

# Designated Pilot Examiner Knowledge Test Guide

Revision 1  
January 20<sup>th</sup>, 2009





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Paramaribo, January 20<sup>th</sup>, 2009

**No. 9-2006-PEL Revision 1**

## **Decision Director CASAS**

**Subject: Designated Pilot Examiner Knowledge Test Guide**

### **PREFACE**

This Decision Director CASAS No. 9-2006-PEL Revision 1, dated January 20<sup>th</sup>, 2009, Designated Pilot Examiner Knowledge Test Guide, provides information for applicants preparing to take the designated pilot examiner knowledge tests. Appendices provide lists for each aircraft category of designated pilot examiner licensing with subject matter outlines, reference materials, and sample questions with learning statement codes. This guide can be purchased from the Civil Aviation Safety Authority Suriname, P.O. Box 12587, Airfield Zorg & Hoop. Paramaribo, Suriname or downloaded from the CASAS web site at <http://www.casas.sr>.

Comments and/or questions regarding this guide should be sent to the following address: Civil Aviation Safety Authority Suriname, P.O. Box 12587, Airfield Zorg & Hoop. Paramaribo, Suriname.

/s/ January 20<sup>th</sup>, 2009

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V. Hanenberg  
Director CASAS

# DESIGNATED PILOT EXAMINER KNOWLEDGE TEST GUIDE

## PURPOSE

The purpose of this Decision Director CASAS (DDC) is to provide guidance for applicants preparing to take the designated pilot examiner knowledge tests. Appendices provide subject matter outlines, reference material, and sample questions with learning statements.

Civil Aviation Regulations Suriname (CARS) can be obtained from the Civil Aviation Safety Authority Suriname, P.O. Box 12587, Airfield Zorg & Hoop. Paramaribo, Suriname. CARS Part 2 Personnel Licensing regulations cover the requirements for personnel licensing.

This DDC can be purchased from the Civil Aviation Safety Authority Suriname, P.O. Box 12587, Airfield Zorg & Hoop. Paramaribo, Suriname or downloaded from the CASAS website at <<http://www.casas.sr>>.

Comments and/or questions regarding this DDC should be sent to Civil Aviation Safety Authority Suriname, P.O. Box 12587, Airfield Zorg & Hoop. Paramaribo, Suriname.

## INTRODUCTION

What is required to become a skilled and effective pilot examiner? Although some individuals possess more knowledge and skills than others, no one is a natural-born examiner. Competent examiners become so through study, training, and experience.

This knowledge test guide should answer most questions about taking the designated pilot examiner knowledge tests by covering the following areas: knowledge test eligibility requirements; knowledge areas on the tests; descriptions of the tests; process for taking a knowledge test; validity of Airman Test Knowledge Reports; use of test aids and materials; cheating or other unauthorised conduct; retesting procedures; and obtaining training and testing publications and general information.

This guide will help applicants in preparing to take one or all of the following tests:

- |                               |     |
|-------------------------------|-----|
| • Pilot Examiner – Aeroplane  | PEA |
| • Pilot Examiner – Helicopter | PER |
| • Pilot Examiner – Airship    | PEL |
| • Pilot Examiner – Balloon    | PEB |
| • Pilot Examiner – Glider     | PEG |

This guide is not offered as an easy way to obtain the necessary information for passing the knowledge tests. Rather, the intent of this guide is to define and narrow the field of study to the required knowledge areas included in the tests.

CASAS airman knowledge tests are a very effective instrument for aviation safety and regulatory compliance. However, these tests can only sample the vast amount of knowledge every examiner needs to operate safely in an ever increasingly complex airspace system.

## KNOWLEDGE TEST ELIGIBILITY REQUIREMENTS

Individuals pursuing a designation as a pilot examiner should review: Civil Aviation Regulations Suriname (CARS), Part 2, section 2.2.1 General; and section 2.2.3, Validity. The applicant for a designated pilot examiner licence knowledge test must be at least 21 years old and have a CASAS Class 1 medical certificate.

## KNOWLEDGE AREAS ON THE TESTS

Designated pilot examiner tests are comprehensive because they must test the applicant's knowledge in many subject areas.

Applicants pursuing a designation as a pilot examiner should review the appropriate regulations in CARS Part 2, section 2.3.5.1(d) for the knowledge areas on the test.

## DESCRIPTIONS OF THE TESTS

All test questions are the objective, multiple-choice type. Each question can be correctly answered by the selection of a single response. Each test question is independent of other questions; therefore, a correct response to one does not depend upon, or influence, the correct response to another. **The minimum passing score is 80 percent.**

The following tests each contain **50 questions** and applicants are allowed a **maximum of 2.0 hours** to complete the test.

- |                               |     |
|-------------------------------|-----|
| • Pilot Examiner – Aeroplane  | PEA |
| • Pilot Examiner – Helicopter | PER |
| • Pilot Examiner – Airship    | PEL |
| • Pilot Examiner – Balloon    | PEB |
| • Pilot Examiner – Glider     | PEG |

Communication between individuals through the use of words is a complicated process. In addition to being an exercise in the application and use of aeronautical knowledge, a knowledge test is also an exercise in communication since it involves the use of the written language. Since the tests involve written rather than spoken words, communication between the test writer and the person being tested may become a difficult matter if care is not exercised by both parties. Consequently, considerable effort is expended to write each question in a clear, precise manner. Test applicants should be sure to carefully read the instructions given with each test, as well as the statements in each test item.

When taking a test, keep the following points in mind:

- Answer each question in accordance with the latest regulations and guidance publications.
- Read each question carefully before looking at the possible answers. Test applicants should clearly understand the problem before attempting to solve it.
- After formulating an answer, determine which choice corresponds with that answer. The answer chosen should completely resolve the problem.
- From the answers given, it may appear there is more than one possible answer; however, there is only one answer that is correct and complete. The other answers are either incomplete, erroneous, or represent common misconceptions.
- If a certain question is difficult, it is best to mark it for review and proceed to the next question. After answering the less difficult questions, return to those marked for review and

answer them. The review marking procedure will be explained to test applicants prior to starting the test. Although the computer should alert test applicants to unanswered questions, test applicants should make sure every question has an answer recorded. This procedure will enable test applicants to use the available time to maximum advantage.

- When solving a calculation problem, the answer closest to the applicant's solution should be selected. The problem has been checked with various types of calculators; therefore, if the problem has been solved correctly, the applicant's answer will be closer to the correct answer than any of the other choices.

## PROCESS FOR TAKING A KNOWLEDGE TEST

The first step in the process of taking a knowledge test is to contact the CASAS office. They can provide applicants with information relating to knowledge test prerequisites, required authorisations and endorsements, testing locations, and the appropriate fees. In addition, applicants should visit the CASAS website at <<http://www.casas.sr>>.

The second step in the process of taking a knowledge test is for the applicant to complete the required training and receive an endorsement from an authorised instructor or aviation training organisation.

Acceptable forms of endorsement are:

- A certificate of graduation or a statement of accomplishment certifying the satisfactory completion of the ground school portion of a course for the licence or rating sought. The certificate or statement may be issued by an approved aviation training organisation.
- A written statement or logbook endorsement from an authorised ground or flight instructor certifying the applicant has completed an applicable ground training or home study course and is prepared to take the knowledge test.
- A failed, passed, or expired Airman Knowledge Test Report, provided the airman still has the original Airman Knowledge Test Report in his/her possession.
- An "expired test/credit" letter issued by the CASAS (in lieu of a duplicate Airman Knowledge Test Report).

The third step in the process of taking a knowledge test is for the applicant to receive written authorisation from CASAS.

The fourth step in taking a knowledge test is to proceed to the CASAS test center. An applicant for a knowledge test must provide proper identification. Testing center personnel will not begin the test until the test applicant's identification is verified.

Upon completion of the knowledge test, the applicant will receive an Airman Knowledge Test Report showing the test score. The Airman Knowledge Test Report is certified with an embossed seal to authenticate the validity of the document.

The Airman Knowledge Test Report lists the learning statement codes for questions answered incorrectly. The total number of codes shown on the Airman Knowledge Test Report is not necessarily an indication of the total number of questions answered incorrectly.

The Appendices of this Knowledge Test Guide contain a list of reference materials for applicants to study during their training for an examiner designation. The questions on the knowledge test will come from these reference materials. Decision Director CASAS, No. 2-2006-PEL Revision 1, Learning

Statement Reference Guide for Airman Knowledge Testing, contains learning statements and their corresponding codes for airman knowledge testing. Applicants should match the learning statement codes on the Airman Knowledge Test Report to these codes to review their areas of deficiency.

A list of reference materials has been prepared by CASAS to establish specific references for all knowledge standards and is to be used when preparing for an airman knowledge test. The list of reference materials is contained in the appendices to this Knowledge Test Guide.

An applicant's instructor is required to provide instruction on each of the knowledge areas listed on the Airman Knowledge Test Report and to complete an endorsement of this instruction. The Airman Knowledge Test Report must be presented to the test examiner prior to taking the skill test. During the oral portion of the skill test, the test examiner is required to evaluate the noted areas of deficiency.

Applicants requiring a duplicate Airman Knowledge Test Report due to loss or destruction of the original should send a signed request to Civil Aviation and Safety Authority Suriname, Personnel Licensing Division, P.O. Box 12587, Paramaribo, Suriname.

## **VALIDITY OF AIRMAN TEST REPORTS**

Airman Knowledge Test Reports for a pilot examiner designation are valid for 24 calendar months. The applicant should plan to complete the skill test during the 24 calendar month validity period. If the Airman Knowledge Test Report expires before completion of the skill test, the applicant must retake the knowledge test.

## **USE OF TEST AIDS AND MATERIALS**

Knowledge test applicants may use aids, reference materials, and test materials within the guidelines listed below. All models of aviation-oriented calculators may be used, including small electronic calculators that perform only arithmetic functions (add, subtract, multiply, and divide). Simple programmable memories, which allow addition to, subtraction from, or retrieval of one number from the memory, are permissible. Also, simple functions, such as square root and percent keys are permissible. The following guidelines apply:

1. Applicants may use any reference materials provided with the test. In addition, applicants may use scales, straightedges, protractors, plotters, navigation computers, log sheets, holding pattern entry aids, and electronic or mechanical calculators that are directly related to the test.
2. Manufacturers permanently inscribed instructions on the front and back of such aids, e.g., formulas, conversions, regulations, signals, weather data, holding pattern diagrams, frequencies, mass and balance formulas, and air traffic control procedures are permissible.
3. CASAS personnel may provide a calculator to applicants and/or deny use of the applicant's personal calculator based on the following limitations:
  - (a) Prior to, and upon completion of the test, while in the presence of the test examiner, applicants must actuate the ON/OFF switch and perform any other function that ensures erasure of any data stored in memory circuits, including removal of batteries.
  - (b) The use of electronic calculators incorporating permanent or continuous type memory circuits without erasure capability is prohibited. The test examiner may

- refuse the use of the applicant's calculator when unable to determine the calculator's erasure capability.
- (c) Printouts of data must be surrendered at the completion of the test if the calculator incorporates this design feature.
  - (d) The use of magnetic cards, magnetic tapes, modules, computer chips, or any other device upon which pre-written programs or information related to the test can be stored and retrieved is prohibited.
  - (e) Applicants are not permitted to use any booklet or manual containing instructions related to use of test aids.
4. Dictionaries are not permitted in the testing area.
  5. The CASAS test examiner makes the final determination relating to test materials and personal possessions the applicant may take into the testing area.

## **CHEATING OR OTHER UNAUTHORISED CONDUCT**

Knowledge testing must be carried out in accordance with the strictest security procedures to avoid test compromise. The CASAS test examiner will terminate a test at any time that he/she suspects that a cheating incident has occurred. A CASAS investigation will be conducted. If the investigation determines that cheating or unauthorised conduct has occurred, any airman licence, certificate, or rating the applicant holds may be revoked, and the applicant will be prohibited for 1 year from applying for or taking any test for a licence, certificate or rating under CARS Part 2.

## **RETESTING PROCEDURES**

Applicants who receive a grade lower than 80 percent and who wish to retest must present the following to CASAS testing center personnel when appearing for the purpose of retesting:

- A failed Airman Knowledge Test Report.
- A written endorsement from an authorised instructor certifying that additional instruction has been given, and the instructor finds the applicant competent to pass the test.
- A written authorisation from CASAS to retake the test.

Applicants possessing an Airman Knowledge Test Report with a score of 80 percent or higher who decide to retake the test in anticipation of a better score, may retake the test after 30 days from the date their last test was taken. CASAS will not allow applicants to retake a passed test before the 30-day period has lapsed. Prior to retesting, applicants will be required to surrender their current Airman Knowledge Test Report to the test examiner. The last test taken will reflect the official final score.

## **OBTAINING TRAINING AND TESTING PUBLICATIONS AND GENERAL INFORMATION**

Most of the current CASAS airman training and testing publications can be obtained in electronic format from CASAS at the CASAS website at <http://www.casas.sr>.

## **AIRMAN KNOWLEDGE TEST ITEMS**

Sample questions and their corresponding learning statements and codes are contained in the appendices to this test guide. They are representative of questions for airman knowledge tests. These will help airmen become familiar with similar questions found on the airman knowledge tests. The

knowledge test is not designed to intimidate any prospective airman; it is designed to measure the level of competency required to receive a CASAS licence, authorisation or rating. The list of reference materials contained in the appendices to this test guide is provided to ensure that instructors and students are able to determine the importance of the subject matter to be taught and learned.

## **COMPUTER TESTING SUPPLEMENTS**

The computer testing supplements contain the graphics, legends, and maps that are needed to successfully respond to certain knowledge test items. These supplements will be provided by CASAS test center personnel during the airman knowledge test.

## **KNOWLEDGE TEST GUIDES**

The knowledge test guides describe the knowledge testing policy and procedures for each licence area.

## **OTHER KNOWLEDGE TESTING INFORMATION**

Other knowledge testing information provides specific test information, such as test name, test code (three-digit test identifiers), number of questions, and the time (hours) allotted for each knowledge test. The test identifiers will assist airmen in selecting the proper test for the licence or rating being sought.

## **REFERENCE MATERIALS / LEARNING STATEMENT CODES**

The appendices of this guide contain the listings of reference materials and sample test questions with related learning statements used for airman knowledge testing. The listings of reference materials and sample questions have been prepared by CASAS to establish specific references for all knowledge standards. The listings contain reference materials to be used when preparing for all airman knowledge tests. The learning statements contained in Decision Director CASAS, No. 2-2006-PEL Revision 1, should be referred to when reviewing areas of deficiency on airman knowledge test reports.

## APPENDIX 1

### LIST OF DESIGNATED PILOT EXAMINER REFERENCE MATERIALS FOR ALL CERTIFICATIONS

The publications listed below contain study material applicants need to be familiar with when preparing for designated pilot examiner knowledge tests. Most of these publications can be purchased from CASAS or be downloaded from the CASAS web site at <http://www.casas.sr>. ICAO publications can be purchased from ICAO at <http://www.icao.int>. The latest revision of the listed references should be requested.

- ❑ The Suriname Civil Aviation Safety and Security Act of March 12, 2002
- ❑ Civil Aviation Regulations Suriname (CARS), in particular:
  - CARS Part 1 – General Policies, Procedures, and Policies
  - CARS Part 2 – Personnel Licensing
  - CARS Part 5 – Airworthiness
  - CARS Part 7 – Instruments and Equipment
  - CARS Part 8 – Operations
  - CARS Part 11 – Aerial Work
- ❑ Implementing Standards Part 2
- ❑ ICAO Annexes: 3, 10 Volume II, 11 and 14 (pertinent parts)
- ❑ ICAO Document 4444: General provisions, Aero Control service, Approach control service, Aerodrome control service, and Flight information and alerting service.
- ❑ Aeronautical Information Manual (AIM)
- ❑ Aeronautical Information Publication (AIP) for Suriname
- ❑ Aircraft Electricity and Electronics - Glencoe Division, Macmillan/McGraw-Hill Publication Company
- ❑ Airport/Facility Directory
- ❑ Automatic Flight Control
- ❑ Balloon Digest – Balloon Federal of America
- ❑ Balloon Ground School – Balloon Publishing Company
- ❑ Cameron Balloons Flight Manual – Cameron Balloons Limited

## APPENDIX 1 (CONTINUED)

### LIST OF DESIGNATED PILOT EXAMINER REFERENCE MATERIALS FOR ALL CERTIFICATIONS

- ❑ Enroute High Altitude Chart
- ❑ Enroute Low Altitude Chart
- ❑ Flight Theory for Pilots - IAP Inc. Publications
- ❑ GA 42 Airship Training Manual – Jeppesen Sanderson
- ❑ Goodyear Airship Operations Manual – Goodyear Publications
- ❑ How To Fly A Balloon The Balloonist’s Resource – Balloon Publishing Company
- ❑ Instrument Approach Procedure Chart
- ❑ Pilot’s Handbook for Navy Model ZP2K Airship and Handling Rigid Airships on the Ground
- ❑ Sectional Aeronautical Chart
- ❑ Transport Category Aircraft Systems - Jeppesen Sandersen
- ❑ U.S. Terminal Procedures (DP) (adopted in cooperation with FAA)
- ❑ FAA Accident Prevention Program Bulletins (adopted in cooperation with FAA)
- ❑ FAA AC 00-6 – Aviation Weather (adopted in cooperation with FAA)
- ❑ FAA AC 00-8 – Powerline Advisory Circular (adopted in cooperation with FAA)
- ❑ FAA AC 00-24 – Thunderstorms (adopted in cooperation with FAA)
- ❑ FAA AC 00-30 – Atmospheric Turbulence Avoidance (adopted in cooperation with FAA)
- ❑ FAA AC 00-45 – Aviation Weather Services (adopted in cooperation with FAA)
- ❑ FAA AC 00-54 – Pilot Wind Shear Guide (adopted in cooperation with FAA)
- ❑ FAA AC 20-43 – Aircraft Fuel Control (adopted in cooperation with FAA)
- ❑ FAA AC 20-103 – Aircraft Engine Crankshaft Failure (adopted in cooperation with FAA)
- ❑ FAA AC 20-117 – Hazards Following Ground Deicing (adopted in cooperation with FAA)
- ❑ FAA AC 60-22 – Aeronautical Decision Making (adopted in cooperation with FAA)

## APPENDIX 1 (CONTINUED)

### LIST OF DESIGNATED PILOT EXAMINER REFERENCE MATERIALS FOR ALL CERTIFICATIONS

- ❑ FAA AC 61-107 – Operations of Aircraft at Altitudes Above 25,000 Feet (adopted in cooperation with FAA)
- ❑ FAA AC 90-48 – Pilot’s Role in Collision Avoidance (adopted in cooperation with FAA)
- ❑ FAA AC 91-6 – Water, Slush, and Snow on the Runway (adopted in cooperation with FAA)
- ❑ FAA AC 91-13 – Cold Weather Operation of Aircraft (adopted in cooperation with FAA)
- ❑ FAA AC 91-43 – Unreliable Airspeed Indication (adopted in cooperation with FAA)
- ❑ FAA AC 103-4 – Hazard with Dry Ice Aboard Aircraft (adopted in cooperation with FAA)
- ❑ FAA AC 120-58 – Pilot Guide Large Aircraft Deicing (adopted in cooperation with FAA)
- ❑ FAA-H-8083-1 – Aircraft Weight and Balance (adopted in cooperation with FAA)
- ❑ FAA-H-8083-3 – Airplane Flying Handbook (adopted in cooperation with FAA)
- ❑ FAA-H-8083-9 – Aviation Instructor Handbook (adopted in cooperation with FAA)
- ❑ FAA-H-8083-11 – Balloon Flying Handbook (adopted in cooperation with FAA)
- ❑ FAA-H-8083-13 – Glider Flying Handbook (adopted in cooperation with FAA)
- ❑ FAA-H-8083-15 – Instrument Flying Handbook (adopted in cooperation with FAA)
- ❑ FAA-H-8083-21 – Rotorcraft Flying Handbook (adopted in cooperation with FAA)
- ❑ FAA-H-8083-25 – Pilot’s Handbook of Aeronautical Knowledge (adopted in cooperation with FAA)

## APPENDIX 2

### DESIGNATED PILOT EXAMINER - AEROPLANE (PEA) DESIGNATED PILOT EXAMINER - HELICOPTER (PER) DESIGNATED PILOT EXAMINER - AIRSHIP (PEL) DESIGNATED PILOT EXAMINER - BALLOON (PEB) DESIGNATED PILOT EXAMINER - GLIDER (PEG)

#### SUBJECT MATTER OUTLINE

The following outlines the major topics and underlying content areas on the Designated Pilot Examiner knowledge tests.

1. Air Law:
  - a. Rules and regulations relevant to the holder of (as applicable);
  - b. Rules of the air;
  - c. Appropriate air traffic services practices and procedures.
  
2. Aircraft General Knowledge:
  - a. General characteristics and limitations of electrical, hydraulic, pressurization and other aircraft systems;
  - b. Flight control systems, including autopilot and stability augmentation;
  - c. Principles of operation, handling procedures and operating limitations of aircraft powerplants;
  - d. Effects of atmospheric conditions on engine performance;
  - e. Relevant operational information from the flight manual or other appropriate document;
  - f. Operating procedures and limitations of appropriate aircraft;
  - g. Effects of atmospheric conditions on aircraft performance in accordance with the relevant operational information from the flight manual;
  - h. Use and serviceability checks of equipment and systems of the relevant category of aircraft;
  - i. Flight instruments;
  - j. Compasses, turning and acceleration errors;
  - k. Gyroscopic instruments, operational limits and precession effects;
  - l. Practices and procedures in the event of malfunctions of various flight instruments and electronic display units;
  - m. Maintenance procedures for airframes, systems and powerplants of appropriate aircraft;
  - n. For helicopter, transmission (power-trains).
  
3. Flight Performance, Planning and Loading:
  - a. Effects of loading and mass distribution on aircraft handling, flight characteristics and performance;
  - b. Mass and balance calculations;

## APPENDIX 2 (CONTINUED)

**DESIGNATED PILOT EXAMINER - AEROPLANE (PEA)**  
**DESIGNATED PILOT EXAMINER - HELICOPTER (PER)**  
**DESIGNATED PILOT EXAMINER - AIRSHIP (PEL)**  
**DESIGNATED PILOT EXAMINER - BALLOON (PEB)**  
**DESIGNATED PILOT EXAMINER - GLIDER (PEG)**

### SUBJECT MATTER OUTLINE

- c. Use and practical application of take-off, landing and other performance data, including procedures for cruise control;
  - d. Pre-flight and en-route operational flight planning;
  - e. Preparation and filing of air traffic services flight plans; appropriate air traffic services procedures;
  - f. Altimeter setting procedures;
  - g. In the case of helicopter, effects of external loading on handling.
4. Human Performance:
- a. Human performance relevant to the appropriate aircraft category;
  - b. Principles of threat and error management.
5. Meteorology:
- a. Interpretation and application of aeronautical meteorological reports, charts and forecasts;
  - b. Codes and abbreviations;
  - c. Use of, and procedures for obtaining, meteorological information, pre-flight and in-flight;
  - d. Altimetry;
  - e. Aeronautical meteorology;
  - f. Climatology of relevant areas in respect of the elements having an effect upon aviation;
  - g. The movement of pressure systems;
  - h. The structure of fronts, and the origin and characteristics of significant weather phenomena which affect take-off, en-route and landing conditions;
  - i. Causes, recognition and effects of icing;
  - j. Frontal zone penetration procedures;
  - k. Hazardous weather avoidance;
  - l. In the case of aeroplane, practical high altitude meteorology, including interpretation and use of weather reports, charts and forecasts;
  - m. Jet streams.

## APPENDIX 2 (CONTINUED)

**DESIGNATED PILOT EXAMINER - AEROPLANE (PEA)**  
**DESIGNATED PILOT EXAMINER - HELICOPTER (PER)**  
**DESIGNATED PILOT EXAMINER - AIRSHIP (PEL)**  
**DESIGNATED PILOT EXAMINER - BALLOON (PEB)**  
**DESIGNATED PILOT EXAMINER - GLIDER (PEG)**

### SUBJECT MATTER OUTLINE

6. Navigation:
  - a. Air navigation, including the use of aeronautical charts, radio navigation aids and area navigation systems;
  - b. Specific navigation requirements for long-range flights;
  - c. Use, limitation and serviceability of avionics and instruments necessary for the control and navigation of aircraft;
  - d. Use, accuracy and reliability of navigation systems used in departure, en-route, approach and landing phases of flight;
  - e. Identification of radio navigation aids;
  - f. Principles and characteristics of self-contained and external-referenced navigation systems; operation of airborne equipment.
  
7. Operation Procedures:
  - a. Application of threat and error management to operational performance;
  - b. Interpretation and use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;
  - c. Precautionary and emergency procedures;
  - d. Safety practices;
  - e. Operational procedures for carriage of freight and dangerous goods;
  - f. Requirements and practices for safety briefing to passengers, including precautions to be observed when embarking and disembarking from aircraft;
  - g. In the case of helicopter, settling with power, ground resonance, retreating blade stall, dynamic roll-over, and other operational hazards;
  - h. Safety procedures, associated with flight under VFR.
  
8. Principles of Flight:
  - a. Principles of flight relating to the appropriate aircraft category.
  
9. Radiotelephony:
  - a. Communication procedures and phraseology;
  - b. Action to be taken in case of communication failure.

## APPENDIX 2 (CONTINUED)

### DESIGNATED FLIGHT TEST EXAMINER - AEROPLANE (PEA)

#### SAMPLE QUESTIONS, ANSWERS AND LEARNING STATEMENTS

**1. If the landing gear on an aeroplane moves forward during retraction, the total moment will**

A – increase.

B – decrease.

C – remain the same.

**Answer B – Calculate mass and balance**

**2. A station is forecasting wind and temperature aloft at FL 390 to be 300° at 200 knots; temperature -54° C. How would this data be encoded in the FD?**

A – 300054.

B – 809954.

C – 309954.

**Answer B – Recall information on a Forecast Winds and Temperatures Aloft (FD)**

**3. When approaching an aerodrome with an operational control tower, at what point must two-way communications be established?**

A – When reaching a point 4 statute miles from the aerodrome reference point and at an altitude of 1,500 feet.

B – Prior to 5 nautical miles from the aerodrome when operating from the surface up to and including 1,500 feet.

C – At a point between 10 and 5 nautical miles from the aerodrome, or as indicated in the AIP.

**Answer B – Recall regulations - controlled / restricted airspace requirements**

**4. If poor aircraft controllability is experienced during an emergency go-around with full flaps, the cause is most probably due to**

A – excessive airspeed with full flaps extended.

B – the high-power, low-airspeed situation with the aeroplane trimmed for a full-flap configuration.

C – a reduction in the angle of attack with full flaps to the point where the aircraft control is greatly impaired.

**Answer B – Recall forces acting on aircraft - stability / controllability**

**5. The taxiway ending marker**

A – identifies area where aircraft are prohibited.

B – indicates taxiway does not continue.

C – provides general taxiing direction to named taxiway.

**Answer B – Recall aerodrome operations - markings / signs / lighting**

## APPENDIX 2 (CONTINUED)

### DESIGNATED FLIGHT TEST EXAMINER - HELICOPTER (PER)

#### SAMPLE QUESTIONS, ANSWERS AND LEARNING STATEMENTS

**1. Cross-country time, for the purpose of meeting the cross-country time requirements for**

A – a PPL licence, CPL licence, or an instrument rating, includes a landing at an aerodrome which must be a straight-line distance of more than 50 statute miles from the original point of departure.

B – a CPL licence, includes a landing at an aerodrome which must be a straight-line distance of 100 statute miles from the original point of departure.

C – a PPL licence, CPL licence, or an instrument rating, includes a landing at an aerodrome which must be a straight-line distance of more than 50 nautical miles from the original point of departure.

**Answer C – Recall Regulations - flight / duty time**

**2. The taxiway ending marker**

A – identifies area where aircraft are prohibited.

B – indicates taxiway does not continue.

C – provides general taxiing direction to named taxiway.

**Answer B – Recall aerodrome operations - markings / signs / lighting**

**3. Under what condition is indicated altitude the same as true altitude?**

A – If the altimeter has no mechanical error.

B – When at sea level under standard conditions.

C – When at 18,000 feet MSL with the altimeter set at 29.92.

**Answer B – Define altitude - absolute / true / indicated / density / pressure**

**4. Carburetor ice can form**

A – only at temperatures near freezing and the humidity near the saturation point.

B – when the outside air temperature is as high as 100° F and the humidity is as low as 50 percent.

C – at any temperature or humidity level.

**Answer B – Recall carburetor ice - factors affecting / causing**

**5. Ground resonance is most likely to occur when**

A – there is a sudden change in velocity of the plane of rotation..

B – a series of shocks cause the rotor system to become out of balance.

C – initial ground contact is made with a combination of high gross mass and low RPM.

**Answer B – Recall ground resonance - conditions to occur**

APPENDIX 2 (CONTINUED)

DESIGNATED FLIGHT TEST EXAMINER -AIRSHIP (PEL)

SAMPLE QUESTIONS, ANSWERS AND LEARNING STATEMENTS

**1. When must the holder of a licence notify the Authority of any permanent change of mailing address?**

A – Within 60 days, after that date the privileges of that licence may not be exercised.

B – Within 45 days, after that date the privileges of that licence may not be exercised.

C – Within 30 days, after that date the privileges of that licence may not be exercised.

**Answer C – Recall regulations - change of address**

**2. Under what condition is indicated altitude the same as true altitude?**

A – If the altimeter has no mechanical error.

B – When at sea level under standard conditions.

C – When at 18,000 feet MSL with the altimeter set at 29.92.

**Answer B – Define altitude - absolute / true / indicated / density / pressure**

**3. During pre-flight, the fuel vent system should always be checked to ensure the vent**

A – is closed.

B – is open.

C – system pressure is in the green range.

**Answer B – Recall fuel system - components / operating principles / characteristics**

**4. To rid itself of all the alcohol contained in one mixed drink, the human body requires about**

A – 1 hour.

B – 2 hours.

C – 3 hours.

**Answer C – Recall effects of alcohol on the body**

**5. The visibility entry in a terminal aerodrome forecast (TAF) of P6SM implies that the prevailing visibility is expected to be greater than**

A – 6 nautical miles.

B – 6 statute miles.

C – 6 kilometers.

**Answer B – Recall information on a Terminal Aerodrome Forecast (TAF)**

APPENDIX 2 (CONTINUED)

DESIGNATED FLIGHT TEST EXAMINER -BALLOON (PEB)

SAMPLE QUESTIONS, ANSWERS AND LEARNING STATEMENTS

**1. When must the holder of a licence notify the Authority of any permanent change of mailing address?**

A – Within 60 days, after that date the privileges of that licence may not be exercised.

B – Within 45 days, after that date the privileges of that licence may not be exercised.

C – Within 30 days, after that date the privileges of that licence may not be exercised.

**Answer C – Recall regulations - change of address**

**2. Under what condition is indicated altitude the same as true altitude?**

A – If the altimeter has no mechanical error.

B – When at sea level under standard conditions.

C – When at 18,000 feet MSL with the altimeter set at 29.92.

**Answer B – Define altitude - absolute / true / indicated / density / pressure**

**3. To rid itself of all the alcohol contained in one mixed drink, the human body requires about**

A – 1 hour.

B – 2 hours.

C – 3 hours.

**Answer C – Recall effects of alcohol on the body**

**4. When converting from true course to magnetic heading, a pilot should**

A – subtract easterly variation and right wind correction angle.

B – add westerly variation and subtract left wind correction angle.

C – subtract westerly variation and add right wind correction angle

**Answer B – Recall course / heading - effects of wind**

**5. The visibility entry in a terminal aerodrome forecast (TAF) of P6SM implies that the prevailing visibility is expected to be greater than**

A – 6 nautical miles.

B – 6 statute miles.

C – 6 kilometers.

**Answer B – Recall information on a Terminal Aerodrome Forecast (TAF)**

## APPENDIX 2 (CONTINUED)

### DESIGNATED FLIGHT TEST EXAMINER -GLIDER (PEG)

#### SAMPLE QUESTIONS, ANSWERS AND LEARNING STATEMENTS

**1. Under what condition is indicated altitude the same as true altitude?**

- A – If the altimeter has no mechanical error.
- B – When at sea level under standard conditions.
- C – When at 18,000 feet MSL with the altimeter set at 29.92.

**Answer B – Define altitude - absolute / true / indicated / density / pressure**

**2. If severe turbulence is encountered, the aircraft's airspeed should be reduced to**

- A – maneuvering speed.
- B – normal structural cruising speed.
- C – the minimum steady flight speed in the landing configuration.

**Answer A – Recall aircraft limitations - turbulent air penetration**

**3. Cross-country time, for the purpose of meeting the cross-country time requirements for**

- A – a PPL licence, CPL licence, or an instrument rating, includes a landing at an aerodrome which must be a straight-line distance of more than 50 statute miles from the original point of departure.
- B – a CPL licence, includes a landing at an aerodrome which must be a straight-line distance of 100 statute miles from the original point of departure.
- C – a PPL licence, CPL licence, or an instrument rating, includes a landing at an aerodrome which must be a straight-line distance of more than 50 nautical miles from the original point of departure.

**Answer C – Recall Regulations - flight / duty time**

**4. After 141 miles are flown from the departure point, the aircraft's position is located 11 miles off course. If 71 miles remain to be flown, what approximate total correction should be made to converge on the destination?**

- A – 8°.
- B – 11°.
- C – 14°.

**Answer C – Calculate aircraft performance - time/speed/distance/course/fuel/wind**

**5. To determine the freezing level and areas of probable icing aloft, you should refer to**

- A – an area forecast.
- B – an AIRMET or SIGMET.
- C – a weather depiction chart.

**Answer B – Recall information on AIRMETS / SIGMETS**