: MULTI ENGINE OPERATIONS

(i) TASK A: MANOEUVRING WITH ONE ENGINE INOPERATIVE

(ii) TASK B: Vmc (demonstration)

SKILL TEST PREREQUISITES: PRIVATE PILOT AEROPLANE

15. An applicant for the Private Pilot-Aeroplane Skill Test is required by TTCAR 1:30 to -

(a) Be at least 17 years of age;

(b) Be able to read, speak, write, and understand the English language. If there is a doubt, use the PEL Handbook, English Language Skill Standards;

(c) Have passed the appropriate private pilot knowledge test since the beginning of the 24th month before the month in which he or she takes the skill test;

(d) Have satisfactorily accomplished the required training and obtained the aeronautical experience prescribed;

(e) Possess at least a current Class 2 medical certificate;

(f) Have an endorsement from an authorized instructor certifying that the applicant has received and logged training time within 60 days preceding the date of application in preparation for the skill test, and is prepared for the skill test; and

(g) 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.

AIRCRAFT AND EQUIPMENT REQUIRED FOR THE SKILL TEST

16. (1) The private pilot-aeroplane applicant is required by TTCAR No.1:110 to provide an aircraft with a current airworthiness certificate and the necessary equipment and controls. The aircraft must –

(a) Be of Trinidad and Tobago registration, or at the discretion of the flight test examiner administering the skill test, of foreign registration properly certified by the State of Registry and of the same category, class and type, if applicable, for the licence and/or rating for which the applicant is applying;

(b) Have fully functioning dual controls; and

(c) Be capable of performing all areas of operation appropriate to the rating sought and have no operating limitations, which prohibit its use in any of the areas of operation, required for the skill test.

FLIGHT INSTRUCTOR RESPONSIBILITY

17. (1) An appropriately rated flight instructor is responsible for training the private pilot applicant to acceptable standards in all subject matter areas, procedures, and manoeuvres included in the tasks within each area of operation in the appropriate private pilot STS.

(2) Because of the impact of their teaching activities in developing safe, proficient pilots, flight instructors should exhibit a high level of knowledge, skill, and the ability to impart that knowledge and skill to students.

(3) Throughout the applicant's training, the flight instructor is responsible for emphasizing the performance of effective visual scanning and collision avoidance procedures.

FLIGHT TEST EXAMINER RESPONSIBILITY

18. (1) The flight test examiner conducting the skill test is responsible for determining that the applicant meets the acceptable standards of knowledge and skill of each task within the appropriate STS. This is an ongoing process throughout the test. Oral questioning, to determine the applicant's knowledge of tasks and related safety factors, should be used judiciously at all times, especially during the flight portion of the skill test. Examiners shall test to the greatest extent practicable the applicant's correlative abilities rather than mere rote enumeration of facts throughout the skill test.

(2) If the flight test examiner determines that a task is incomplete, or the outcome uncertain, he may require the applicant to repeat that task, or portions of that task. This provision has been made in the interest of fairness and does not mean that instruction, practice, or the repeating of an unsatisfactory task is permitted during the certification process. In this case, the remaining tasks of the skill test phase should be completed before repeating the questionable task.

(3) On multi-engine skill tests where the failure of the most critical engine after lift off is required, the flight test examiner must give consideration to local atmospheric conditions, terrain, and type of aircraft used. However the failure of an engine shall not be simulated until attaining at least VSSE/VYSE and at an altitude not lower than 500 feet AGL.

(4) During simulated engine failures on multi-engine skill tests, the flight test examiner shall set zero thrust after the applicant has simulated feathering the propeller. The flight test examiner shall require the applicant to demonstrate at least one landing with a simulated-feathered propeller with the engine set to zero thrust.

(5) Throughout the flight portion of the skill test, the flight test examiner shall evaluate the applicant's use of visual scanning and collision avoidance procedures.

SATISFACTORY PERFORMANCE

19. Satisfactory performance to meet the requirements for licence issue is based on the applicant's ability to safely -

(a) Perform the tasks specified in the areas of operation for the licence or rating sought within the approved standards;

(b) Demonstrate mastery of the aircraft with the successful outcome of each task performed never seriously in doubt;

(c) Demonstrate satisfactory proficiency and competency within the approved standards;

(d) Demonstrate sound judgment; and

(e) Demonstrate single-pilot competence if the aircraft is type licenced for single-pilot operations.

UNSATISFACTORY PERFORMANCE

20. (1) The tolerances represent the performance expected in good flying conditions. If, in the judgment of the flight test examiner, the applicant does not meet the standards of performance of any task performed, the associated area of operation is failed and therefore, the skill test is failed.

(2) The flight test examiner or applicant may discontinue the test at any time when the failure of an area of operation makes the applicant ineligible for the licence or rating sought. **The test may be continued *ONLY* with the consent of the applicant.** If the test is discontinued, the applicant is entitled credit for only those areas of operation and their associated tasks that were satisfactorily performed. However, during the retest, and at the discretion of the flight test examiner, any task may be re-evaluated, including those previously passed.

(3) Typical areas of unsatisfactory performance and grounds for disqualification are -

(a) Any action or lack of action by the applicant that requires corrective intervention by the flight test examiner to maintain safe flight;

(b) Failure to use proper and effective visual scanning techniques to clear the area before and while performing manoeuvres;

(c) Consistently exceeding tolerances stated in the Objectives;

(d) Failure to take prompt corrective action when tolerances are exceeded.

(4) When a notice of disapproval is issued, the flight test examiner shall record the applicant's unsatisfactory performance in terms of the area of operation and specific task(s) not meeting the standard appropriate to the skill test conducted. The area(s) of operation/tasks not tested and the number of skill test failures shall also be recorded. If the applicant fails the skill test because of a special emphasis area, the Notice of Disapproval shall indicate the associated task. For example, AREA OF OPERATION VIII, MANOEUVERING DURING SLOW FLIGHT, failure to use proper collision avoidance procedures.

CREW RESOURCE MANAGEMENT (CRM)

21. CRM refers to the effective use of all available resources: human resources, hardware, and information. Human resources include all groups routinely working with the cockpit crew or pilot who are involved with decisions that are required to operate a flight safely. These groups include, but are not limited to flight operations officers/dispatchers, cabin crewmembers, maintenance personnel, air traffic controllers, and weather services. CRM is not a single task, but a set of competencies that must be evident in all tasks in this STS as applied to either single pilot operations or crew.

APPLICANT'S USE OF CHECKLISTS

22. Throughout the skill test, the applicant is evaluated on the use of an appropriate checklist. Proper use is dependent on the specific task being evaluated. The situation may be such that the use of the checklist, while accomplishing elements of an Objective, would be either unsafe or impractical, especially in a single-pilot operation. In this case, a review of the checklist after the elements have been accomplished would be appropriate. Division of attention and proper visual scanning should be considered when using a checklist.

USE OF DISTRACTIONS DURING SKILL TESTS

23. Numerous studies indicate that many accidents have occurred when the pilot has been distracted during critical phases of flight. To evaluate the applicant's ability to utilize proper control technique while dividing attention both inside and/or outside the cockpit, the flight test examiner shall cause realistic distractions during the flight portion of the skill test to evaluate the applicant's ability to divide attention while maintaining safe flight.

POSITIVE EXCHANGE OF FLIGHT CONTROLS

24. (1) During flight training, there must always be a clear understanding between students and flight instructors of who has control of the aircraft. Prior to flight, a briefing should be conducted that includes the procedure for the exchange of flight controls. A positive three-step process in the exchange of flight controls between pilots is a proven procedure and one that is strongly recommended.

(2) When the instructor wishes the student to take control of the aircraft, he or she will say, "You have the flight controls." The student acknowledges immediately by saying, "I have the flight controls." The flight instructor again says, "You have the flight controls." When control is returned to the instructor, follow the same procedure. A visual check is recommended to verify that the exchange has occurred. There should never by any doubt as to who is flying the aircraft.

METRIC CONVERSION INITIATIVE

25. To assist pilots in understanding and using the metric measurement system, the STSs refer to the metric equivalent of various altitudes throughout. The inclusion of meters is intended to familiarize pilots with its use. The metric altimeter is arranged in 10 meter increments; therefore, when converting from feet to meters, the exact conversion, being too exact for skill purposes, is rounded to the nearest 10 meter increment or even altitude as necessary.

APPENDIX 1
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APPENDIX 1: SINGLE-ENGINE LAND AND SINGLE-ENGINE SEA

ADDITIONAL RATING TASK TABLES

A. **Aeroplane Single-Engine Land**

AREAS OF OPERATION	ASES	AMEL	AMES	Glider	Balloon	Airship
I	F,G	F,G	F,G	F,G	F,G	F,G
II	D	NONE	D	A,B,C,D,F	A,B,C,D,F	A,B,C,D,F
III	C	NONE	C	B,C	B,C	B,C
IV	A,B,C, D,E,F	A,B,C, D,E,F	A,B,C, D,E,F	A,B,C,D, E,F,K,L	A,B,C,D, E,F,K,L	A,B,C,D, E,F,K,L
V	NONE	NONE	NONE	ALL	ALL	ALL
VI	NONE	NONE	NONE	ALL	ALL	ALL
VII	NONE	NONE	NONE	ALL	ALL	NONE
VIII	NONE	NONE	NONE	ALL	ALL	ALL
IX	NONE	NONE	NONE	ALL	ALL	ALL
X	A,B	A,B	A,B	ALL	ALL	ALL
XI	NONE	NONE	NONE	ALL	ALL	ALL
XII	A	NONE	A	A	A	A

B. **Aeroplane Single-Engine Sea**

AREAS OF OPERATION	ASEL	AMEL	AMES	Glider	Balloon	Airship
I	F,G,H,I	F,G,H,I	F,G	F,G,H,I	F,G,H,I	F,G,H,I
II	E	E	E	A,B,C,E,F	A,B,C,E,F	A,B,C,E,F
III	C	C	NONE	B,C	B,C	B,C
IV	A,B,E,F,G,H,I,J	A,B,E,F,G,H,I,J	A,B,E,F,G,H,I,J	A,B,E,F,G,H,I,J,K,L	A,B,E,F,G,H,I,J,K,L	A,B,E,F,G,H,I,J,K,L
V	NONE	NONE	NONE	ALL	ALL	ALL
VI	NONE	NONE	NONE	ALL	ALL	ALL
VII	NONE	NONE	NONE	ALL	ALL	NONE
VIII	NONE	NONE	NONE	ALL	ALL	ALL
IX	NONE	NONE	NONE	ALL	ALL	ALL
X	A,B	A,B	A,B	ALL	ALL	ALL
XI	NONE	NONE	NONE	ALL	ALL	ALL
XII	B,C,D	B,C,D	NONE	B,C,D	B,C,D	B,C,D

APPLICANT'S SKILL TEST CHECKLIST: APPOINTMENT WITH FLIGHT TEST EXAMINER:

FLIGHT TEST EXAMINER'S NAME: _____

LOCATION: _____

DATE/TIME: _____

I. ACCEPTABLE AIRCRAFT

- ☐ Aircraft Documents:
  - Airworthiness Licence
  - Registration Licence
  - Operating Limitations
- ☐ Aircraft Maintenance Records:
  - Logbook Record of Airworthiness Inspections and AD Compliance
- ☐ Pilot's Operating Handbook, Approved Aeroplane Flight Manual

II. PERSONAL EQUIPMENT

- ☐ View-Limiting Device
- ☐ Current Aeronautical Charts
- ☐ Computer and Plotter
- ☐ Flight Plan Form
- ☐ Flight Logs
- ☐ Current and Appropriate Flight Information Publications

III. PERSONAL RECORDS

- ☐ Identification-Photo/Signature ID
- ☐ Pilot Licence Currently Held
- ☐ Current and Appropriate Medical Certificate
- ☐ Completed TTCAA Form PEL002, Application For Flight Crew Licence, Rating, Authorization or Validation Certificate with authorized instructor's Signature (If applicable)
- ☐ Original Aviation Knowledge Test Report
- ☐ Pilot Logbook or Approved Training Organization (ATO) document containing an authorized instructor's endorsement certifying the applicant is prepared for the required skill test.
- ☐ TTCAA Form PEL004, Notice of Disapproval (if applicable)
- ☐ Examiner's Fee (if applicable)

FLIGHT TEST EXAMINER'S SKILL TEST CHECKLIST: AEROPLANE SINGLE-ENGINE LAND AND AEROPLANE SINGLE-ENGINE SEA

FLIGHT TEST EXAMINER'S NAME: _____

LOCATION: _____

DATE/TIME: _____

I. PREFLIGHT PREPARATION

- ☐ A. Licences and Documents (ASEL and ASES)
- ☐ B. Airworthiness Requirements (ASEL and ASES)
- ☐ C. Weather Information (ASEL and ASES)
- ☐ D. Cross-Country Flight Planning (ASEL and ASES)
- ☐ E. National Airspace System (ASEL and ASES)
- ☐ F. Performance and Limitations (ASEL and ASES)
- ☐ G. Operation of Systems (ASEL and ASES)
- ☐ H. Water and Seaplane Characteristics (ASES)
- ☐ I. Seaplane Bases, Maritime Rules, and Aids to Marine Navigation (ASES)
- ☐ J. Aeromedical Factors (ASEL and ASES)

II. PREFLIGHT PROCEDURES

- ☐ A. Preflight Inspection (ASEL and ASES)
- ☐ B. Cockpit Management (ASEL and ASES)
- ☐ C. Engine Starting (ASEL and ASES)
- ☐ D. Taxiing (ASEL)
- ☐ E. Taxiing and Sailing (ASES)
- ☐ F. Before Takeoff Check (ASEL and ASES)

III. AERODROME AND SEAPLANE BASE OPERATIONS

- ☐ A. Radio Communications and ATS Light Signals (ASEL and ASES)
- ☐ B. Traffic Patterns/Circuits (ASEL and ASES)
- ☐ C. Aerodrome/Seaplane Base, Runway, and Taxiway Signs, Markings, and Lighting (ASEL and ASES)

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VIII. SLOW FLIGHT AND STALLS

- ☐ A. Manoeuvring During Slow Flight (ASEL and ASES)
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- ☐ C. Power-On Stalls (ASEL and ASES)
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- ☐ B. Constant Airspeed Climbs (ASEL and ASES)
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- ☐ D. Turns to Headings (ASEL and ASES)
- ☐ E. Recovery from Unusual Flight Attitudes (ASEL and ASES)
- ☐ F. Radio Communications, Navigation Systems/Facilities, and Radar Services (ASEL and ASES)

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- ☐ A. Emergency Approach and Landing (Simulated) (ASEL and ASES)
- ☐ B. Systems and Equipment Malfunctions (ASEL and ASES)
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- ☐ Night Preparation (ASEL and ASES)

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- ☐ A. After Landing, Parking, and Securing (ASEL and ASES)
- ☐ B. Anchoring (ASES)
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- ☐ D. Ramping/Beaching (ASES)

I. AREA OF OPERATION: PREFLIGHT PREPARATION

NOTE: The flight test examiner shall develop a scenario based on real time weather to evaluate tasks C and D.

A. TASK: LICENCES AND DOCUMENTS (ASEL and ASES)

REFERENCES: TTCAR No.1, No. 2 and No.5; POH/AFM.

Objective: To determine that the applicant exhibits knowledge of the elements related to licences and documents by:

1. Explaining-
   (a) Private pilot licence privileges, limitations, and recent flight experience requirements.
   (b) Medical licence class and duration.
   (c) Pilot logbook or flight records.

2. Locating and explaining-
   (a) Airworthiness and registration licences.
   (b) Operating limitations, placards, instrument markings, and POH/AFM.
   (c) Mass and balance data and equipment list.

B. TASK: AIRWORTHINESS REQUIREMENTS (ASEL and ASES)

REFERENCES: TTCAR No.1, No.2 and No.5

Objective: To determine that the applicant exhibits knowledge of the elements related to airworthiness requirements by:

1. Explaining-
   (a) Required instruments and equipment for day/night VFR.
   (b) Procedures and limitations for determining airworthiness of the aeroplane with inoperative instruments and equipment with and without an MEL.
   (c) Requirements and procedures for obtaining a special flight permit.

2. Locating and explaining-
   (a) Airworthiness directives.
   (b) Compliance records.
   (c) Maintenance/inspection requirements.
   (d) Appropriate record keeping.

C. TASK: WEATHER INFORMATION (ASEL and ASES)

REFERENCES: TTCAR No.1, No.2

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to weather information by analyzing weather reports, charts, and forecasts from various sources with emphasis on-

(a) METAR, TAF, and GAMET.
(b) Surface analysis chart.
(c) Radar summary chart.
(d) Winds and temperature aloft chart.
(e) Significant weather prognostic charts.
(f) Convective outlook chart.
(g) Automated Aviation Weather Reports and Terminal Information Service (If Available)

2. Makes a competent "go/no-go" decision based on available weather information.

D. TASK: CROSS-COUNTRY FLIGHT PLANNING (ASEL and ASES)

REFERENCES: TTCAR No.1

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to cross-country flight planning by presenting and explaining a pre-planned VFR cross- country flight, as previously assigned by the flight test examiner. On the day of the skill test, the final flight plan shall be to the first fuel stop, based on maximum allowable passengers, baggage, and/or cargo loads using real-time weather.
2. Uses appropriate and current aeronautical charts.
3. Properly identifies airspace, obstructions, and terrain features.
4. Selects easily identifiable en route checkpoints.
5. Selects most favourable altitudes considering weather conditions and equipment capabilities.
6. Computes headings, flight time, and fuel requirements.
7. Selects appropriate navigation system/facilities and communication frequencies.
8. Applies pertinent information from NOTAMs and other flight publications.
9. Completes a navigation log and simulates filing a VFR flight plan.

E. TASK: NATIONAL AIRSPACE SYSTEM (ASEL and ASES)

REFERENCES: TTCAR No.1, No.2, Navigation Charts.

Objective: To determine that the applicant exhibits knowledge of the elements related to the National Airspace System by explaining:

1. Basic VFR weather minimums-for all classes of airspace.
2. Airspace classes-their operating rules, pilot certification, and aeroplane equipment requirements for the following-
   Class A.
   Class B.
   Class C.
   Class D.
   Class E.
   Class G.
3. Special use and other airspace areas.

F. TASK: PERFORMANCE AND LIMITATIONS (ASEL and ASES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to performance and limitations by explaining the use of charts, tables, and data to determine performance and the adverse effects of exceeding limitations.
2. Computes mass and balance. Determines the computed mass and centre of gravity is within the aeroplane's operating limitations and if the mass and centre of gravity will remain within limits during all phases of flight.
3. Demonstrates use of the appropriate performance charts, tables, and data.
4. Describes the effects of atmospheric conditions on the aeroplane's performance.

G. TASK: OPERATION OF SYSTEMS (ASEL and ASES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant exhibits knowledge of the elements related to the operation of systems on the aeroplane provided for the flight test by explaining at least three (3) of the following systems.

1. Primary Flight Controls And Trim.
2. Flaps, Leading Edge Devices, And Spoilers.
3. Water Rudders (ASES).
4. Powerplant and Propeller.
5. Landing Gear.
6. Fuel, Oil, and Hydraulic.
7. Electrical.
8. Avionics
9. Pitot-Static Vacuum/Pressure and Associated Flight Instruments.
10. Environmental.
11. De-icing and Anti-Icing.

H. TASK: WATER AND SEAPLANE CHARACTERISTICS (ASES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant exhibits knowledge of the elements related to water and seaplane characteristics by explaining:

1. The characteristics of a water surface as affected by features, such as-
   (a) Size and Location
   (b) Protected and Unprotected Areas.
   (c) Surface Wind.
   (d) Direction and Strength of Water Current.

(e) Floating and Partially Submerged Debris.
(f) Sandbars, Islands, and Shoals.
(g) Vessel Traffic and Wakes.
(h) Other Features Peculiar to the Area.

2. Float and hull construction, and their effect on seaplane performance.

3. Causes of porpoising and skipping, and the pilot action required to prevent or correct these occurrences.

I. TASK: SEAPLANE BASES, MARITIME RULES, AND AIDS TO MARINE NAVIGATION (ASES)

REFERENCES: Flight Information Publications, Marine Navigation Publications And Regulations

Objective: To determine that the applicant exhibits knowledge of the elements related to seaplane bases, maritime rules, and aids to marine navigation by explaining:

1. How to locate and identify seaplane bases on charts or in directories.

2. Operating restrictions at various bases.

3. Right-of-way, steering, and sailing rules pertinent to seaplane operation.

4. Marine navigation aids such as buoys, beacons, lights, and sound signals.

J. TASK: AEROMEDICAL FACTORS (ASEL and ASES)

REFERENCES: Aeromedical Publications

Objective: To determine that the applicant exhibits knowledge of the elements related to aeromedical factors by explaining:

1. The symptoms, causes, effects, and corrective actions of at least three (3) of the following-
   (a) Hypoxia.
   (b) Hyperventilation.
   (c) Middle Ear and Sinus Problems.
   (d) Spatial Disorientation.
   (e) Motion Sickness.
   (f) Carbon Monoxide Poisoning.
   (g) Stress and Fatigue.
   (h) Dehydration.

2. The effects of alcohol, drugs, and over-the-counter medications.

3. The effects of excesses nitrogen during scuba dives upon a pilot or passenger in flight.

II. AREA OF OPERATION: PREFLIGHT PROCEDURES

REFERENCES: POH/AFM.

A. TASK: PREFLIGHT INSPECTION (ASEL and ASES)

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to preflight inspection. This shall include which items must be inspected, the reasons for checking each item, and how to detect possible defects.
2. Inspects the aeroplane with reference to an appropriate checklist.
3. Verifies the aeroplane is in condition for safe flight.

B. TASK: COCKPIT MANAGEMENT (ASEL and ASES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to cockpit management procedures.
2. Ensures all loose items in the cockpit and cabin are secured.
3. Organizes material and equipment in an efficient manner so they are readily available.
4. Briefs occupants on the use of safety belts, shoulder harnesses, doors, and emergency procedures.

C. TASK: ENGINE STARTING (ASEL and ASES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to recommended engine starting procedures. This shall include the use of an external power source, hand propping safety, and starting under various atmospheric conditions.
2. Positions the aeroplane properly considering structures, surface conditions, other aircraft, and the safety of nearby persons and property.
3. Utilizes the appropriate checklist for starting procedure.

D. TASK: TAXIING (ASEL)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to safe taxi procedures.
2. Performs a brake check immediately after the aeroplane begins moving.
3. Positions the flight controls properly for the existing wind conditions.
4. Controls direction and speed without excessive use of brakes.
5. Complies with aerodrome/taxiway markings, signals, ATS clearances, and instructions.
6. Taxies so as to avoid other aircraft and hazards.

E. TASK: TAXIING AND SAILING (ASES)

REFERENCES: MARINE NAVIGATION RULES, POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to water taxi and sailing procedures.
2. Positions the flight controls properly for the existing wind conditions.
3. Plans and follows the most favourable course while taxi or sailing considering wind, water current, water conditions and maritime regulations.
4. Uses the appropriate idle, plow, or step taxi technique.
5. Uses flight controls, flaps, doors, water rudder, and power correctly so as to follow the desired course while sailing.
6. Prevents and corrects for porpoising and skipping.
7. Avoids other aircraft, vessels, and hazards.
8. Complies with seaplane base signs, signals, and clearances.

F. TASK: BEFORE TAKEOFF CHECK (ASEL and ASES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to the before takeoff check. This shall include the reasons for checking each item and how to detect malfunctions.
2. Positions the aeroplane properly considering other aircraft/vessels, wind and surface conditions.
3. Divides attention inside and outside the cockpit.
4. Ensures that engine temperature and pressure are suitable for run- up and takeoff.
5. Accomplishes the before takeoff checklist and ensures the aeroplane is in safe operating condition.
6. Reviews takeoff performance airspeeds, takeoff distances, departure, and emergency procedures.
7. Avoids runway incursions and/or ensures no conflict with traffic prior to taxiing into takeoff position.

III. AREA OF OPERATION: AERODROME AND SEAPLANE BASE OPERATIONS

A. TASK: RADIO COMMUNICATIONS AND ATS LIGHT SIGNALS (ASEL and ASES)

REFERENCES: ***TTCAR No.1***

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to radio communications and ATS light signals.
2. Selects appropriate frequencies.
3. Transmits using recommended phraseology.
4. Acknowledges radio communications and complies with instructions.

B. TASK: TRAFFIC PATTERNS (ASEL and ASES)

REFERENCES: ***TTCAR No.1****, National Aviation Information Publications*

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to traffic patterns. This shall include procedures at aerodromes with and without operating control towers, prevention of runway incursions, collision avoidance, wake turbulence avoidance, and wind shear.
2. Complies with proper traffic pattern procedures.
3. Maintains proper spacing from other aircraft.
4. Corrects for wind drift to maintain the proper ground track.
5. Maintains orientation with the runway/landing area in use.
6. Maintains traffic pattern altitude, ±100 feet (30 meters), and the appropriate airspeed, ±10 knots.

C. TASK: AERODROME/SEAPLANE BASE, RUNWAY, AND TAXIWAY SIGNS, MARKINGS, AND LIGHTING (ASEL and ASES)

REFERENCES: TTCAR No.2, National Aviation Information Publications

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to aerodrome/seaplane base, runway, and taxiway operations with emphasis on runway incursion avoidance.
2. Properly identifies and interprets aerodrome/seaplane base, runway, and taxiway signs, markings, and lighting.

IV. AREA OF OPERATION: TAKEOFFS, LANDINGS, AND GO AROUNDS

A. TASK: NORMAL AND CROSSWIND TAKEOFF AND CLIMB (ASEL and ASES)

Note: *If a crosswind condition does not exist, the applicant's knowledge of crosswind elements shall be evaluated through oral testing.*

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to a normal and crosswind takeoff, climb operations, and rejected takeoff procedures.
2. Positions the flight controls for the existing wind conditions.
3. Clears the area; taxies into the takeoff position and aligns the aeroplane on the runway centre/takeoff path.
4. Retracts the water rudders, as appropriate, (ASES) and advances the throttle smoothly to takeoff power.
5. Establishes and maintains the most efficient planing/lift-off attitude and corrects for porpoising and skipping (ASES).
6. Lifts off at the recommended airspeed and accelerates to Vy.
7. Establishes a pitch attitude that will maintain Vy +10/-5 knots.
8. Retracts the landing gear, if appropriate, and flaps after a positive rate of climb is established.
9. Maintains takeoff power and Vy +10/-5 knots to a safe manoeuvring altitude.
10. Maintains directional control and proper wind-drift correction throughout the takeoff and climb.
11. Complies with noise abatement procedures.
12. Completes the appropriate checklist.

B. TASK: NORMAL AND CROSSWIND APPROACH AND LANDING (ASEL and ASES)

NOTE: If a crosswind condition does not exist, the applicant's knowledge of crosswind elements shall be evaluated through oral testing.

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to a normal and crosswind approach and landing.
2. Adequately surveys the intended landing area (ASES).
3. Considers the wind conditions, landing surface, obstructions, and selects a suitable touchdown point.
4. Establishes the recommended approach and landing configuration and airspeed, and adjusts pitch attitude and power as required.
5. Maintains a stabilized approach and recommended airspeed, or in its absence, not more than 1.3 Vso, +10/-5 knots, with wind gust factor applied.
6. Makes smooth, timely, and correct control application during the roundout and touchdown.
7. Contacts the water at the proper pitch attitude (ASES).
8. Touches down smoothly at approximate stalling speed (ASEL).
9. Touches down at or within 400 feet (120 meters) beyond a specified point, with no drift, and with the aeroplane's longitudinal axis aligned with and over the runway centre/landing path.
10. Maintains crosswind correction and directional control throughout the approach and landing sequence.
11. Completes the appropriate checklist.

C. TASK: SOFT-FIELD TAKEOFF AND CLIMB (ASEL)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to a soft-field takeoff and climb.
2. Positions the flight controls for existing wind conditions and to maximize lift as quickly as possible.
3. Clears the area; taxies onto the takeoff surface at a speed consistent with safety without stopping while advancing the throttle smoothly to takeoff power.
4. Establishes and maintains a pitch attitude that will transfer the mass of the aeroplane from the wheels to the wings as rapidly as possible.
5. Lifts off at the lowest possible airspeed and remains in ground effect while accelerating to Vx or Vy, as appropriate.
6. Establishes a pitch attitude for Vx or Vy, as appropriate, and maintains selected airspeed +10/-5 knots, during the climb.
7. Retracts the landing gear, if appropriate, and flaps after clear of any obstacles or as recommended by the manufacturer.
8. Maintains takeoff power and Vx or Vy +10/-5 knots to a safe manoeuvring altitude.
9. Maintains directional control and proper wind-drift correction throughout the takeoff and climb.
10. Completes the appropriate checklist.

D. TASK: SOFT-FIELD APPROACH AND LANDING (ASEL)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to a soft-field approach and landing.
2. Considers the wind conditions, landing surface and obstructions, and selects the most suitable touchdown area.
3. Establishes the recommended approach and landing configuration, and airspeed; adjusts pitch attitude and power as required.
4. Maintains a stabilized approach and recommended airspeed, or in its absence not more than 1.3 Vso, +10/-5 knots, with wind gust factor applied.
5. Makes smooth, timely, and correct control application during the roundout and touchdown.
6. Touches down softly with no drift, and with the aeroplane's longitudinal axis aligned with the runway/landing path.
7. Maintains crosswind correction and directional control throughout the approach and landing sequence.
8. Maintains proper position of the flight controls and sufficient speed to taxi on the soft surface.
9. Completes the appropriate checklist.

E. TASK: SHORT-FIELD TAKEOFF (CONFINED AREA-ASES) AND MAXIMUM PERFORMANCE CLIMB (ASEL and ASES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to a short-field (confined area ASES) takeoff and maximum performance climb.
2. Positions the flight controls for the existing wind conditions; sets the flaps as recommended.
3. Clears the area; taxies into takeoff position utilizing maximum available takeoff area and aligns the aeroplane on the runway center/takeoff path.
4. Selects an appropriate take off path for the existing conditions (ASES).
5. Applies brakes (if appropriate), while advancing the throttle smoothly to takeoff power.
6. Establishes and maintains the most efficient planing/lift-off attitude and corrects for porpoising and skipping (ASES).
7. Lifts off at the recommended airspeed, and accelerates to the recommended obstacle clearance airspeed or Vx.
8. Establishes a pitch attitude that will maintain the recommended obstacle clearance airspeed, or Vx, +10/-5 knots, until the obstacle is cleared, or until the aeroplane is 50 feet (20 meters) above the surface.
9. After clearing the obstacle, establishes the pitch attitude for Vy, accelerates to Vy, and maintains Vy, +10/-5 knots, during the climb.
10. Retracts the landing gear, if appropriate, and flaps after clear of any obstacles or as recommended by manufacturer.
11. Maintains takeoff power and Vy +10/-5 to a safe manoeuvring altitude.
12. Maintains directional control and proper wind-drift correction throughout the takeoff and climb.
13. Completes the appropriate checklist.

F. TASK: SHORT-FIELD APPROACH (CONFINED AREA-ASES) AND LANDING (ASEL and ASES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to a short-field (confined area ASES) approach and landing.
2. Adequately surveys the intended landing area (ASES).
3. Considers the wind conditions, landing surface, obstructions, and selects the most suitable touchdown point.
4. Establishes the recommended approach and landing configuration and airspeed; adjusts pitch attitude and power as required.
5. Maintains a stabilized approach and recommended approach airspeed, or in its absence not more than 1.3 Vso, +10/-5 knots, with wind gust factor applied.
6. Makes smooth, timely, and correct control application during the roundout and touchdown.
7. Selects the proper landing path, contacts the water at the minimum safe airspeed with the proper pitch attitude for the surface conditions (ASES).
8. Touches down smoothly at minimum control airspeed (ASEL).
9. Touches down at or within 200 feet (60 meters) beyond a specified point, with no side drift, minimum float and with the aeroplane's longitudinal axis aligned with and over the runway centre/landing path.
10. Maintains crosswind correction and directional control throughout the approach and landing sequence.
11. Applies brakes, (ASEL) or elevator control (ASES), as necessary, to stop in the shortest distance consistent with safety.
12. Completes the appropriate checklist.

G. TASK: GLASSY WATER TAKEOFF AND CLIMB (ASES)

NOTE: If a glassy water condition does not exist, the applicant shall be evaluated by simulating the task.

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to glassy water takeoff and climb.
2. Positions the flight controls and flaps for the existing conditions.
3. Clears the area; selects an appropriate takeoff path considering surface hazards and/or vessels and surface conditions.
4. Retracts the water rudders as appropriate; advances the throttle smoothly to takeoff power.
5. Establishes and maintains an appropriate planing attitude, directional control, and corrects for porpoising, skipping, and increases in water drag.
6. Utilizes appropriate techniques to lift seaplane from the water considering surface conditions.
7. Establishes proper attitude/airspeed, and accelerates to Vy, +10/-5 knots during the climb.
8. Retracts the landing gear, if appropriate, and flaps after a positive rate of climb is established.
9. Maintains takeoff power Vy +10/-5 to a safe manoeuvring altitude.
10. Maintains directional control and proper wind-drift correction throughout takeoff and climb.
11. Completes the appropriate checklist.

H. TASK: GLASSY WATER APPROACH AND LANDING (ASES)

NOTE: If a glassy water condition does not exist, the applicant shall be evaluated by simulating the task.

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to glassy water approach and landing.
2. Adequately surveys the intended landing area.
3. Considers the wind conditions, water depth, hazards, surrounding terrain, and other watercraft.
4. Selects the most suitable approach path, and touchdown area.
5. Establishes the recommended approach and landing configuration and airspeed, and adjusts pitch attitude and power as required.
6. Maintains a stabilized approach and the recommended approach airspeed, +10/-5 knots and maintains a touchdown pitch attitude and descent rate from the last altitude reference until touchdown.
7. Makes smooth, timely, and correct power and control adjustments to maintain proper pitch attitude and rate of descent to touchdown.
8. Contacts the water in the proper pitch attitude, and slows to idle taxi speed.
9. Maintains crosswind correction and directional control throughout the approach and landing sequence.
10. Completes the appropriate checklist.

I. TASK: ROUGH WATER TAKEOFF AND CLIMB (ASES)

NOTE: If a rough water condition does not exist, the applicant shall be evaluated by simulating the task.

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to rough water takeoff and climb.
2. Positions the flight controls and flaps for the existing conditions.
3. Clears the area; selects an appropriate takeoff path considering wind, swells surface hazards and/or vessels.
4. Retracts the water rudders as appropriate; advances the throttle smoothly to takeoff power.
5. Establishes and maintains an appropriate planing attitude, directional control, and corrects for porpoising, skipping, or excessive bouncing.
6. Lifts off at minimum airspeed and accelerates to Vy, +10/-5 knots before leaving ground effect.
7. Retracts the landing gear, if appropriate, and flaps after a positive rate of climb is established.
8. Maintains takeoff power Vy +10/-5 to a safe manoeuvring altitude.
9. Maintains directional control and proper wind-drift correction throughout takeoff and climb.
10. Completes the appropriate checklist.

J. TASK: ROUGH WATER APPROACH AND LANDING (ASES)

NOTE: If a rough water condition does not exist, the applicant shall be evaluated by simulating the task.

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to rough water approach and landing.
2. Adequately surveys the intended landing area.
3. Considers the wind conditions, water, depth, hazards, surrounding terrain, and other watercraft.
4. Selects the most suitable approach path, and touchdown area.
5. Establishes the recommended approach and landing configuration and airspeed, and adjusts pitch attitude and power as required.
6. Maintains a stabilized approach and the recommended approach airspeed, or in its absence not more than 1.3 Vso +10/-5 knots with wind gust factor applied.
7. Makes smooth, timely, and correct power and control application during the roundout and touch down.
8. Contacts the water in the proper pitch attitude, and at the proper airspeed, considering the type of rough water.
9. Maintains crosswind correction and directional control throughout the approach and landing sequence.
10. Completes the appropriate checklist.

K. TASK: FORWARD SLIP TO A LANDING (ASEL and ASES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to forward slip to a landing.
2. Considers the wind conditions, landing surface and obstructions, and selects the most suitable touchdown point.
3. Establishes the slipping attitude at the point from which a landing can be made using the recommended approach and landing configuration and airspeed; adjusts pitch attitude and power as required.
4. Maintains a ground track aligned with the runway center/landing path and an airspeed, which results in minimum float during the roundout.
5. Makes smooth, timely, and correct control application during the recovery from the slip, the roundout, and the touchdown.
6. Touches down smoothly at the approximate stalling speed, at or within 400 feet (120 meters) beyond a specified point, with no side drift, and with the aeroplane's longitudinal axis aligned with and over the runway center/landing path.
7. Maintains crosswind correction and directional control throughout the approach and landing sequence.
8. Completes the appropriate checklist.

L. TASK: GO-AROUND/REJECTED LANDING (ASEL and ASES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to a go-around/rejected landing.
2. Makes a timely decision to discontinue the approach to landing.
3. Applies takeoff power immediately and transitions to climb pitch attitude for Vy, and maintains Vy +10/-5 knots.
4. Retracts the flaps as appropriate.
5. Retracts the landing gear, if appropriate, after a positive rate of climb is established.
6. Manoeuvres to the side of the runway/landing area to clear and avoid conflicting traffic.
7. Maintains takeoff power Vy +10/-5 to a safe manoeuvring altitude.
8. Maintains directional control and proper wind-drift correction throughout the Climb.
9. Completes the appropriate checklist.

V. AREA OF OPERATION: PERFORMANCE MANOEUVRES

A. TASK: STEEP TURNS (ASEL and ASES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to steep turns.
2. Establishes the manufacturer's recommended airspeed or if one is not stated, a safe airspeed not to exceed Va.
3. Rolls into a coordinated 360° turn; maintains a 45° bank.
4. Performs the task in the opposite direction, as specified by the flight test examiner.
5. Divides attention between aeroplane control and orientation.
6. Maintains the entry altitude, ±100 feet (30 meters), airspeed, ±10 knots, bank, ±5°; and rolls out on the entry heading, ±10°.

VI. AREA OF OPERATION: GROUND REFERENCE MANOEUVRES

NOTE: The flight test examiner shall select at least one task.

A. TASK: RECTANGULAR COURSE (ASEL and ASES)

REFERENCES: TTCAA Flight Training Handbook

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to a rectangular course.
2. Selects a suitable reference area.
3. Plans the manoeuvre so as to enter a left or right pattern, 600 to 1,000 feet AGL (180 to 300 meters) at an appropriate distance from the selected reference area, 45° to the downwind leg.
4. Applies adequate wind-drift correction during straight-and-turning flight to maintain a constant ground track around the rectangular reference area.
5. Divides attention between aeroplane control and the ground track while maintaining coordinated flight.
6. Maintains altitude, ±100 feet (30 meters); maintains airspeed, ±10 knots.

B. TASK: S-TURNS (ASEL and ASES)

REFERENCES: TTCAA Flight Training Handbook

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to S-turns.
2. Selects a suitable ground reference line.
3. Plans the manoeuvre so as to enter at 600 to 1,000 feet (180 to 300 meters) AGL, perpendicular to the selected reference line.
4. Applies adequate wind-drift correction to track a constant radius turn on each side of the selected reference line.
5. Reverses the direction of turn directly over the selected reference line.
6. Divides attention between aeroplane control and the ground track while maintaining coordinated flight.
7. Maintains altitude, ±100 feet (30 meters); maintains airspeed, ±10 knots.

C. TASK: TURNS AROUND A POINT (ASEL and ASES)

REFERENCES: TTCAA Flight Training Handbook

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to turns around a point.
2. Selects a suitable ground reference point.
3. Plans the manoeuvre so as to enter left or right at 600 to 1,000 feet (180 to 300 meters) AGL, at an appropriate distance from the reference point.
4. Applies adequate wind-drift correction to track a constant radius turn around the selected reference point.
5. Divides attention between aeroplane control and the ground track while maintaining coordinated flight.
6. Maintains altitude, ±100 feet (30 meters); maintains airspeed, ±10 knots.

VII. AREA OF OPERATION: NAVIGATION

A. TASK: PILOTAGE AND DEAD RECKONING (ASEL and ASES)

REFERENCES: TTCAA Flight Training Handbook

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to pilotage and dead reckoning.
2. Follows the preplanned course by reference to landmarks.
3. Identifies landmarks by relating surface features to chart symbols.
4. Navigates by means of pre-computed headings, groundspeeds, and elapsed time.
5. Corrects for and records the differences between preflight groundspeed and heading calculations and those determined en route.
6. Verifies the aeroplane's position within three (3) nautical miles of the flight-planned route.
7. Arrives at the en route checkpoints within five (5) minutes of the initial or revised ETA and provides a destination estimate.
8. Maintains the appropriate altitude, ±200 feet (60 meters) and headings, ±15°.

B. TASK: NAVIGATION SYSTEMS AND RADAR SERVICES (ASEL and ASES)

REFERENCES: NAVIGATION EQUIPMENT OPERATION MANUALS.

REFERENCES: Navigation Equipment Operation Manuals, Flight Information Publications

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to navigation systems and radar services.
2. Demonstrates the ability to use an airborne electronic navigation system.
3. Locates the aeroplane's position using the navigation system.
4. Intercepts and tracks a given course, radial or bearing, as appropriate.
5. Recognizes and describes the indication of station passage, if appropriate.
6. Recognizes signal loss and takes appropriate action.
7. Uses proper communication procedures when utilizing radar services.
8. Maintains the appropriate altitude, ±200 feet (60 meters) and headings ±15°.

C. **TASK: DIVERSION (ASEL and ASES)**

REFERENCES: Flight Information Publications

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to diversion.
2. Selects an appropriate alternate aerodrome and route.
3. Makes an accurate estimate of heading, groundspeed, arrival time, and fuel consumption to the alternate aerodrome.
4. Maintains the appropriate altitude, ±200 feet (60 meters) and heading, ±15°.

D. **TASK: LOST PROCEDURES (ASEL and ASES)**

REFERENCES: Flight Information Publications

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to lost procedures.
2. Selects an appropriate course of action.
3. Maintains an appropriate heading and climbs, if necessary.
4. Identifies prominent landmarks.
5. Uses navigation systems/facilities and/or contacts an ATS facility for assistance, as appropriate.

VIII. AREA OF OPERATION: SLOW FLIGHT AND STALLS

A. TASK: MANOEUVRING DURING SLOW FLIGHT (ASEL and ASES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to manoeuvring during slow flight.
2. Selects an entry altitude that will allow the task to be completed no lower than 1,500 feet (460 meters) AGL.
3. Establishes and maintains an airspeed at which any further increase in angle of attack, increase in load factor, or reduction in power, would result in an immediate stall.
4. Accomplishes coordinated straight-and-level flight, turns, climbs, and descents with landing gear and flap configurations specified by the flight test examiner.
5. Divides attention between aeroplane control and orientation.
6. Maintains the specified altitude, ±100 feet (30 meters); specified heading, ±10°; airspeed, +10/-0 knots; and specified angle of bank, ±10°.

B. TASK: POWER-OFF STALLS (ASEL and ASES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to power-off stalls.
2. Selects an entry altitude that allows the task to be completed no lower than 1,500 feet (460 meters) AGL.
3. Establishes a stabilized descent in the approach or landing configuration, as specified by the flight test examiner.
4. Transitions smoothly from the approach or landing attitude to a pitch attitude that will induce a stall.
5. Maintains a specified heading, ±10°, in straight flight; maintains a specified angle of bank not to exceed 20°, ±10°; in turning flight, while inducing the stall.
6. Recognizes and recovers promptly after the stall occurs by simultaneously reducing the angle of attack, increasing power to maximum allowable, and levelling the wings to return to a straight- and-level flight attitude with a minimum loss of altitude appropriate for the aeroplane.
7. Retracts the flaps to the recommended setting; retracts the landing gear, if retractable, after a positive rate of climb is established.
8. Accelerates to Vx or Vy speed before the final flap retraction; returns to the altitude, heading, and airspeed specified by the flight test examiner.

C. **TASK: POWER-ON STALLS (ASEL and ASES)**

NOTE: In some high performance aeroplanes, the power setting may have to be reduced below the skill test standards guideline power setting to prevent excessively high pitch attitudes (greater than 30° nose up).

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to power-on stalls.
2. Selects an entry altitude that allows the task to be completed no lower than 1,500 feet (460 meters) AGL.
3. Establishes the takeoff or departure configuration. Sets power to no less than 65 percent available power.
4. Transitions smoothly from the takeoff or departure attitude to the pitch attitude that will induce a stall.
5. Maintains a specified heading, ±10°, in straight flight; maintains a specified angle of bank not to exceed 20°, ±10°, in turning flight, while inducing the stall.
6. Recognizes and recovers promptly after the stall occurs by simultaneously reducing the angle of attack, increasing power as appropriate, and leveling the wings to return to a straight-and-level flight attitude with a minimum loss of altitude appropriate for the aeroplane.
7. Retracts the flaps to the recommended setting; retracts the landing gear if retractable, after a positive rate of climb is established.
8. Accelerates to Vx or Vy speed before the final flap retraction; returns to the altitude, heading, and airspeed specified by the flight test examiner.

D. **TASK: SPIN AWARENESS (ASEL and ASES)**

REFERENCES: POH/AFM.

Objective: To determine that the applicant exhibits knowledge of the elements related to spin awareness by explaining:

1. Aerodynamic factors related to spins.
2. Flight situations where unintentional spins may occur.
3. Procedures for recovery from unintentional spins.

IX. AREA OF OPERATION: BASIC INSTRUMENT MANOEUVRES

NOTE: The flight test examiner shall select task E and at least two other tasks.

A. TASK: STRAIGHT-AND-LEVEL FLIGHT (ASEL and ASES)

REFERENCES: TTCAA Instrument Flight Training Handbook

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to attitude instrument flying during straight-and-level flight.
2. Maintains straight-and-level flight solely by reference to instruments using proper instrument cross-check and interpretation, and coordinated control application.
3. Maintains altitude, ±200 feet (60 meters); heading, ±20°; and airspeed, ±10 knots.

B. TASK: CONSTANT AIRSPEED CLIMBS (ASEL and ASES)

REFERENCES: TTCAA Instrument Flight Training Handbook

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to attitude instrument flying during constant airspeed climbs.
2. Establishes the climb configuration specified by the flight test examiner.
3. Transitions to the climb pitch attitude and power setting on an assigned heading using proper instrument cross-check and interpretation, and coordinated control application.
4. Demonstrates climbs solely by reference to instruments at a constant airspeed to specific altitudes in straight flight and turns.
5. Levels off at the assigned altitude and maintains that altitude, ±200 feet (60 meters); maintains heading, ±20°; maintains airspeed, ±10 knots.

C. TASK: CONSTANT AIRSPEED DESCENTS (ASEL and ASES)

REFERENCES: TTCAA Instrument Flight Training Handbook

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to attitude instrument flying during constant airspeed descents.
2. Establishes the descent configuration specified by the flight test examiner.
3. Transitions to the descent pitch attitude and power setting on an assigned heading using proper instrument cross-check and interpretation, and coordinated control application.
4. Demonstrates descents solely by reference to instruments at a constant airspeed to specific altitudes in straight flight and turns.
5. Levels off at the assigned altitude and maintains that altitude, ±200 feet (60 meters); maintains heading, ±20°; maintains airspeed, ±10 knots.

D. **TASK: TURNS TO HEADINGS (ASEL and ASES)**

REFERENCES: TTCAA Instrument Flight Training Handbook

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to attitude instrument flying during turns to headings.
2. Transitions to the level-turn attitude using proper instrument cross- check and interpretation, and coordinated control application.
3. Demonstrates turns to headings solely by reference to instruments; maintains altitude, ±200 feet (60 meters); maintains a standard rate turn and rolls out on the assigned heading, ± 10°; maintains airspeed, ±10 knots.

E. **TASK: RECOVERY FROM UNUSUAL FLIGHT ATTITUDES (ASEL and ASES)**

REFERENCES: TTCAA Instrument Flight Training Handbook

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to attitude instrument flying during unusual attitudes.
2. Recognizes unusual flight attitudes solely by reference to instruments; recovers promptly to a stabilized level flight attitude using proper instrument cross-check and interpretation and smooth, coordinated control application in the correct sequence.

F. **TASK: RADIO COMMUNICATIONS, NAVIGATION SYSTEMS/FACILITIES, AND RADAR SERVICES (ASEL and ASES)**

REFERENCES: TTCAA Instrument Flight Training Handbook

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to radio communications, navigation systems/facilities, and radar services available for use during flight solely by reference to instruments.
2. Selects the proper frequency and identifies the appropriate facility.
3. Follows verbal instructions and/or navigation systems/facilities for guidance.
4. Determines the minimum safe altitude.
5. Maintains altitude, ±200 feet (60 meters); maintains heading, ±20°; maintains airspeed, ±10 knots.

X. AREA OF OPERATION: EMERGENCY OPERATIONS

A. TASK: EMERGENCY APPROACH AND LANDING (SIMULATED) (ASEL and ASES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to emergency approach and landing procedures.
2. Analyzes the situation and selects an appropriate course of action.
3. Establishes and maintains the recommended best-glide airspeed, ±10 knots.
4. Selects a suitable landing area.
5. Plans and follows a flight pattern to the selected landing area considering altitude, wind, terrain, and obstructions.
6. Prepares for landing, or go-around, as specified by the flight test examiner.
7. Follows the appropriate checklist.

B. TASK: SYSTEMS AND EQUIPMENT MALFUNCTIONS (ASEL and ASES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to system and equipment malfunctions appropriate to the aeroplane provided for the skill test.
2. Analyzes the situation and takes appropriate action for simulated emergencies appropriate to the aeroplane provided for the skill test for at least three (3) of the following-
   (a) Partial or complete power loss.
   (b) Engine roughness or overheat.
   (c) Carburettor or induction icing.
   (d) Loss of oil pressure.
   (e) Fuel starvation.
   (f) Electrical malfunction.
   (g) Vacuum/pressure, and associated flight instruments malfunction.
   (h) Pitot/static.
   (i) Landing gear or flap malfunction.
   (j) Inoperative trim.
   (k) Inadvertent door or window opening.
   (l) structural icing.
   (m) Smoke/fire/engine compartment fire.
   (n) Any other emergency appropriate to the aeroplane.
3. Follows the appropriate checklist or procedure.

C. TASK: EMERGENCY EQUIPMENT AND SURVIVAL GEAR (ASEL and ASES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to emergency equipment and survival gear appropriate to the aeroplane and environment encountered during flight. Identifies appropriate equipment that should be aboard the aeroplane.

XI. AREA OF OPERATION: NIGHT OPERATIONS

A. TASK: NIGHT PREPARATION (ASEL and ASES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant exhibits knowledge of the elements related to night operations by explaining:

1. Physiological aspects of night flying as it relates to vision.
2. Lighting systems identifying aerodromes, runways, taxiways and obstructions, and pilot controlled lighting.
3. Aeroplane lighting systems.
4. Personal equipment essential for night flight.
5. Night orientation, navigation, and chart reading techniques.
6. Safety precautions and emergencies unique to night flying.

XII. AREA OF OPERATION: POSTFLIGHT PROCEDURES

NOTE: The flight test examiner shall select task A and for ASES applicants at least one other task.

A. TASK: AFTER LANDING, PARKING, AND SECURING (ASEL and ASES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to after landing, parking and securing procedures.
2. Maintains directional control after touchdown while decelerating to an appropriate speed.
3. Observes runway hold lines and other surface control markings and lighting.
4. Parks in an appropriate area, considering the safety of nearby persons and property.
5. Follows the appropriate procedure for engine shutdown.
6. Completes the appropriate checklist.
7. Conducts an appropriate postflight inspection and secures the aircraft.

B. TASK: ANCHORING (ASES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to anchoring.
2. Selects a suitable area for anchoring, considering seaplane movement, water depth, tide, wind, and weather changes.
3. Uses an adequate number of anchors and lines of sufficient strength and length to ensure the seaplane's security.

C. TASK: DOCKING AND MOORING (ASES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to docking and mooring.
2. Approaches the dock or mooring buoy in the proper direction considering speed, hazards, wind, and water current.
3. Ensures seaplane security.

D. TASK: RAMPING/BEACHING (ASES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to ramping/beaching.
2. Approaches the ramp/beach considering persons and property, in the proper attitude and direction, at a safe speed, considering water depth, tide, current and wind.
3. Ramps/beaches and secures the seaplane in a manner that will protect it from the harmful effect of wind, waves, and changes in water level.

APPENDIX 2
TABLE OF CONTENTS

Appendix 2: Aeroplane Multi-Engine Land and Multi-Engine Sea

ADDITIONAL RATING TASK TABLES

A. Aeroplane Multi-Engine Land

AREAS OF OPERATION	ASEL	ASES	AMES	Glider	Balloon	Airship
I	F,G,H	F,G,H	F,G	F,G,H	F,G,H	F,G,H
II	ALL	ALL	D	ALL	ALL	ALL
III	NONE	C	C	B,C	B,C	B,C
IV	A,B,C,D	A,B,C,D	A,B,C,D	A,B,C,D,K	A,B,C,D,K	A,B,C,D,K
V	ALL	ALL	NONE	ALL	ALL	ALL
VI	NONE	NONE	NONE	ALL	ALL	ALL
VII	NONE	NONE	NONE	ALL	ALL	NONE
VIII	ALL	ALL	NONE	ALL	ALL	ALL
IX	NONE	NONE	NONE	ALL	ALL	ALL
X	ALL	ALL	B,D,E	ALL	ALL	ALL
XI	ALL	ALL	NONE	ALL	ALL	ALL
XII	NONE	NONE	NONE	ALL	ALL	ALL
XIII	NONE	A	A	A	A	A

B. **Aeroplane Multi-Engine Sea**

AREAS OF OPERATION	AMEL	ASEL	ASES	Glider	Balloon	Airship
I	F,G,I,J	F,G,H,I,J	F,G,H	F,G,H,I,J	F,G,H,I,J	F,G,H,I,J
II	E	ALL	ALL	ALL	ALL	ALL
III	C	C	NONE	B,C	B,C	B,C
IV	A,B,C,D, E,F,G,H	A,B,C,D, E,F,G,H	A,B,C,D, E,F,G,H	ALL	ALL	ALL
V	NONE	ALL	ALL	ALL	ALL	ALL
VI	NONE	NONE	NONE	ALL	ALL	ALL
VII	NONE	NONE	NONE	ALL	ALL	NONE
VIII	NONE	ALL	ALL	ALL	ALL	ALL
IX	NONE	NONE	NONE	ALL	ALL	ALL
X	ALL	ALL	ALL	ALL	ALL	ALL
XI	NONE	ALL	ALL	ALL	ALL	ALL
XII	NONE	NONE	NONE	ALL	ALL	ALL
XIII	B,C,D	B,C,D	NONE	ALL	ALL	ALL

APPLICANT'S SKILL TEST CHECKLIST

APPOINTMENT WITH FLIGHT TEST EXAMINER:

FLIGHT TEST EXAMINER'S NAME: _____

LOCATION: _____

DATE/TIME: _____

I. Acceptable Aircraft

- ☐ Aircraft Documents:
  - Airworthiness Licence
  - Registration Licence
  - Operating Limitations
- ☐ Aircraft Maintenance Records:
  - Logbook Record Of Airworthiness Inspections And Ad Compliance
- ☐ Pilot's Operating Handbook, TTCAA-Approved Aeroplane Flight Manual

II. Personal Equipment

- ☐ View-Limiting Device
- ☐ Current Aeronautical Charts
- ☐ Computer And Plotter
- ☐ Flight Plan Form
- ☐ Flight Logs
- ☐ Current Flight Information Publications

III. Personal Records

- ☐ Identification - Photo/Signature Id
- ☐ Pilot Licence
- ☐ Current Medical Licence
- ☐ Completed Airman Licence And/Or Rating Application With Instructor's Signature (If Applicable)
- ☐ Original Aviation Knowledge Test Report
- ☐ Pilot Logbook Or ATO Document With Appropriate Instructor Endorsements
- ☐ TTCAA Notice Of Disapproval (If Applicable)
- ☐ Examiner's Fee (If Applicable)

FLIGHT TEST EXAMINER'S SKILL TEST CHECKLIST

AEROPLANE MULTI-ENGINE LAND AND MULTI-ENGINE SEA

APPLICANT'S NAME: _____

LOCATION: _____

DATE/TIME: _____

I. PREFLIGHT PREPARATION

- ☐ A. Licences and Documents (AMEL and AMES)
- ☐ B. Airworthiness Requirements (AMEL and AMES)
- ☐ C. Weather Information (AMEL and AMES)
- ☐ D. Cross-Country Flight Planning (AMEL and AMES)
- ☐ E. National Airspace System (AMEL and AMES)
- ☐ F. Performance and Limitations (AMEL and AMES)
- ☐ G. Operation of Systems (AMEL and AMES)
- ☐ H. Principles of Flight-Engine Inoperative (AMEL and AMES)
- ☐ I. Water and Seaplane Characteristics (AMES)
- ☐ J. Seaplane Bases, Maritime Rules, and Aids to Marine Navigation (AMES)
- ☐ K. Aeromedical Factors (AMEL and AMES)

II. PREFLIGHT PROCEDURES

- ☐ A. Preflight Inspection (AMEL and AMES)
- ☐ B. Cockpit Management (AMEL and AMES)
- ☐ C. Engine Starting (AMEL and AMES)
- ☐ D. Taxiing (AMEL)
- ☐ E. Taxiing and Sailing (AMES)
- ☐ F. Before Takeoff Check (AMEL and AMES)

III. AERODROME AND SEAPLANE BASE OPERATIONS

- ☐ A. Radio Communications and ATS Light Signals (AMEL and AMES)
- ☐ B. Traffic Patterns (AMEL and AMES)
- ☐ C. Aerodrome/Seaplane Base, Runway, and Taxiway Signs, Markings, and Lighting (AMEL and AMES)

IV. TAKEOFFS, LANDINGS, AND GO-AROUNDS

- ☐ A. Normal and Crosswind Takeoff and Climb (AMEL and AMES)
- ☐ B. Normal and Crosswind Approach and Landing (AMEL and AMES)
- ☐ C. Short-Field Takeoff (Confined Area-AMEL) and Maximum Performance Climb (AMEL and AMES)
- ☐ D. Short-Field (Confined Area-AMES) Approach and Landing (AMEL and AMES)
- ☐ E. Glassy Water Takeoff and Climb (AMES)
- ☐ F. Glassy Water Approach and Landing (AMES)
- ☐ G. Rough Water Takeoff and Climb (AMES)
- ☐ H. Rough Water Approach and Landing (AMES)
- ☐ I. Go-Around/Rejected Landing (AMEL and AMES)

V. PERFORMANCE MANOEUVRE

- ☐ Steep Turns (AMEL and AMES)

VI. GROUND REFERENCE MANOEUVRES

- ☐ A. Rectangular Course (AMEL and AMES)
- ☐ B. S-Turns (AMEL and AMES)
- ☐ C. Turns Around a Point (AMEL and AMES)

VII. NAVIGATION

- ☐ A. Pilotage and Dead Reckoning (AMEL and AMES)
- ☐ B. Navigation Systems and Radar Services (AMEL and AMES)
- ☐ C. Diversion (AMEL and AMES)
- ☐ D. Lost Procedures (AMEL and AMES)

VIII. SLOW FLIGHT AND STALLS

- ☐ A. Manoeuvring During Slow Flight (AMEL and AMES)
- ☐ B. Power-Off Stalls (AMEL and AMES)
- ☐ C. Power-On Stalls (AMEL and AMES)
- ☐ D. Spin Awareness (AMEL and AMES)

IX. BASIC INSTRUMENT MANOEUVRES

- ☐ A. Straight-and-Level Flight (AMEL and AMES)
- ☐ B. Constant Airspeed Climbs (AMEL and AMES)
- ☐ C. Constant Speed Descents (AMEL and AMES)
- ☐ D. Turns to Headings (AMEL and AMES)
- ☐ E. Recovery from Unusual Flight Attitudes
- ☐ F. Radio Communications, Navigation System/Facilities, and Radar Services (AMEL and AMES)

X. EMERGENCY OPERATIONS

- ☐ A. Emergency Descent (AMEL and AMES)
- ☐ B. Engine Failure During Takeoff Before VMC (Simulated) (AMEL and AMES)
- ☐ C. Engine Failure After Lift-Off (Simulated) (AMEL and AMES)
- ☐ D. Approach and Landing with an Inoperative Engine (Simulated) (AMEL and AMES)
- ☐ E. Systems and Equipment Malfunctions (AMEL and AMES)
- ☐ F. Emergency Equipment and Survival Gear (AMEL and AMES)

XI. MULTI-ENGINE OPERATIONS

- ☐ A. Manoeuvring with One Engine Inoperative (AMEL and AMES)
- ☐ B. Vmc Demonstration (AMEL and AMES)
- ☐ C. Engine Failure During Flight (by Reference to Instruments) (AMEL and AMES)
- ☐ D. Instrument Approach-One Engine Inoperative (by Reference to Instruments) (AMEL and AMES)

XII. NIGHT OPERATION

- ☐ Night Preparation (AMEL and AMES)

XIII. POSTFLIGHT PROCEDURES

- ☐ A. After Landing, Parking, and Securing (AMEL and AMES)
- ☐ B. Anchoring (AMES)
- ☐ C. Docking and Mooring (AMES)
- ☐ D. Ramping/Beaching (AMES)

I. AREA OF OPERATION: PREFLIGHT PREPARATION

A. TASK: LICENCES AND DOCUMENTS (AMEL and AMES)

NOTE: The flight test examiner shall develop a scenario based on real time weather to evaluate tasks C and D.

REFERENCES: TTCAR No.1, No.2 and No.5 and the POH/AFM.

Objective: To determine that the applicant exhibits knowledge of the elements related to licences and documents by:

1. Explaining-
   (a) Private pilot licence privileges, limitations and recent flight experience requirements.
   (b) Medical licence, class and duration.
   (c) Pilot logbook or flight records.
2. Locating and explaining-
   (a) Airworthiness and registration licences.
   (b) Operating limitations, placards, instrument markings, and POH/AFM.
   (c) Mass and balance data and equipment list.

B. TASK: AIRWORTHINESS REQUIREMENTS (AMEL and AMES)

REFERENCES: TTCAR No.2 and No.5.

Objective: To determine that the applicant exhibits knowledge of the elements related to airworthiness requirements by:

1. Explaining-
   (a) Required instruments and equipment for day/night VFR.
   (b) Procedures and limitations for determining airworthiness of the aeroplane with inoperative instruments and equipment with and without an MEL.
   (c) Requirements and procedures for obtaining a special flight permit.
2. Locating and explaining-
   (a) Airworthiness directives.
   (b) Compliance records.
   (c) Maintenance/inspection requirements.
   (d) Appropriate record keeping.

C. TASK: WEATHER INFORMATION (AMEL and AMES)

REFERENCES: TTCAR No.1.

Objective: To determine that the applicant:

1. 1. Exhibits knowledge of the elements related to weather information by analyzing weather reports, charts, and forecasts from various sources with emphasis on-
   (a) METAR, TAF, and GAMET.
   (b) Surface analysis chart.
   (c) Radar summary chart.
   (d) Winds and temperature aloft chart.
   (e) Significant weather prognostic charts.
   (f) Convective outlook chart.
   (g) Automated weather reports.
2. Makes a competent "go/no-go" decision based on available weather information.

D. TASK: CROSS-COUNTRY FLIGHT PLANNING (AMEL and AMES)

REFERENCES: TTCAA Flight Training Handbook

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to cross-country flight planning by presenting and explaining a pre-planned VFR cross- country flight, as previously assigned by the flight test examiner. On the day of the skill test, the final flight plan shall be to the first fuel stop, based on maximum allowable passengers, baggage and/or cargo loads using real-time weather.
2. Uses appropriate and current aeronautical charts.
3. Properly identifies airspace, obstructions, and terrain features.
4. Selects easily identifiable en route checkpoints.
5. Selects most favourable altitudes considering weather conditions and equipment capabilities.
6. Computes headings, flight time, and fuel requirements.
7. Selects appropriate navigation system/facilities and communication frequencies.
8. Applies pertinent information from NOTAMs and other flight publications.
9. Completes a navigation log and simulates filing a VFR flight plan.

E. TASK: NATIONAL AIRSPACE SYSTEM (AMEL and AMES)

REFERENCES: TTCAR No.1 and Navigation Charts.

Objective: To determine that the applicant exhibits knowledge of the elements related to the Airspace System by explaining:

1. Basic VFR weather minimums-for all classes of airspace.
2. Airspace classes-their operating rules, pilot certification, and aeroplane equipment requirements for the following-
   (a) Class A.
   (b) Class B.
   (c) Class C.
   (d) Class D.
   (e) Class E.
   (f) Class G.
3. Special use and other airspace areas.

F. TASK: PERFORMANCE AND LIMITATIONS (AMEL and AMES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to performance and limitations by explaining the use of charts, tables, and data to determine performance and the adverse effects of exceeding limitations.
2. Computes mass and balance. Determines the computed mass and centre of gravity is within the aeroplane's operating limitations and if the mass and centre of gravity will remain within limits during all phases of flight.
3. Demonstrates use of the appropriate performance charts, tables, and data.
4. Describes the effects of atmospheric conditions on the aeroplane's performance.

G. TASK: OPERATION OF SYSTEMS (AMEL and AMES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant exhibits knowledge of the elements related to the operation of systems on the aeroplane provided for the flight test by explaining at least three (3) of the following systems:

1. Primary Flight Controls and Trim.
2. Flaps, Leading Edge Devices, and Spoilers.
3. Water Rudders (AMES).
4. Powerplant and Propeller.
5. Landing Gear.
6. Fuel, Oil, and Hydraulic.
7. Electrical.
8. Avionics.
9. Pitot-Static Vacuum/Pressure, and Associated Flight Instruments.
10. Environmental.
11. De-icing and Anti-Icing.

H. TASK: PRINCIPLES OF FLIGHT-ENGINE INOPERATIVE (AMEL and AMES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant exhibits knowledge of the elements related to engine inoperative principles of flight by explaining the:

1. Meaning of the term "critical engine."
2. Effects of density altitude on the Vmc demonstration.
3. Effects of aeroplane mass and centre of gravity on control.
4. Effects of angle of bank on Vmc.
5. Relationship of Vmc to stall speed.
6. Reasons for loss of directional control.
7. Indications of loss of directional control.
8. Importance of maintaining the proper pitch and bank attitude, and the proper coordination of controls.
9. Loss of directional control recovery procedure.
10. Engine failure during takeoff including planning, decisions, and single-engine operations.

I. TASK: WATER AND SEAPLANE CHARACTERISTICS (AMES)

REFERENCES: POH, TTCAA Flight Training Handbook

Objective: To determine that the applicant exhibits knowledge of the elements related to water and seaplane characteristics by explaining:

1. The characteristics of a water surface as affected by features, such as-
   (a) Size and location.
   (b) Protected and unprotected areas.
   (c) Surface wind.
   (d) Direction and strength of water current.
   (e) Floating and Partially submerged debris.
   (f) Sandbars, islands, and shoals.
   (g) Vessel traffic and wakes.
   (h) Other features peculiar to the area.
2. Float and hull construction, and their effect on seaplane performance.
3. Causes of porpoising and skipping, and the pilot action required to prevent or correct these occurrences.

J. TASK: SEAPLANE BASES, MARITIME RULES, AND AIDS TO MARINE NAVIGATION (AMES)

REFERENCES:

Objective: To determine that the applicant exhibits knowledge of the elements related to seaplane bases, maritime rules, and aids to marine navigation by explaining:

1. How to locate and identify seaplane bases on charts or in directories.
2. Operating restrictions at various bases.
3. Right-of-way, steering, and sailing rules pertinent to seaplane operation.
4. Marine navigation aids such as buoys, beacons, lights, and sound signals.

K. TASK: AEROMEDICAL FACTORS (AMEL and AMES)

REFERENCES: TTCAA Flight Training Handbook

Objective: To determine that the applicant exhibits knowledge of the elements related to aeromedical factors by explaining:

1. The symptoms, causes, effects, and corrective actions of at least three (3) of the following-
   (a) Hypoxia.
   (b) Hyperventilation.
   (c) Middle Ear and Sinus Problems.
   (d) Spatial Disorientation.
   (e) Motion Sickness.
   (f) Carbon Monoxide Poisoning.
   (g) Stress and Fatigue.
   (h) Dehydration.
2. The effects of alcohol, drugs, and over-the-counter medications.
3. The effects of excess nitrogen during scuba dives upon a pilot or passenger in flight.

II. AREA OF OPERATION: PREFLIGHT PROCEDURES

A. TASK: PREFLIGHT INSPECTION (AMEL and AMES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to preflight inspection. This shall include which items must be inspected, the reasons for checking each item, and how to detect possible defects.
2. Inspects the aeroplane with reference to an appropriate checklist.
3. Verifies the aeroplane is in condition for safe flight.

B. TASK: COCKPIT MANAGEMENT (AMEL and AMES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to cockpit management procedures.
2. Ensures all loose items in the cockpit and cabin are secured.
3. Organizes material and equipment in an efficient manner so they are readily available.
4. Briefs occupants on the use of safety belts, shoulder harnesses, doors, and emergency procedures.

C. TASK: ENGINE STARTING (AMEL and AMES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to recommended engine starting procedures. This shall include the use of an external power source, and starting under various atmospheric conditions.
2. Positions the aeroplane properly considering structures, surface conditions, other aircraft, and the safety of nearby persons and property.
3. Utilizes the appropriate checklist for starting procedure.

D. TASK: TAXIING (AMEL)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to safe taxi procedures.
2. Performs a brake check immediately after the aeroplane begins moving.
3. Positions the flight controls properly for the existing wind conditions.
4. Controls direction and speed without excessive use of brakes.
5. Complies with aerodrome/taxiway markings, signals, ATS clearances, and instructions.
6. Taxies so as to avoid other aircraft and hazards.

E. TASK: TAXIING AND SAILING (AMES)

REFERENCES: NAVIGATION RULES, INTERNATIONAL - INLAND; POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to water taxi and sailing procedures.
2. Positions the flight controls properly for the existing wind conditions.
3. Plans and follows the most favourable course while taxi or sailing considering wind, water current, water conditions and maritime regulations.
4. Uses the appropriate idle, plow, or step taxi technique.
5. Uses flight controls, flaps, doors, water rudder, and power correctly so as to follow the desired course while sailing.
6. Prevents and corrects for porpoising and skipping.
7. Avoids other aircraft, vessels, and hazards.
8. Complies with seaplane base signs, signals, and clearances.

F. TASK: BEFORE TAKEOFF CHECK (AMEL and AMES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to the before takeoff check. This shall include the reasons for checking each item and how to detect malfunctions.
2. Positions the aeroplane properly considering other aircraft/vessel, wind and surface conditions.
3. Divides attention inside and outside the cockpit.
4. Ensures that engine temperatures and pressure are suitable for run-up and takeoff.
5. Accomplishes the before takeoff checklist and ensures the aeroplane is in safe operating condition.
6. Reviews takeoff performance airspeeds, takeoff distances, departures, and emergency procedures.
7. Avoids runway incursion and/or ensures no conflict with traffic prior to taxiing into takeoff position.

III. AREA OF OPERATION: AERODROME AND SEAPLANE BASE OPERATIONS

A. TASK: RADIO COMMUNICATIONS AND ATS LIGHT SIGNALS (AMEL and AMES)

REFERENCES: TTCAR No.2.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to radio communications and ATS light signals.
2. Selects appropriate frequencies.
3. Transmits using recommended phraseology.
4. Acknowledges radio communications and complies with instructions.

B. TASK: TRAFFIC PATTERNS (AMEL and AMES)

REFERENCES: TTCAA Flight Training Handbook

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to traffic patterns. This shall include procedures at aerodromes with and without operating control towers, prevention of runway incursions, collision avoidance, wake turbulence avoidance, and wind shear.
2. Complies with proper traffic pattern procedures.
3. Maintains proper spacing from other aircraft.
4. Corrects for wind drift to maintain the proper ground track.
5. Maintains orientation with the runway/landing area in use.
6. Maintains traffic pattern altitude, ±100 feet (30 meters), and the appropriate airspeed, ±10 knots.

C. TASK: AERODROME/SEAPLANE BASE, RUNWAY, AND TAXIWAY SIGNS, MARKINGS, AND LIGHTING (AMEL and AMES)

REFERENCES: TTCAA Flight Training Handbook

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to aerodrome/seaplane base, runway, and taxiway operations with emphasis on runway incursion avoidance.
2. Properly identifies and interprets aerodrome/seaplane base, runway, and taxiway signs, markings, and lighting.

IV. AREA OF OPERATION: TAKEOFFS, LANDINGS, AND GO-AROUNDS

A. TASK: NORMAL AND CROSSWIND TAKEOFF AND CLIMB (AMEL and AMES)

NOTE: If a crosswind condition does not exist, the applicant's knowledge of crosswind elements shall be evaluated through oral testing.

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to a normal and crosswind takeoff, climb operations, and rejected takeoff procedures.
2. Positions the flight controls for the existing wind conditions.
3. Clears the area; taxies into the takeoff position and aligns the aeroplane on the runway centre/takeoff path.
4. Retracts the water rudders as appropriate, (AMES) advances the throttles smoothly to takeoff power.
5. Establishes and maintains the most efficient planing/lift-off attitude and corrects for porpoising and skipping (AMES).
6. Lifts off at the recommended airspeed and accelerates to Vy.
7. Establishes a pitch attitude that will maintain VY +10/-5 knots.
8. Retracts the landing gear, if appropriate, and flaps after a positive rate of climb is established.
9. Maintains takeoff power and Vy +10/-5 knots to a safe manoeuvring altitude.
10. Maintains directional control and proper wind-drift correction throughout the takeoff and climb.
11. Complies with noise abatement procedures.
12. Completes the appropriate checklist.

B. TASK: NORMAL AND CROSSWIND APPROACH AND LANDING (AMEL and AMES)

NOTE: If a crosswind condition does not exist, the applicant's knowledge of crosswind elements shall be evaluated through oral testing.

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to a normal and crosswind approach and landing.
2. Adequately surveys the intended landing area (AMES).
3. Considers the wind conditions, landing surface, obstructions, and selects a suitable touchdown point.
4. Establishes the recommended approach and landing configuration and airspeed, and adjusts pitch attitude and power as required.
5. Maintains a stabilized approach and recommended airspeed, or in its absence, not more than 1.3 Vso, +10/-5 knots, with wind gust factor applied.
6. Makes smooth, timely, and correct control application during the roundout and touchdown.
7. Contacts the water at the proper pitch attitude (AMES).
8. Touches down smoothly at approximate stalling speed (AMEL).
9. Touches down at or within 400 feet (120 meters) beyond a specified point, with no drift, and with the aeroplane's longitudinal axis aligned with and over the runway centre/landing path.
10. Maintains crosswind correction and directional control throughout the approach and landing sequence.
11. Completes the appropriate checklist.

C. TASK: SHORT-FIELD (CONFINED AREA-AMES) TAKEOFF AND MAXIMUM PERFORMANCE CLIMB (AMEL and AMES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to a short-field (confined area AMES) takeoff and maximum performance climb.
2. Positions the flight controls for the existing wind conditions; sets the flaps as recommended.
3. Clears the area; taxies into takeoff position utilizing maximum available takeoff area and aligns the aeroplane on the runway center/take-off path.
4. Selects an appropriate take-off path for the existing conditions (AMES).
5. Applies brakes (if appropriate), while advancing the throttles smoothly to takeoff power.
6. Establishes and maintains the most efficient planing/lift-off attitude and corrects for porpoising and skipping (AMES).
7. Lifts off at the recommended airspeed, and accelerates to the recommended obstacle clearance airspeed or Vx.
8. Establishes a pitch attitude that will maintain the recommended obstacle clearance airspeed, or Vx, +10/-5 knots, until the obstacle is cleared, or until the aeroplane is 50 feet (20 meters) above the surface.
9. After clearing the obstacle, establishes the pitch attitude for VY accelerates to Vy, and maintains Vy, +10/-5 knots, during the climb.
10. Retracts the landing gear, if appropriate, and flaps after clear of any obstacles or as recommended by manufacturer.
11. Maintains takeoff power and Vy +10/-5 knots to a safe manoeuvring altitude.
12. Maintains directional control and proper wind-drift correction throughout the takeoff and climb.
13. Completes the appropriate checklist.

D. TASK: SHORT-FIELD APPROACH (CONFINED AREA-AMES) AND LANDING (AMEL AND AMES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to a short-field (confined area AMES) approach and landing.
2. Adequately surveys the intended landing area (AMES).
3. Considers the wind conditions, landing surface, obstructions, and selects the most suitable touchdown point.
4. Establishes the recommended approach and landing configuration and airspeed; adjusts pitch attitude and power as required.
5. Maintains a stabilized approach and recommended approach airspeed, or in its absence not more than 1.3 Vso, +10/-5 knots, with wind gust factor applied.
6. Makes smooth, timely, and correct control application during the roundout and touchdown.
7. Selects the proper landing path, contacts the water at the minimum safe airspeed with the proper pitch attitude for the surface conditions (AMES).
8. Touches down smoothly at minimum control airspeed (AMEL).
9. Touches down at or within 200 feet (60 meters) beyond a specified point, with no side drift, minimum float, and with the aeroplane's longitudinal axis aligned with and over the runway centre/landing path.
10. Maintains crosswind correction and directional control throughout the approach and landing sequence.
11. Applies brakes, (AMEL) or elevator control (AMES), as necessary, to stop in the shortest distance consistent with safety.
12. Completes the appropriate checklist.

E. TASK: GLASSY WATER TAKEOFF AND CLIMB (AMES)

NOTE: If a glassy water condition does not exist, the applicant shall be evaluated by simulating the task.

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to glassy water takeoff and climb.
2. Positions the flight controls and flaps for the existing conditions.
3. Clears the area; selects an appropriate takeoff path considering surface hazards and/or vessels and surface conditions.
4. Retracts the water rudders as appropriate; advances the throttle smoothly to takeoff power.
5. Establishes and maintains an appropriate planing attitude, directional control, and corrects for porpoising, skipping, and increases in water drag.
6. Utilizes appropriate techniques to lift seaplane from the water considering surface conditions.
7. Establishes proper attitude/airspeed, and accelerates to Vy, +10/- 5 knots during the climb.
8. Retracts the landing gear, if appropriate, and flaps after a positive rate of climb is established.
9. Maintains takeoff power and Vy +10/-5 knots to a safe manoeuvring altitude.
10. Maintains directional control and proper wind-drift correction throughout takeoff and climb.
11. Completes the appropriate checklist.

F. TASK: GLASSY WATER APPROACH AND LANDING (AMES)

NOTE: If a glassy water condition does not exist, the applicant shall be evaluated by simulating the task.

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to glassy water approach and landing.
2. Adequately surveys the intended landing area.
3. Considers the wind conditions, water depth, hazards, surrounding terrain, and other watercraft.
4. Selects the most suitable approach path and touchdown area.
5. Establishes the recommended approach and landing configuration and airspeed, and adjusts pitch attitude and power as required.
6. Maintains a stabilized approach and the recommended approach airspeed, +10/-5 knots and maintains a touchdown pitch attitude and descent rate from the last altitude reference until touchdown.
7. Makes smooth, timely, and correct power and control adjustments to maintain proper pitch attitude and rate of descent to touchdown.
8. Contacts the water in the proper pitch attitude, and slows to idle taxi speed.
9. Maintains crosswind correction and directional control throughout the approach and landing sequence.
10. Completes the appropriate checklist.

G. TASK: ROUGH WATER TAKEOFF AND CLIMB (AMES)

NOTE: If a rough water condition does not exist, the applicant shall be evaluated by simulating the task.

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to rough water takeoff and climb.
2. Positions the flight controls and flaps for the existing conditions.
3. Clears the area; selects an appropriate takeoff path considering wind, swells surface hazards, and/or vessels.
4. Retracts the water rudders as appropriate; advances the throttle smoothly to takeoff power.
5. Establishes and maintains an appropriate planing attitude, directional control, and corrects for porpoising, skipping, or excessive bouncing.
6. Lifts off at minimum airspeed and accelerates to Vy, +10/-5 knots before leaving ground effect.
7. Retracts the landing gear, if appropriate, and flaps after a positive rate of climb is established.
8. Maintains takeoff power and Vy +10/-5 knots to a safe manoeuvring altitude.
9. Maintains directional control and proper wind-drift correction throughout takeoff and climb.
10. Completes the appropriate checklist.

H. TASK: ROUGH WATER APPROACH AND LANDING (AMES)

NOTE: If a rough water condition does not exist, the applicant shall be evaluated by simulating the task.

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to rough water approach and landing.
2. Adequately surveys the intended landing area.
3. Considers the wind conditions, water, depth, hazards, surrounding terrain, and other watercraft.
4. Selects the most suitable approach path, and touchdown area.
5. Establishes the recommended approach and landing configuration and airspeed, and adjusts pitch attitude and power as required.
6. Maintains a stabilized approach and the recommended approach airspeed, or in its absence not more than 1.3 Vso +10/-5 knots with wind gust factor applied.
7. Makes smooth, timely, and correct power and control application during the roundout and touch down.
8. Contacts the water in the proper pitch attitude, and at the proper airspeed, considering the type of rough water.
9. Maintains crosswind correction and directional control throughout the approach and landing sequence.
10. Completes the appropriate checklist.

I. TASK: GO-AROUND/REJECTED LANDING (AMEL and AMES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to a go-around/rejected landing.
2. Makes a timely decision to discontinue the approach to landing.
3. Applies takeoff power immediately and transitions to climb pitch attitude for Vy and maintains Vy +10/-5 knots.
4. Retracts the flaps, as appropriate.
5. Retracts the landing gear, if appropriate, after a positive rate of climb is established.
6. Manoeuvres to the side of the runway/landing area to clear and avoid conflicting traffic.
7. Maintains takeoff power and Vy +10/-5 knots to a safe manoeuvring altitude.
8. Maintains directional control and proper wind-drift correction throughout the climb.
9. Completes the appropriate checklist.

V. AREA OF OPERATION: PERFORMANCE MANOEUVRES

A. TASK: STEEP TURNS (AMEL and AMES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to steep turns.
2. Establishes the manufacturer's recommended airspeed or if one is not stated, a safe airspeed not to exceed Va.
3. Rolls into a coordinated 360° turn; maintains a 45° bank.
4. Performs the task in the opposite direction, as specified by the flight test examiner.
5. Divides attention between aeroplane control and orientation.
6. Maintains the entry altitude, ±100 feet (30 meters), airspeed, ±10 knots, bank, ±5°; and rolls out on the entry heading, ±10°.

VI. AREA OF OPERATION: GROUND REFERENCE MANOEUVRES

NOTE: The flight test examiner shall select at least one Task.

A. TASK: RECTANGULAR COURSE (AMEL and AMES)

REFERENCES: TTCAA Flight Training Handbook

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to a rectangular course.
2. Selects a suitable reference area.
3. Plans the manoeuvre so as to enter a left or right pattern, 600 to 1,000 feet AGL (180 to 300 meters) at an appropriate distance from the selected reference area, 45° to the downwind leg.
4. Applies adequate wind-drift correction during straight-and-turning flight to maintain a constant ground track around the rectangular reference area.
5. Divides attention between aeroplane control and the ground track while maintaining coordinated flight.
6. Maintains altitude, ±100 feet (30 meters); maintains airspeed, ±10 knots.

B. TASK: S-TURNS (AMEL and AMES)

REFERENCES: TTCAA Flight Training Handbook

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to S-turns.
2. Selects a suitable ground reference line.
3. Plans the manoeuvre so as to enter at 600 to 1,000 feet (180 to 300 meters) AGL, perpendicular to the selected reference line.
4. Applies adequate wind-drift correction to track a constant radius turn on each side of the selected reference line.
5. Reverses the direction of turn directly over the selected reference line.
6. Divides attention between aeroplane control and the ground track while maintaining coordinated flight.
7. Maintains altitude, ±100 feet (30 meters); maintains airspeed, ±10 knots.

C. TASK: TURNS AROUND A POINT (AMEL and AMES)

REFERENCES: TTCAA Flight Training Handbook

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to turns around a point.
2. Selects a suitable ground reference point.
3. Plans the manoeuvre so as to enter left or right at 600 to 1,000 feet (180 to 300 meters) AGL, at an appropriate distance from the reference point.
4. Applies adequate wind-drift correction to track a constant radius turn around the selected reference point.
5. Divides attention between aeroplane control and the ground track while maintaining coordinated flight.
6. Maintains altitude, ±100 feet (30 meters); maintains airspeed, ±10 knots.

VII. AREA OF OPERATION: NAVIGATION

A. TASK: PILOTAGE AND DEAD RECKONING (AMEL and AMES)

REFERENCES: TTCAA Flight Training Handbook

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to pilotage and dead reckoning.
2. Follows the pre-planned course by reference to landmarks.
3. Identifies landmarks by relating surface features to chart symbols.
4. Navigates by means of pre-computed headings, groundspeeds, and elapsed time.
5. Corrects for and records the differences between preflight groundspeed, and heading calculations and those determined en route.
6. Verifies the aeroplane's position within three (3) nautical miles of the flight-planned route.
7. Arrives at the en route checkpoints within five (5) minutes of the initial or revised ETA and provides a destination estimate.
8. Maintains the appropriate altitude, ±200 feet (60 meters) and heading, ±15°.

B. TASK: NAVIGATION SYSTEMS AND RADAR SERVICES (AMEL and AMES)

REFERENCES: TTCAA Flight Training Handbook, Navigation Equipment Operation Manuals.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to navigation systems and radar services.
2. Demonstrates the ability to use an airborne electronic navigation system.
3. Locates the aeroplane's position using the navigation system.
4. Intercepts and tracks a given course, radial or bearing, as appropriate.
5. Recognizes and describes the indication of station passage, if appropriate.
6. Recognizes signal loss and takes appropriate action.
7. Uses proper communication procedures when utilizing radar services.
8. Maintains the appropriate altitude, ±200 feet (60 meters) and heading ±15°.

C. **TASK: DIVERSION (AMEL and AMES)**

REFERENCES: TTCAA Flight Training Handbook

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to diversion.
2. Selects an appropriate alternate aerodrome and route.
3. Makes an accurate estimate of heading, groundspeed, arrival time, and fuel consumption to the alternate aerodrome.
4. Maintains the appropriate altitude, ±200 feet (60 meters) and headings, ±15°.

D. **TASK: LOST PROCEDURES (AMEL and AMES)**

REFERENCES: TTCAA Flight Training Handbook

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to lost procedures.
2. Selects an appropriate course of action.
3. Maintains an appropriate heading and climbs, if necessary.
4. Identifies prominent landmarks.
5. Uses navigation systems/facilities and/or contacts an ATS facility for assistance, as appropriate.

VIII. AREA OF OPERATION: SLOW FLIGHT AND STALLS

A. TASK: MANOEUVRING DURING SLOW FLIGHT (AMEL and AMES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to manoeuvring during slow flight.
2. Selects an entry altitude that will allow the task to be completed no lower than 3,000 feet (920 meters) AGL.
3. Establishes and maintains an airspeed at which any further increase in angle of attack, increase in load factor, or reduction in power, would result in an immediate stall.
4. Accomplishes coordinated straight-and-level flight, turns, climbs, and descents with landing gear and flap configurations specified by the flight test examiner.
5. Divides attention between aeroplane control and orientation.
6. Maintains the specified altitude, ±100 feet (30 meters); specified heading, ±10°; airspeed, +10/-0 knots and specified angle of bank, ±10°.

B. TASK: POWER-OFF STALLS (AMEL and AMES)

REFERENCES: POH/AFM

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to power-off stalls.
2. Selects an entry altitude that allows the task to be completed no lower than 3,000 feet (460 meters) AGL.
3. Establishes a stabilized descent in the approach or landing configuration, as specified by the flight test examiner.
4. Transitions smoothly from the approach or landing attitude to a pitch attitude that will induce a stall.
5. Maintains a specified heading, ±10°, in straight flight; maintains a specified angle of bank not to exceed 20°, ±10°; in turning flight, while inducing the stall.
6. Recognizes and recovers promptly after a stall occurs by simultaneously reducing the angle of attack, increasing power to maximum allowable, and levelling the wings to return to a straight-and- level flight attitude with a minimum loss of altitude appropriate for the aeroplane.
7. Retracts the flaps to the recommended setting; retracts the landing gear, if retractable, after a positive rate of climb is established.
8. Accelerates to Vx or Vy speed before the final flap retraction; returns to the altitude, heading, and airspeed specified by the flight test examiner.

C. TASK: POWER-ON STALLS (AMEL and AMES)

NOTE: In some high performance aeroplanes the power setting may have to be reduced below the skill test standards guideline power setting to prevent excessively high pitch attitudes (greater than 30° nose up).

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to power-on stalls.
2. Selects an entry altitude that allows the task to be completed no lower than 3,000 feet (460 meters) AGL.
3. Establishes the takeoff or departure configuration. Sets power to no less than 65 percent available power.
4. Transitions smoothly from the takeoff or departure attitude to the pitch attitude that will induce a stall.
5. Maintains a specified heading, ±10°, in straight flight; maintains a specified angle of bank not to exceed 20°, ±10°, in turning flight, while inducing the stall.
6. Recognizes and recovers promptly after the stall occurs by simultaneously reducing the angle of attack, increasing power to maximum allowable, and levelling the wings to return to a straight- and-level flight attitude with a minimum loss of altitude appropriate for the aeroplane.
7. Retracts the flaps to the recommended setting; retracts the landing gear if retractable, after a positive rate of climb is established.
8. Accelerates to Vx or Vy speed before the final flap retraction; returns to the altitude, heading, and airspeed specified by the flight test examiner.

D. TASK: SPIN AWARENESS (AMEL and AMES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant exhibits knowledge of the elements related to spin awareness by explaining:

1. Aerodynamic factors related to spins.
2. Flight situations where unintentional spins may occur.
3. Procedures for recovery from unintentional spins.

IX. AREA OF OPERATION: BASIC INSTRUMENT MANOEUVRES

NOTE: The flight test examiner shall select task E and at least two other tasks. If the applicant holds an instrument-rating aeroplane he or she only needs to demonstrate task E.

A. TASK: STRAIGHT-AND-LEVEL FLIGHT (AMEL and AMES)

REFERENCES: TTCAA Instrument Training Handbook

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to attitude instrument flying during straight-and-level flight.
2. Maintains straight-and-level flight solely by reference to instruments using proper instrument cross-check and interpretation, and coordinated control application.
3. Maintains altitude, ±200 feet (60 meters); heading, ±20°; and airspeed, ±10 knots.

B. TASK: CONSTANT AIRSPEED CLIMBS (AMEL and AMES)

REFERENCES: TTCAA Instrument Training Handbook

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to attitude instrument flying during constant airspeed climbs.
2. Establishes the climb configuration specified by the flight test examiner.
3. Transitions to the climb pitch attitude and power setting on an assigned heading using proper instrument cross-check and interpretation, and coordinated control application.
4. Demonstrates climbs solely by reference to instruments at a constant airspeed to specific altitudes in straight flight and turns.
5. Levels off at the assigned altitude and maintains that altitude, ±200 feet (60 meters); maintains heading, ±20°; maintains airspeed, ±10 knots.

C. TASK: CONSTANT AIRSPEED DESCENTS (AMEL and AMES)

REFERENCES: TTCAA Instrument Training Handbook

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to attitude instrument flying during constant airspeed descents.
2. Establishes the descent configuration specified by the flight test examiner.
3. Transitions to the descent pitch attitude and power setting on an assigned heading using proper instrument cross-check and interpretation, and coordinated control application.
4. Demonstrates descents solely by reference to instruments at a constant airspeed to specific altitudes in straight flight and turns.
5. Levels off at the assigned altitude and maintains that altitude, ±200 feet (60 meters); maintains heading, ±20°; maintains airspeed, ±10 knots.

D. TASK: TURNS TO HEADINGS (AMEL and AMES)

REFERENCES: TTCAA Instrument Training Handbook

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to attitude instrument flying during turns to headings.
2. Transitions to the level-turn attitude using proper instrument cross- check and interpretation, and coordinated control application.
3. Demonstrates turns to headings solely by reference to instruments; maintains altitude, ±200 feet (60 meters); maintains a standard rate turn and rolls out on the assigned heading, ±10°; maintains airspeed, ±10 knots.

E. TASK: RECOVERY FROM UNUSUAL FLIGHT ATTITUDES (AMEL and AMES)

REFERENCES: TTCAA Instrument Training Handbook

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to attitude instrument flying during unusual attitudes.
2. Recognizes unusual flight attitudes solely by reference to instruments; recovers promptly to a stabilized level flight attitude using proper instrument cross-check and interpretation and smooth, coordinated control application in the correct sequence.

F. TASK: RADIO COMMUNICATIONS, NAVIGATION SYSTEMS/FACILITIES, AND RADAR SERVICES (AMEL and AMES)

REFERENCES:

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to radio communications, navigation systems/facilities, and radar services available for use during flight solely by reference to instruments.
2. Selects the proper frequency and identifies the appropriate facility.
3. Follows verbal instructions and/or navigation systems/facilities for guidance.
4. Determines the minimum safe altitude.
5. Maintains altitude, ±200 feet (60 meters); maintains heading, ±20°; maintains airspeed, ±10 knots.

X. AREA OF OPERATION: EMERGENCY OPERATIONS

NOTE: Examiners shall select an entry altitude that will allow the single engine demonstrations task to be completed no lower than 5,000 feet (1500 meters) AGL or the manufacturer's recommended altitude, whichever is higher. At altitudes lower than 5,000 feet (1500 meters) AGL, engine failure shall be simulating by reducing throttle to idle and then establishing zero thrust.

A. TASK: EMERGENCY DESCENT (AMEL and AMES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to an emergency descent.
2. Recognizes situations, such as depressurization, cockpit-smoke and/or fire that requires an emergency descent.
3. Establishes the appropriate airspeed and configuration for the emergency descent.
4. Exhibits orientation, division of attention, and proper planning.
5. Maintains positive load factors during the descent.
6. Completes appropriate checklists.

B. TASK: ENGINE FAILURE DURING TAKEOFF BEFORE VMC (SIMULATED-AMEL and AMES)

REFERENCES: POH/AFM.

NOTE: Engine failure (simulated) shall be accomplished before reaching 50 percent of the calculated Vmc.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to the procedure used for engine failure during takeoff prior to reaching Vmc.
2. Closes the throttles smoothly and promptly when simulated engine failure occurs.
3. Maintains directional control and applies brakes (AMEL) or flight controls (AMES), as necessary.

C. TASK: ENGINE FAILURE AFTER LIFT-OFF (SIMULATED-AMEL and AMES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to the procedure used for engine failure after lift-off.
2. Recognizes a simulated engine failure promptly, maintains control, and utilizes appropriate emergency procedures.
3. Reduces drag, identifies and verifies the inoperative engine after simulated engine failure.
4. Simulates feathering the propeller on the inoperative engine. Examiner shall then establish zero-thrust on the inoperative engine.
5. Establishes Vyse; if obstructions are present, establishes Vxse or Vmc +5 knots, whichever is greater, until obstructions are cleared. Then transitions to Vyse.
6. Banks toward the operating engine as required for best performance.
7. Monitors operating engine and makes adjustments as necessary.
8. Recognizes the aeroplane's performance capabilities. If a climb is not possible at Vyse, maintain Vyse and return to the departure aerodrome for landing, or initiates an approach to the most suitable landing area available.
9. Secures the (simulated) inoperative engine.
10. Maintains heading, ± 10°, and airspeed, ± 5 knots.
11. Completes appropriate emergency checklist.

D. TASK: APPROACH AND LANDING WITH AN INOPERATIVE ENGINE (SIMULATED-AMEL and AMES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to an approach and landing with an engine inoperative to include engine failure on final approach.
2. Recognizes engine failure and takes appropriate action, maintains control, and utilizes recommended emergency procedures.
3. Banks toward the operating engine, as required, for best performance.
4. Monitors the operating engine and makes adjustments as necessary.
5. Maintains the recommended approach airspeed +10/-5, and landing configuration with a stabilized approach, until landing is assured.
6. Makes smooth, timely and correct control applications during roundout and touchdown.
7. Touches down on the first one-third of available runway, with no drift and the aeroplane's longitudinal axis aligned with and over the runway centre/landing path.
8. Maintains crosswind correction and directional control throughout the approach and landing sequence.
9. Completes appropriate checklists.

E. TASK: SYSTEMS AND EQUIPMENT MALFUNCTIONS (AMEL and AMES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to system and equipment malfunctions appropriate to the aeroplane provided for the skill test.
2. Analyzes the situation and takes the appropriate action for simulated emergencies appropriate to the aeroplane provided for the skill test for at least three (3) of the following:

   (a) Partial or complete power loss.
   (b) Engine roughness or overheat.
   (c) Carburettor or induction icing.
   (d) Loss of oil pressure.
   (e) Fuel starvation.
   (f) Electrical malfunction.
   (g) Vacuum/pressure, and associated flight instruments malfunction.
   (h) Pitot/static.
   (i) Landing gear or flap malfunction.
   (j) Inoperative trim.
   (k) Inadvertent door or window opening.
   (l) structural icing.
   (m) Smoke/fire/engine compartment fire.

Any other emergency appropriate to the aeroplane.

3. Follows the appropriate checklist or procedure.

F. TASK: EMERGENCY EQUIPMENT AND SURVIVAL GEAR (AMEL and AMES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant: Exhibits knowledge of the elements related to emergency equipment and survival gear appropriate to the aeroplane and environment encountered during flight. Identifies appropriate equipment that should be aboard the aeroplane.

XI. AREA OF OPERATION: MULTI-ENGINE OPERATIONS

NOTE: If the applicant is instrument rated, and has previously demonstrated instrument proficiency in a multi-engine aeroplane or does not hold an instrument rating aeroplane
tasks D and C, need not be accomplished

A. TASK: MANOEUVRING WITH ONE ENGINE INOPERATIVE (AMEL and AMES)

REFERENCES: POH/AFM.

NOTE: The feathering of one propeller shall be demonstrated in flight, in a multi-engine aeroplane equipped with propellers, which can be safely feathered and un-feathered. The manoeuvre shall be performed at altitudes and positions where safe landings on established aerodromes can be readily accomplished. In the event a propeller cannot be unfeathered during the skill test, it shall be treated as an emergency.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to manoeuvring with one engine inoperative.
2. Recognizes engine failure and maintains control.
3. Sets the engine controls, reduces drag, identifies and verifies the inoperative engine, and feathers appropriate propeller.
4. Establishes and maintains a bank toward the operating engine as required for best performance in straight and level flight.
5. Follows the prescribed checklists to verify procedures for securing the inoperative engine.
6. Monitors the operating engine and makes necessary adjustments.
7. Demonstrates coordinated flight with one engine inoperative (propeller feathered).
8. Restarts the inoperative engine using appropriate restart procedures.
9. Maintains altitude ±100 feet (30 meters) or minimum sink as appropriate and heading ± 10°.
10. Completes the appropriate checklists.

B. TASK: Vmc DEMONSTRATION (AMEL and AMES)

REFERENCES: POH/AFM.

NOTE 1: An applicant seeking a aeroplane multi-engine land (AMEL) rating, "Limited to Centre Thrust," is not required to be evaluated on this task.

NOTE 2: Aeroplanes with normally aspirated engines will lose power as altitude increases because of the reduced density of the air entering the induction system of the engine. This loss of power will result in a Vmc lower than the stall speed at higher altitudes. Therefore, recovery should be made at the first indication of loss of directional control, stall warning, or buffet. Do not perform this manoeuvre by increasing the pitch attitude to a high angle with both engines operating and then reducing power on the critical engine. This technique is hazardous and may result in loss of aeroplane control.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to Vmc by explaining the causes of loss of directional controls at airspeeds less than Vmc, the factors affecting Vmc and the safe recovery procedures.
2. Configures the aeroplane at Vsse/Vyse, as appropriate-
   (a) Landing gear retracted.
   (b) Flaps set for takeoff.
   (c) Cowl flaps set for takeoff.
   (d) Trim set for takeoff.
   (e) Propellers set for high RPM.
   (f) Power on critical engine reduced to idle.
   (g) Power on operating engine set to takeoff or maximum available power.
3. Establishes a single-engine climb attitude with the airspeed at approximately 10 knots above Vsse.
4. Establishes a bank toward the operating engine, as required for best performance and controllability.
5. Increases the pitch attitude slowly to reduce the airspeed at approximately 1 knot per second while applying rudder pressure to maintain directional control until full rudder is applied.
6. Recognizes indications of loss of directional control, stall warning or buffet.
7. Recovers promptly by simultaneously reducing power sufficiently on the operating engine while decreasing the angle of attack as necessary to regain airspeed and directional control. Recovery SHOULD NOT be attempted by increasing the power on the simulated failed engine.
8. Recovers within 20° of the entry heading.
9. Advances power smoothly on operating engine and accelerates to Vxse/Vyse, as appropriate, +10/-5 knots, during the recovery.

C. **TASK: ENGINE FAILURE DURING FLIGHT (by Reference to Instruments) (AMEL and AMES)**

REFERENCES: TTCAR No.1.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements by explaining the procedures used during instrument flight with one engine inoperative.
2. Recognizes engine failure, sets the engine controls, reduces drag, identifies, and verifies the inoperative engine and feathers appropriate engine propeller.
3. Establishes and maintains a bank toward the operating engine as required for best performance in straight and level.
4. Follows the prescribed checklists to verify procedures for securing the inoperative engine.
5. Monitors the operating engine and makes necessary adjustments.
6. Demonstrates coordinated flight with one engine inoperative.
7. Maintains altitude ± 100 feet (30 meters), or minimum sink as appropriate and heading ± 10°, bank ± 5°, and levels off from climbs and descents within ± 100 feet (30 meters).

D. **TASK: INSTRUMENT APPROACH-ONE ENGINE INOPERATIVE (by Reference to Instruments) (AMEL and AMES)**

REFERENCES: TTCAR No.1.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements by explaining the procedures used during a published instrument approach with one engine inoperative.
2. Recognizes engine failure, sets the engine controls, reduces drag, identifies and verifies the inoperative engine, and feathers appropriate engine propeller.
3. Establishes and maintains a bank toward the operating engine, as required, for best performance in straight and level flight.
4. Follows the prescribed checklists to verify procedures for securing the inoperative engine.
5. Monitors the operating engine and makes necessary adjustments.
6. Requests and receives an actual or a simulated ATS clearance for an instrument approach.
7. Follows the actual or a simulated ATS clearance for an instrument approach.
8. Maintains altitude within 100 feet (30 meters), the airspeed within ± 10 knots if within the aircraft's capability, and heading ±10.
9. Establishes a rate of descent that will ensure arrival at the MDA or DH/DA, with the aeroplane in a position from which a descent to a landing, on the intended runway can be made, either straight in or circling as appropriate.
10. On final approach segment, no more than three-quarter-scale deflection of the CDI/glide slope indicator. For RMI or ADF indicators, within 10° of the course.
11. Avoids loss of aircraft control, or attempted flight contrary to the engine-inoperative operating limitations of the aircraft.
12. Complies with the published criteria for the aircraft approach category when circling.
13. Completes landing and appropriate checklists.

XII. AREA OF OPERATION: NIGHT OPERATIONS

A. TASK: NIGHT PREPARATION (AMEL and AMES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant exhibits knowledge of the elements related to night operations by explaining:

1. Physiological aspects of night flying as it relates to vision.
2. Lighting systems identifying aerodromes, runways, taxiways and obstructions, and pilot controlled lighting.
3. Aeroplane lighting systems.
4. Personal equipment essential for night flight.
5. Night orientation, navigation, and chart reading techniques.
6. Safety precautions and emergencies unique to night flying.

XIII. AREA OF OPERATION: POSTFLIGHT PROCEDURES

NOTE: The flight test examiner shall select task A and for AMES applicants at least one other task.

A. TASK: AFTER LANDING, PARKING, AND SECURING (AMEL and AMES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to after landing, parking and securing procedures.
2. Maintains directional control after touchdown while decelerating to an appropriate speed.
3. Observes runway hold lines and other surface control markings and lighting.
4. Parks in an appropriate area, considering the safety of nearby persons and property.
5. Follows the appropriate procedure for engine shutdown.
6. Completes the appropriate checklist.
7. Conducts an appropriate postflight inspection and secures the aircraft.

B. TASK: ANCHORING (AMES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to anchoring.
2. Selects a suitable area for anchoring, considering seaplane movement, water depth, tide, wind, and weather changes.
3. Uses an adequate number of anchors and lines of sufficient strength and length to ensure the seaplane's security.

C. TASK: DOCKING AND MOORING (AMES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to docking and mooring.
2. Approaches the dock or mooring buoy in the proper direction considering speed, hazards, wind, and water current.
3. Ensures seaplane security.

D. TASK: RAMPING/BEACHING (AMES)

REFERENCES: POH/AFM.

Objective: To determine that the applicant:

1. Exhibits knowledge of the elements related to ramping/beaching.
2. Approaches the ramp/beach considering persons and property, in the proper attitude and direction, at a safe speed, considering water depth, tide, current, and wind.
3. Ramps/beaches and secures the seaplane in a manner that will protect it from the harmful effect of wind, waves, and changes in water level.