

DDC No. 6-2006-PEL Revision 1

# Private Pilot Licence Knowledge Test Guide

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





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

**No. 6-2006-PEL Revision 1**

**Decision Director CASAS**

Subject: Private Pilot Licence Knowledge Test Guide

**PREFACE**

This Decision Director CASAS, No. 6-2006-PEL Revision 1, dated January 20<sup>th</sup>, 2009, Private Pilot Knowledge Test Guide, provides information for applicants preparing for the Private Pilot knowledge tests. Appendices provide lists for each aircraft category of private pilot licencing with subject matter outlines, reference materials, and sample questions with learning statements 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

# PRIVATE PILOT KNOWLEDGE TEST GUIDE

## PURPOSE

The purpose of this Decision Director CASAS (DDC) is to provide guidance for applicants preparing to take Private Pilot 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 private pilot? Although some individuals possess more knowledge and skills than others, no one is a natural-born pilot. Competent pilots become so through study, training, and experience.

This knowledge test guide should answer most questions about taking a private pilot knowledge test 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 Knowledge Test 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:

- |  |     |
|--|-----|
| • Private Pilot – Aeroplane              | PAR |
| • Private Pilot – Aeroplane Conversion   | PCL |
| • Private Pilot – Aeroplane Validation   | PVL |
| • Private Pilot – Helicopter             | PRH |
| • Private Pilot – Helicopter Conversion  | PCH |
| • Private Pilot – Helicopter Validation  | PVH |
| • Private Pilot – Airship                | PLA |
| • Private Pilot – Airship Conversion     | PCA |
| • Private Pilot – Airship Validation     | PVA |
| • Private Pilot – Glider                 | PGL |
| • Private Pilot – Glider Conversion      | PCG |
| • Private Pilot – Glider Validation      | PVG |
| • Private Pilot – Balloon Gas            | PBG |
| • Private Pilot – Balloon Gas Conversion | PCB |
| • Private Pilot – Balloon Gas Validation | PVB |

- Private Pilot – Balloon Hot Air PBH
- Private Pilot – Balloon Hot Air Conversion PCT
- Private Pilot – Balloon Hot Air Validation PVT

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 pilot needs to operate safely in an ever increasingly complex airspace system.

## KNOWLEDGE TEST ELIGIBILITY REQUIREMENTS

Individuals pursuing a private pilot licence should review: Civil Aviation Regulations Suriname (CARS) Part 2, section 2.2.1, General; section 2.2.3, Validity; and section 2.2.4, Requirements for issue or validation. The applicant for a private pilot licence knowledge test in all categories other than balloon and glider shall not be less than 17 years old. In the balloon or glider categories the applicant shall not be less than 16 years old. The applicant must hold a CASAS Class 2 medical certificate.

## KNOWLEDGE AREAS ON THE TESTS

Private pilot tests are comprehensive because they must test the applicant’s knowledge in many subject areas.

Applicants pursuing a private pilot licence should review the appropriate regulations in CARS Part 2, section 2.3.3.2 (c), Knowledge areas, for the knowledge areas on the tests.

## 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 75 percent.**

The following tests each contain **60 questions**, and applicants are allowed a **maximum of 3.0 hours** to complete each test.

- Private Pilot – Aeroplane
- Private Pilot – Helicopter
- Private Pilot – Airship
- Private Pilot – Glider
- Private Pilot – Balloon - Gas
- Private Pilot – Balloon - Hot Air

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

- Private Pilot – Aeroplane Validation / Conversion
- Private Pilot – Helicopter Validation / Conversion
- Private Pilot – Airship Validation / Conversion
- Private Pilot – Glider Validation / Conversion
- Private Pilot – Balloon – Gas Validation / Conversion
- Private Pilot – Balloon – Hot Air Validation / Conversion

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 that 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 that 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 a private pilot licence. 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 code 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 Safety Authority Suriname, Personnel Licencing Division, P.O. Box 12587, Paramaribo, Suriname.

## **VALIDITY OF AIRMAN KNOWLEDGE TEST REPORTS**

Airman Knowledge Test Reports for a Private Pilot licence 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 75 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 75 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 PRIVATE PILOT REFERENCE MATERIALS FOR ALL CERTIFICATIONS

The publications listed below contain study material applicants need to be familiar with when preparing for private pilot 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 Definitions
  - CARS Part 2 – Personnel Licensing
  - CARS Part 5 – Airworthiness
  - CARS Part 7 – Instruments and Equipment
  - CARS Part 8 – Operations
  - CARS Part 11 – Aerial Work
- ❑ 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 PRIVATE PILOT 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 60-22 – Aeronautical Decision Making (adopted in cooperation with FAA)

## APPENDIX 1 (CONTINUED)

### LIST OF PRIVATE PILOT 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 91-43 – Unreliable Airspeed Indication (adopted in cooperation with FAA)
- ❑ FAA-H-8083-1 – Aircraft Weight and Balance Handbook (adopted in cooperation with FAA)
- ❑ FAA-H-8083-3 – Airplane Flying 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-8083-21 – 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

### PRIVATE PILOT - AEROPLANE (PAR)

#### SUBJECT MATTER OUTLINE

The following outlines the major topics and underlying content areas on the Private Pilot – Aeroplane knowledge test.

1. Air Law:
  - a. Rules and regulations relevant to the holder of a PPL;
  - b. Rules of the air;
  - c. Appropriate air traffic services practices and procedures.
2. Aircraft General Knowledge:
  - a. Principles of operation and functioning of powerplants, systems and instruments;
  - b. Operating limitations of aeroplanes and powerplants;
  - c. Relevant operational information from the flight manual or other appropriate document.
3. Flight Performance, Planning and Loading:
  - a. Effects of loading and mass distribution on flight characteristics;
  - b. Mass and balance calculations;
  - c. Use and practical application of take-off, landing and other performance data;
  - d. Pre-flight and en-route flight planning appropriate to private operations under VFR;
  - e. Preparation and filing of air traffic services flight plans;
  - f. Appropriate air traffic services procedures, position reporting procedures;
  - g. Altimeter setting procedures and operations in areas of high-density traffic.
4. Human Performance:
  - a. Human performance relevant to the Private Pilot – aeroplane;
  - b. Principles of threat and error management.
5. Meteorology:
  - a. Application of elementary aeronautical meteorology;
  - b. Use of, and procedures for obtaining, meteorological information, altimetry and hazardous weather conditions.
6. Navigation:
  - a. Practical aspects of air navigation and dead-reckoning techniques;
  - b. Use of aeronautical charts.
7. Operational Procedures:
  - a. Application of threat and error management to operational procedures;
  - b. Altimeter setting procedures;
  - c. Use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;
  - d. Appropriate precautionary and emergency procedures, including action to be taken to avoid hazardous weather, wake turbulence and other operating hazards.

**APPENDIX 2 (CONTINUED)**

**PRIVATE PILOT - AEROPLANE (PAR)**

**SUBJECT MATTER OUTLINE**

8. Principles of Flight:
  - a. Principles of flight relating to aeroplanes;
  - b. Flight characteristics and forces acting on an aircraft.
  
9. Radiotelephony:
  - a. Communication procedures and phraseology as applied to VFR operations;
  - b. Action to be taken in case of communication failure.

## APPENDIX 2 (CONTINUED)

### PRIVATE PILOT – AEROPLANE (PAR)

#### SAMPLE QUESTIONS, ANSWERS AND LEARNING STATEMENTS

**1. What minimum radio equipment is required for operation within controlled airspace?**

A – Two-way radio communications equipment and a 4096-code transponder.

B – Two-way radio communications equipment, a 4096-code transponder, and DME.

C – Two-way radio communications equipment having the aeronautic emergency frequency 121.5 MHz.

**Answer C – Learning Statement: Recall regulations - controlled / restricted airspace requirements**

**2. In the Northern Hemisphere, if an aircraft is accelerated or decelerated, the magnetic compass will normally indicate**

A – a turn momentarily.

B – correctly when on a north or south heading.

C – a turn toward the south.

**Answer B – Learning Statement: Recall flight instruments - magnetic compass**

**3. What is absolute altitude?**

A – The altitude read directly from the altimeter.

B – The vertical distance of the aircraft above the surface.

C – The height above the standard datum plane.

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

**4. The danger of spatial disorientation during flight in poor visual conditions may be reduced by**

A – shifting the eyes quickly between the exterior visual field and the instrument panel.

B – having faith in the instruments rather than taking a chance on the sensory organs.

C – leaning the body in the opposite direction of the motion of the aircraft.

**Answer B – Learning Statement: Recall physiological factors - spatial disorientation**

**5. How many Global Positioning System (GPS) satellites are required to yield a three dimensional position (latitude, longitude, and altitude) and time solution?**

A – 4.

B – 5.

C – 6.

**Answer A – Learning Statement: Recall radio - GPS / RNAV / RAIM**

## APPENDIX 3

### PRIVATE PILOT - AEROPLANE VALIDATION (PVL) PRIVATE PILOT - AEROPLANE CONVERSION (PCL)

#### SUBJECT MATTER OUTLINE

The following outlines the major topics and underlying content areas on the Private Pilot - Aeroplane Validation and Conversion knowledge tests.

1. Air Law:
  - a. Rules and regulations relevant to the holder of a PPL;
  - b. Rules of the air;
  - c. Appropriate air traffic services practices and procedures.
  
2. Meteorology:
  - a. Application of elementary aeronautical meteorology;
  - b. Use of, and procedures for obtaining, meteorological information, altimetry and hazardous weather conditions.
  
3. Operational Procedures:
  - a. Application of threat and error management to operational procedures;
  - b. Altimeter setting procedures;
  - c. Use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;
  - d. Appropriate precautionary and emergency procedures, including action to be taken to avoid hazardous weather, wake turbulence and other operating hazards.
  
4. Radiotelephony:
  - a. Communication procedures and phraseology as applied to VFR operations;
  - b. Action to be taken in case of communication failure.



## APPENDIX 3 (CONTINUED)

### PRIVATE PILOT - AEROPLANE VALIDATION (PVL) PRIVATE PILOT - AEROPLANE CONVERSION (PCL)

#### SAMPLE QUESTIONS, ANSWERS AND LEARNING STATEMENTS

**1. If an aircraft is involved in an accident which results in substantial damage to the aircraft, the nearest appropriate authority should be notified**

A – by the quickest available means.

B – within 48 hours.

C – within 72 hours.

**Answer A – Learning Statement: Recall regulations - immediate notification**

**2. What information is contained on a Convective SIGMET?**

A – Tornadoes, embedded thunderstorms, and hail  $\frac{3}{4}$  inch or greater in diameter.

B – Severe icing, severe turbulence, or widespread dust storms lowering visibility to less than 3 miles.

C – Surface winds greater than 40 knots or thunderstorms equal to or greater than video integrator processor (VIP) level 4.

**Answer A – Learning Statement: Recall information on AIRMETS / SIGMETS**

**3. Aerodrome taxiway edge lights are identified at night by**

A – white directional lights.

B – blue omnidirectional lights.

C – alternate red and green lights.

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

**4. If the aircraft's radio fails, what is the recommended procedure when landing at a controlled aerodrome?**

A – Observe the traffic flow, enter the pattern, and look for a light signal from the tower.

B – Enter a crosswind leg and rock the wings.

C – Flash the landing lights and cycle the landing gear while circling the aerodrome.

**Answer A – Learning Statement: Recall aerodrome traffic patterns - entry procedures**

## APPENDIX 4

### PRIVATE PILOT - HELICOPTER (PRH)

#### SUBJECT MATTER OUTLINE

The following outlines the major topics and underlying content areas on the Private Pilot – Helicopter knowledge test.

1. Air Law:
  - a. Rules and regulations relevant to the holder of a PPL;
  - b. Rules of the air;
  - c. Appropriate air traffic services practices and procedures.
2. Aircraft General Knowledge:
  - a. Principles of operation and functioning of powerplants, systems and instruments;
  - b. Operating limitations of helicopters and powerplants;
  - c. Relevant operational information from the flight manual or other appropriate document.
3. Flight Performance, Planning and Loading:
  - a. Effects of loading and mass distribution on flight characteristics;
  - b. Mass and balance calculations;
  - c. Use and practical application of take-off, landing and other performance data;
  - d. Pre-flight and en-route flight planning appropriate to private pilot operations under VFR;
  - e. Preparation and filing of air traffic services flight plans;
  - f. Appropriate air traffic services procedures, position reporting procedures;
  - g. Altimeter setting procedures and operations in areas of high-density traffic.
4. Human Performance:
  - a. Human performance relevant to the Private Pilot – helicopter;
  - b. Principles of threat and error management.
5. Meteorology:
  - a. Application of elementary aeronautical meteorology;
  - b. Use of, and procedures for obtaining, meteorological information, altimetry and hazardous weather conditions.
6. Navigation:
  - a. Practical aspects of air navigation and dead-reckoning techniques;
  - b. Use of aeronautical charts.

## APPENDIX 4 (CONTINUED)

### PRIVATE PILOT - HELICOPTER (PRH)

#### SUBJECT MATTER OUTLINE

7. Operational Procedures:
  - a. Application of threat and error management to operational procedures;
  - b. Altimeter setting procedures;
  - c. Use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;
  - d. Appropriate precautionary and emergency procedures, including action to be taken to avoid hazardous weather, wake turbulence and other operating hazards.
  
8. Principles of Flight:
  - a. Principles of flight relating to helicopters;
  - b. Flight characteristics and forces acting on an aircraft.
  
9. Radiotelephony:
  - a. Communication procedures and phraseology as applied to VFR operations;
  - b. Action to be taken in case of communication failure.

APPENDIX 4 (CONTINUED)

PRIVATE PILOT - HELICOPTER (PRH)

SAMPLE QUESTIONS, ANSWERS AND LEARNING STATEMENTS

**1. Who is responsible for determining if an aircraft is in condition for safe flight?**

A – A licenced aircraft mechanic.

B – The pilot in command.

C – The owner or operator.

**Answer B – Learning Statement:** Recall regulations – pilot-in-command authority / responsibility

**2. What type fuel can be substituted for an aircraft if the recommended octane is not available?**

A – The next higher octane aviation gas.

B – The next lower octane aviation gas.

C – Unleaded automotive gas of the same octane rating.

**Answer A – Learning Statement:** Recall fuel – types / characteristics / contamination / fueling / defueling / precautions

**3. (Refer to figure 47.) What is the best rate-of-climb speed for the helicopter?**

A – 24 MPH.

B – 40 MPH.

C – 57 MPH.

**Answer C – Learning Statement:** Recall information on a Height Velocity Diagram  
(See Appendix 14 for figure 47.)

**4. To get a complete weather briefing for the planned flight, the pilot should request**

A – a general briefing.

B – an abbreviated briefing.

C – a standard briefing.

**Answer C – Learning Statement:** Recall weather reporting systems – briefings / forecasts / reports

**5. When operating at high forward airspeeds, retreating blade stalls are more likely to occur under which condition?**

A – Low gross mass and low density altitude.

B – High RPM and low density altitude.

C – Steep turns in turbulent air.

**Answer C – Learning Statement:** Recall stalls – characteristics / factors / recovery / precautions

## APPENDIX 5

### PRIVATE PILOT - HELICOPTER VALIDATION (PVH) PRIVATE PILOT - HELICOPTER CONVERSION (PCH)

#### SUBJECT MATTER OUTLINE

The following outlines the major topics and underlying content areas on the Private Pilot - Helicopter Validation and Conversion knowledge tests.

1. Air Law:
  - a. Rules and regulations relevant to the holder of a PPL;
  - b. Rules of the air; appropriate air traffic services practices and procedures.
2. Meteorology:
  - a. Application of elementary aeronautical meteorology;
  - b. Use of, and procedures for obtaining, meteorological information, altimetry and hazardous weather conditions.
3. Operational Procedures:
  - a. Application of threat and error management to operational procedures;
  - b. Altimeter setting procedures;
  - c. Use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;
  - d. Appropriate precautionary and emergency procedures, including action to be taken to avoid hazardous weather, wake turbulence and other operating hazards.
4. Radiotelephony:
  - a. Communication procedures and phraseology as applied to VFR operations;
  - b. Action to be taken in case of communication failure.

## APPENDIX 5 (CONTINUED)

### PRIVATE PILOT - HELICOPTER VALIDATION (PVH) PRIVATE PILOT - HELICOPTER CONVERSION (PCH)

#### SAMPLE QUESTIONS, ANSWERS AND LEARNING STATEMENTS

**1. If a licenced pilot changes permanent mailing address and fails to notify the Civil Aviation Authority Suriname of the new address, the pilot is entitled to exercise the privileges of the pilot licence for a period of only**

A – 30 days after the date of the move.

B – 60 days after the date of the move.

C – 90 days after the date of the move.

**Answer A – Learning Statement: Recall regulations - change of address**

**2. Which type of weather briefing should a pilot request to supplement mass disseminated data?**

A – An outlook briefing.

B – A supplemental briefing.

C – An abbreviated briefing.

**Answer C – Learning Statement: Recall weather reporting systems - briefings / forecasts / reports**

**3. When exiting the runway, the runway exit sign indicates the**

A – direction to take-off runway.

B – direction to turn to exit runway onto named taxiway.

C – designation and direction of taxiway leading out of an intersection.

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

**4. Which of the frequency ranges below would be considered to be in the VHF frequency band?**

A – 3 MHz to 30 MHz.

B – 2850 KHz to 22000 KHz.

C – 30 MHz to 300 MHz.

**Answer C – Learning Statement: Recall radio system - licence requirements / frequencies**

## APPENDIX 6

### PRIVATE PILOT - AIRSHIP (PLA)

#### SUBJECT MATTER OUTLINE

The following outlines the major topics and underlying content areas on the Private Pilot – Airship knowledge test.

1. Air Law:
  - a. Rules and regulations relevant to the holder of a PPL;
  - b. Rules of the air;
  - c. Appropriate air traffic services practices and procedures.
2. Aircraft General Knowledge:
  - a. Principles of operation and functioning of powerplants, systems and instruments;
  - b. Operating limitations of airships and powerplants;
  - c. Relevant operational information from the flight manual or other appropriate document.
3. Flight Performance, Planning and Loading:
  - a. Effects of loading and mass distribution on flight characteristics;
  - b. Mass and balance calculations;
  - c. Use and practical application of take-off, landing and other performance data;
  - d. Pre-flight and en-route flight planning appropriate to private operations under VFR;
  - e. Preparation and filing of air traffic services flight plans;
  - f. Appropriate air traffic services procedures, position reporting procedures;
  - g. Altimeter setting procedures and operations in areas of high-density traffic.
4. Human Performance:
  - a. Human performance relevant to the Private Pilot – airship;
  - b. Principles of threat and error management.
5. Meteorology:
  - a. Application of elementary aeronautical meteorology;
  - b. Use of, and procedures for obtaining, meteorological information, altimetry and hazardous weather conditions.
6. Navigation:
  - a. Practical aspects of air navigation and dead-reckoning techniques;
  - b. Use of aeronautical charts.

## APPENDIX 6 (CONTINUED)

### PRIVATE PILOT - AIRSHIP (PLA)

#### SUBJECT MATTER OUTLINE

7. Operational Procedures:
  - a. Application of threat and error management to operational procedures;
  - b. Altimeter setting procedures;
  - c. Use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;
  - d. Appropriate precautionary and emergency procedures, including action to be taken to avoid hazardous weather, wake turbulence and other operating hazards.
  
8. Principles of Flight:
  - a. Principles of flight relating to airships;
  - b. Flight characteristics and forces acting on an aircraft.
  
9. Radiotelephony:
  - a. Communication procedures and phraseology as applied to VFR operations;
  - b. Action to be taken in case of communication failure.



APPENDIX 6 (CONTINUED)

PRIVATE PILOT - AIRSHIP (PLA)

SAMPLE QUESTIONS, ANSWERS AND LEARNING STATEMENTS

**1. What action is required when two aircraft of the same category converge, but not head-on?**

A – The faster aircraft shall give way.

B – The aircraft on the left shall give way.

C – Each aircraft shall give way to the right.

**Answer B – Learning Statement: Recall regulations - general right-of-way rules**

**2. The basic purpose of adjusting the fuel/air mixture at altitude is to**

A – decrease the amount of fuel in the mixture in order to compensate for increased air density.

B – decrease the fuel flow in order to compensate for decreased air density.

C – increase the amount of fuel in the mixture to compensate for the decrease in pressure and density of the air.

**Answer B – Learning Statement: Recall fuel - air mixture**

**3. What effect does high density altitude have on aircraft performance?**

A – It increases engine performance.

B – It reduces climb performance.

C – It increases takeoff performance.

**Answer B – Learning Statement: Recall aircraft performance - density altitude**

**4. Which statement best defines hypoxia?**

A – A state of oxygen deficiency in the body.

B – An abnormal increase in the volume of air breathed.

C – A condition of gas bubble formation around the joints or muscles.

**Answer A – Learning Statement: Recall physiological factors - cause / effects of hypoxia**

**5. One of the most easily recognized discontinuities across a front is**

A – a change in temperature.

B – an increase in cloud coverage.

C – an increase in relative humidity.

**Answer A – Learning Statement: Recall weather associated with frontal activity / air masses**

## APPENDIX 7

### PRIVATE PILOT - AIRSHIP VALIDATION (PVA) PRIVATE PILOT - AIRSHIP CONVERSION (PCA)

#### SUBJECT MATTER OUTLINE

The following outlines the major topics and underlying content areas on the Private Pilot - Airship Validation and Conversion knowledge tests.

1. Air Law:
  - a. Rules and regulations relevant to the holder of a PPL;
  - b. Rules of the air;
  - c. Appropriate air traffic services practices and procedures.
2. Meteorology:
  - a. Application of elementary aeronautical meteorology;
  - b. Use of, and procedures for obtaining, meteorological information, altimetry and hazardous weather conditions.
3. Operational Procedures:
  - a. Application of threat and error management to operational procedures;
  - b. Altimeter setting procedures;
  - c. Use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;
  - d. Appropriate precautionary and emergency procedures, including action to be taken to avoid hazardous weather, wake turbulence and other operating hazards.
4. Radiotelephony:
  - a. Communication procedures and phraseology as applied to VFR operations;
  - b. Action to be taken in case of communication failure.

APPENDIX 7 (CONTINUED)

PRIVATE PILOT - AIRSHIP VALIDATION (PVA)  
PRIVATE PILOT - AIRSHIP CONVERSION (PCA)

SAMPLE QUESTIONS, ANSWERS AND LEARNING STATEMENTS

**1. The definition of night is**

A – sunset to sunrise.

B – 1 hour before sunset to 1 hour after sunrise.

C – the time between the end of evening civil twilight and the beginning of morning civil twilight or such other period between sunset and sunrise.

**Answer C – Learning Statement: Recall regulations - definitions**

**2. To get a complete weather briefing for the planned flight, the pilot should request**

A – a general briefing.

B – an abbreviated briefing.

C – a standard briefing.

**Answer C – Recall weather reporting systems - briefings / forecasts / reports**

**3. During flight in an airship, when is vertical equilibrium established?**

A – When buoyancy is greater than airship mass.

B – When buoyancy equals airship mass.

C – When buoyancy is less than airship mass.

**Answer B – Recall airship - buoyancy**

**4. When should pilots decline a land and hold short (LAHSO) clearance?**

A – Pilots can not decline clearance.

B – Only when the tower operator concurs.

C – When it will compromise safety.

**Answer C – Learning Statement: Interpret ATC communications / instructions / terminology**

## APPENDIX 8

### PRIVATE PILOT - GLIDER (PGL)

#### SUBJECT MATTER OUTLINE

The following outlines the major topics and underlying content areas on the Private Pilot - Glider knowledge test.

1. Air Law:
  - a. Rules and regulations relevant to the holder of a PPL;
  - b. Rules of the air;
  - c. Appropriate air traffic services practices and procedures.
2. Aircraft General Knowledge:
  - a. Principles of systems and instruments;
  - b. Operating limitations of gliders;
  - c. Relevant operational information from the flight manual or other appropriate document.
3. Flight Performance, Planning and Loading:
  - a. Effects of loading and mass distribution on flight characteristics;
  - b. Mass and balance calculations;
  - c. Use and practical application of take-off, landing and other performance data;
  - d. Pre-flight and en-route flight planning appropriate to private pilot operations under VFR;
  - e. Preparation and filing of air traffic services flight plans;
  - f. Appropriate air traffic services procedures, position reporting procedures;
  - g. Altimeter setting procedures and operations in areas of high-density traffic.
4. Human Performance:
  - a. Human performance relevant to the Private Pilot – glider;
  - b. Principles of threat and error management.
5. Meteorology:
  - a. Application of elementary aeronautical meteorology;
  - b. Use of, and procedures for obtaining, meteorological information, altimetry and hazardous weather conditions.
6. Navigation:
  - a. Practical aspects of air navigation and dead-reckoning techniques;
  - b. Use of aeronautical charts.

**APPENDIX 8 (CONTINUED)**

**PRIVATE PILOT - GLIDER (PGL)**

**SUBJECT MATTER OUTLINE**

7. Operational Procedures:
  - a. Application of threat and error management to operational procedures;
  - b. Altimeter setting procedures;
  - c. Use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;
  - d. Appropriate precautionary and emergency procedures, including action to be taken to avoid hazardous weather, wake turbulence and other operating hazards.
  
8. Principles of Flight:
  - a. Principles of flight relating to gliders;
  - b. Flight characteristics and forces acting on an aircraft.
  
9. Radiotelephony:
  - a. Communication procedures and phraseology as applied to VFR operations;
  - b. Action to be taken in case of communication failure.

APPENDIX 8 (CONTINUED)

PRIVATE PILOT - GLIDER (PGL)

SAMPLE QUESTIONS, ANSWERS AND LEARNING STATEMENTS

**1. If a licenced pilot changes permanent mailing address and fails to notify the Civil Aviation Authority Suriname of the new address, the pilot is entitled to exercise the privileges of the pilot licence for a period of only**

A – 30 days after the date of the move.

B – 60 days after the date of the move.

C – 90 days after the date of the move.

**Answer A – Learning Statement: Recall regulations - visual flight rules and limitations**

**2. If it is necessary to set the altimeter from 29.15 to 29.85, what change occurs?**

A – 70-foot increase in indicated altitude.

B – 70-foot increase in density altitude.

C – 700-foot increase in indicated altitude.

**Answer C – Learning Statement: Recall altimeter - settings / setting procedures**

**3. What is absolute altitude?**

A – The altitude read directly from the altimeter.

B – The vertical distance of the aircraft above the surface.

C – The height above the standard datum plane.

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

**4. A sailplane has a best glide ratio of 30:1. How many nautical miles will the glider travel while losing 2,000 feet?**

A – 10 nautical miles.

B – 15 nautical miles.

C – 21 nautical miles.

**Answer A – Learning Statement: Calculate aircraft performance - glide**

**5. The suffix nimbus used in naming clouds, means?**

A – a cloud with extensive vertical development.

B – a rain cloud.

C – a middle cloud containing ice pellets.

**Answer B – Learning Statement: Recall cloud types - formation / resulting weather**

## APPENDIX 9

### PRIVATE PILOT - GLIDER VALIDATION (PVG) PRIVATE PILOT - GLIDER CONVERSION (PCG)

#### SUBJECT MATTER OUTLINE

The following outlines the major topics and underlying content areas on the Private Pilot - Glider Validation and Conversion knowledge tests.

1. Air Law:
  - a. Rules and regulations relevant to the holder of a PPL;
  - b. Rules of the air;
  - c. Appropriate air traffic services practices and procedures.
2. Meteorology:
  - a. Application of elementary aeronautical meteorology;
  - b. Use of, and procedures for obtaining, meteorological information, altimetry and hazardous weather conditions.
3. Operational Procedures:
  - a. Application of threat and error management to operational procedures;
  - b. Altimeter setting procedures;
  - c. Use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;
  - d. Appropriate precautionary and emergency procedures, including action to be taken to avoid hazardous weather, wake turbulence and other operating hazards.
4. Radiotelephony:
  - a. Communication procedures and phraseology as applied to VFR operations;
  - b. Action to be taken in case of communication failure.

## APPENDIX 9 (CONTINUED)

### PRIVATE PILOT - GLIDER VALIDATION (PVG) PRIVATE PILOT - GLIDER CONVERSION (PCG)

#### SAMPLE QUESTIONS, ANSWERS AND LEARNING STATEMENTS

**1. With respect to the Personnel Licencing, which is a class of aircraft?**

- A – Aeroplane, helicopter, glider, lighter-than-air.
- B – Single-engine land and sea, multiengine land and sea.
- C – Lighter-than-air, airship, hot air balloon, gas balloon.

**Answer B – Learning Statement: Recall regulations - aircraft Category / Class**

**2. What is indicated when a current Convective SIGMET forecasts thunderstorms?**

- A – Moderate thunderstorms covering 30 percent of the area.
- B – Moderate or severe turbulence.
- C – Thunderstorms obscured by massive cloud layers.

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

**3. When landing behind a large aircraft, the pilot should avoid wake turbulence by staying**

- A – above the large aircraft's final approach path and landing beyond the large aircraft's touchdown point.
- B – below the large aircraft's final approach path and landing before the large aircraft's touchdown point.
- C – above the large aircraft's final approach path and landing before the large aircraft's touchdown point.

**Answer A – Learning Statement: Recall wake turbulence - characteristics / avoidance techniques**

**4. A non-tower satellite aerodrome, within the same Class D airspace as the designated for the primary airport, requires radio communications be established and maintained with the**

- A – satellite aerodrome's UNICOM.
- B – associated Flight Service Station.
- C – primary aerodrome's control tower.

**Answer C – Learning Statement: Recall airspace classes - limits / requirements / restrictions / airspeeds / equipment**



## APPENDIX 10

### PRIVATE PILOT - BALLOON GAS (PBG)

#### SUBJECT MATTER OUTLINE

The following outlines the major topics and underlying content areas on the Private Pilot - Balloon Gas knowledge test.

1. Air Law:
  - a. Rules and regulations relevant to the holder of a PPL;
  - b. Rules of the air;
  - c. Appropriate air traffic services practices and procedures.
2. Aircraft General Knowledge:
  - a. Principles of systems and instruments;
  - b. Operating limitations of gas balloons;
  - c. Relevant operational information from the flight manual or other appropriate document.
3. Flight Performance, Planning and Loading:
  - a. Effects of loading and mass distribution on flight characteristics;
  - b. Mass and balance calculations;
  - c. Use and practical application of take-off, landing and other performance data;
  - d. Pre-flight and en-route flight planning appropriate to private pilot operations under VFR;
  - e. Preparation and filing of air traffic services flight plans;
  - f. Appropriate air traffic services procedures, position reporting procedures;
  - g. Altimeter setting procedures and operations in areas of high-density traffic.
4. Human Performance:
  - a. Human performance relevant to the Private Pilot – Balloon Gas;
  - b. Principles of threat and error management.
5. Meteorology:
  - a. Application of elementary aeronautical meteorology;
  - b. Use of, and procedures for obtaining, meteorological information, altimetry and hazardous weather conditions.
6. Navigation:
  - a. Practical aspects of air navigation and dead-reckoning techniques;
  - b. Use of aeronautical charts.

**APPENDIX 10 (CONTINUED)**

**PRIVATE PILOT - BALLOON GAS (PBG)**

**SUBJECT MATTER OUTLINE**

7. Operational Procedures:
  - a. Application of threat and error management to operational procedures;
  - b. Altimeter setting procedures;
  - c. Use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;
  - d. Appropriate precautionary and emergency procedures, including action to be taken to avoid hazardous weather, wake turbulence and other operating hazards.
  
8. Principles of Flight:
  - a. Principles of flight relating to gas balloons;
  - b. Flight characteristics and forces acting on a balloon.
  
9. Radiotelephony:
  - a. Communication procedures and phraseology as applied to VFR operations;
  - b. Action to be taken in case of communication failure.

APPENDIX 10 (CONTINUED)

PRIVATE PILOT - BALLOON GAS (PBG)

SAMPLE QUESTIONS, ANSWERS AND LEARNING STATEMENTS

**1. The definition of night is**

A – sunset to sunrise.

B – 1 hour before sunset to 1 hour after sunrise.

C – the time between the end of evening civil twilight and the beginning of morning civil twilight or such other period between sunset and sunrise.

**Answer C – Learning Statement: Recall regulations - definitions**

**2. What effect, if any, does high humidity have on aircraft performance?**

A – It increases performance.

B – It decreases performance.

C – It has no effect on performance.

**Answer B – Recall aircraft performance - atmospheric effects**

**3. When a stressful situation is encountered in flight, an abnormal increase in the volume of air breathed in and out can cause a condition know as**

A – hyperventilation.

B – aero sinusitis.

C – aerotitis.

**Answer A – Learning Statement: Recall physiological factors - hyperventilation**

**4. Which type of weather briefing should a pilot request to supplement mass disseminated data?**

A – An outlook briefing.

B – A supplemental briefing.

C – An abbreviated briefing.

**Answer C – Learning Statement: Recall weather reporting systems - briefings / forecasts / reports**

**5. Normal VFR operations in Class D airspace with an operating control tower require the ceiling and visibility to be at least**

A – 1,000 feet and 1 statute mile.

B – 1,000 feet and 3 nautical miles.

C – 1,500 feet and 3 statute miles.

**Answer C – Learning Statement: Recall airspace requirements - visibility / cloud clearance**

## APPENDIX 11

### PRIVATE PILOT - BALLOON GAS VALIDATION (PVB) PRIVATE PILOT - BALLOON GAS CONVERSION (PCB)

#### SUBJECT MATTER OUTLINE

The following outlines the major topics and underlying content areas on the Private Pilot - Balloon Gas Validation and Conversion knowledge tests.

1. Air Law:
  - a. Rules and regulations relevant to the holder of a PPL;
  - b. Rules of the air;
  - c. Appropriate air traffic services practices and procedures.
  
2. Meteorology:
  - a. Application of elementary aeronautical meteorology;
  - b. Use of, and procedures for obtaining, meteorological information, altimetry and hazardous weather conditions.
  
3. Operational Procedures:
  - a. Application of threat and error management to operational procedures;
  - b. Altimeter setting procedures;
  - c. Use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;
  - d. Appropriate precautionary and emergency procedures, including action to be taken to avoid hazardous weather, wake turbulence and other operating hazards.
  
4. Radiotelephony:
  - a. Communication procedures and phraseology as applied to VFR operations;
  - b. Action to be taken in case of communication failure.

APPENDIX 11 (CONTINUED)

PRIVATE PILOT - BALLOON GAS VALIDATION (PVB)  
PRIVATE PILOT - BALLOON GAS CONVERSION (PCB)

SAMPLE QUESTIONS, ANSWERS AND LEARNING STATEMENTS

**1. Who is responsible for determining if an aircraft is in condition for flight?**

A – A licenced aircraft maintenance technician.

B – The pilot in command.

C – The owner or operator.

**Answer B – Learning Statement: Recall regulations - pilot-in-command authority / responsibility**

**2. Low-level turbulence can occur and icing can become hazardous in which type of fog?**

A – Rain-induced fog.

B – Upslope fog.

C – Steam fog.

**Answer C – Learning Statement: Recall fog - types / formation / resulting weather**

**3. A non-tower satellite aerodrome within the same Class D airspace as the designated for the primary aerodrome, requires radio communications be established and maintained with the**

A – satellite aerodrome's UNICOM.

B – associated Flight Service Station.

C – primary aerodrome's control tower.

**Answer C – Learning Statement: Recall airspace classes - limits / requirements / restrictions / airspeeds / equipment**

**4. Normal VFR operations in Class D airspace with an operating control tower require the ceiling and visibility to be at least**

A – 1,000 feet and 1 statute mile.

B – 1,000 feet and 3 nautical miles.

C – 1,500 feet and 3 statute miles.

**Answer C – Learning Statement: Recall airspace requirements - visibility / cloud clearance**

## APPENDIX 12

### PRIVATE PILOT - BALLOON HOT AIR (PBH)

#### SUBJECT MATTER OUTLINE

The following outlines the major topics and underlying content areas on the Private Pilot – Balloon Hot Air knowledge test.

1. Air Law:
  - a. Rules and regulations relevant to the holder of a PPL;
  - b. Rules of the air;
  - c. Appropriate air traffic services practices and procedures.
2. Aircraft General Knowledge:
  - a. Principles of systems and instruments;
  - b. Operating limitations of hot air balloons;
  - c. Relevant operational information from the flight manual or other appropriate document.
3. Flight Performance, Planning and Loading:
  - a. Effects of loading and mass distribution on flight characteristics;
  - b. Mass and balance calculations;
  - c. Use and practical application of take-off, landing and other performance data;
  - d. Pre-flight and en-route flight planning appropriate to private pilot operations under VFR;
  - e. Preparation and filing of air traffic services flight plans;
  - f. Appropriate air traffic services procedures, position reporting procedures;
  - g. Altimeter setting procedures and operations in areas of high-density traffic.
4. Human Performance:
  - a. Human performance relevant to the Private Pilot – Balloon Hot Air;
  - b. Principles of threat and error management.
5. Meteorology:
  - a. Application of elementary aeronautical meteorology;
  - b. Use of, and procedures for obtaining, meteorological information, altimetry and hazardous weather conditions.
6. Navigation:
  - a. Practical aspects of air navigation and dead-reckoning techniques;
  - b. Use of aeronautical charts.

**APPENDIX 12 (CONTINUED)**

**PRIVATE PILOT - BALLOON HOT AIR (PBH)**

**SUBJECT MATTER OUTLINE**

7. Operational Procedures:
  - a. Application of threat and error management to operational procedures;
  - b. Altimeter setting procedures;
  - c. Use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;
  - d. Appropriate precautionary and emergency procedures, including action to be taken to avoid hazardous weather, wake turbulence and other operating hazards.
  
8. Principles of Flight:
  - a. Principles of flight relating to hot air balloons;
  - b. Flight characteristics and forces acting on a balloon.
  
9. Radiotelephony:
  - a. Communication procedures and phraseology as applied to VFR operations;
  - b. Action to be taken in case of communication failure.

## APPENDIX 12 (CONTINUED)

### PRIVATE PILOT - BALLOON HOT AIR (PBH)

#### SAMPLE QUESTIONS, ANSWERS AND LEARNING STATEMENTS

**1. If a licenced pilot changes permanent mailing address and fails to notify the Civil Aviation Authority Suriname of the new address, the pilot is entitled to exercise the privileges of the pilot licence for a period of only**

A – 30 days after the date of the move.

B – 60 days after the date of the move.

C – 90 days after the date of the move.

**Answer A – Learning Statement: Recall regulations - change of address**

**2. What is absolute altitude?**

A – The altitude read directly from the altimeter.

B – The vertical distance of the aircraft above the surface.

C – The height above the standard datum plane.

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

**3. What is one procedure for relighting the burner while in flight?**

A – Open the regulator or blast valve full open and light the pilot light.

B – Close the tank valves, vent the fuel lines, reopen the tank valves, and light the pilot light.

C – Open another tank valve, open the regulator or blast valve, and light the main jets with reduced flow.

**Answer C – Learning Statement: Recall emergency conditions / procedures**

**4. What is the relationship of false lift with the wind?**

A – False lift increases as the wind accelerates the balloon.

B – False lift does not exist if the surface winds are calm.

C – False lift decreases as the wind accelerates the balloon.

**Answer C – Learning Statement: Recall forces acting on aircraft - airspeed / air density / lift / drag**



## APPENDIX 13

### PRIVATE PILOT - BALLOON HOT AIR VALIDATION (PVT) PRIVATE PILOT - BALLOON HOT AIR CONVERSION (PCT)

#### SUBJECT MATTER OUTLINE

The following outlines the major topics and underlying content areas on the Private Pilot - Balloon Hot Air Validation and Conversion knowledge tests.

1. Air Law:
  - a. Rules and regulations relevant to the holder of a PPL;
  - b. Rules of the air;
  - c. Appropriate air traffic services practices and procedures.
  
2. Meteorology:
  - a. Application of elementary aeronautical meteorology;
  - b. Use of and procedures for obtaining meteorological information altimetry and hazardous weather conditions.
  
3. Operational Procedures:
  - a. Application of threat and error management to operational procedures;
  - b. Altimeter setting procedures;
  - c. Use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;
  - d. Appropriate precautionary and emergency procedures, including action to be taken to avoid hazardous weather, wake turbulence and other operating hazards.
  
4. Radiotelephony:
  - a. Communication procedures and phraseology as applied to VFR operations;
  - b. Action to be taken in case of communication failure.

**APPENDIX 13 (CONTINUED)**

**PRIVATE PILOT - BALLOON HOT AIR VALIDATION (PVT)  
PRIVATE PILOT - BALLOON HOT AIR CONVERSION (PCT)**

**SAMPLE QUESTIONS, ANSWERS AND LEARNING STATEMENTS**

**1. If a licenced pilot changes permanent mailing address and fails to notify the Civil Aviation Authority Suriname of the new address, the pilot is entitled to exercise the privileges of the pilot licence for a period of only**

A – 30 days after the date of the move.

B – 60 days after the date of the move.

C – 90 days after the date of the move.

**Answer A – Learning Statement: Recall regulations - change of address**

**2. Low-level turbulence can occur and icing can become hazardous in which type of fog?**

A – Rain-induced fog.

B – Upslope fog.

C – Steam fog.

**Answer C – Learning Statement: Recall fog - types / formation / resulting weather**

**3. What is one procedure for relighting the burner while in flight?**

A – Open the regulator or blast valve full open and light the pilot light.

B – Close the tank valves, vent the fuel lines, reopen the tank valves, and light the pilot light.

C – Open another tank valve, open the regulator or blast valve, and light the main jets with reduced flow.

**Answer C – Learning Statement: Recall emergency conditions / procedures**

APPENDIX 14

FIGURES FOR SAMPLE QUESTIONS IN THIS PUBLICATION

APPENDIX 4, QUESTION NUMBER 3, FIGURE 47:

