U.S. Department of Transportation

Federal Aviation Administration

## **PRIVATE PILOT**

### **Practical Test Standards**

for

POWERED PARACHUTE (PPL and PPS)

WEIGHT SHIFT CONTROL (WSCL and WSCS)

December 2004

FLIGHT STANDARDS SERVICE Washington, DC 20591

## PRIVATE PILOT POWERED PARACHUTE

and

**WEIGHT SHIFT CONTROL** 

**Practical Test Standards** 

2004

FLIGHT STANDARDS SERVICE Washington, DC 20591

#### **NOTE**

Material in FAA-S-8081-32 will be effective December 1, 2004.

#### **FOREWORD**

The Private Pilot Practical Test Standards (PTS) for Powered Parachute and Weight Shift Control has been published by the Federal Aviation Administration (FAA) to establish the standards for private pilot certification practical tests for the powered parachute category (land and sea) and weight shift control category (land and sea). FAA inspectors and designated pilot examiners shall conduct practical tests in compliance with these standards. Flight instructors and applicants should find these standards helpful during training and when preparing for the practical test.

/s/ 1-13/2005

Joseph K. Tintera, Manager Regulatory Support Division Flight Standards Service

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#### INTRODUCTION

#### **General Information**

The Flight Standards Service of the Federal Aviation Administration (FAA) has developed this practical test book as the standard that shall be used by FAA inspectors and designated pilot examiners when conducting private pilot powered parachute and weight shift control practical tests. Flight instructors are also expected to use this book when preparing applicants for practical tests. Applicants should be familiar with this book and refer to these standards during their training.

Information considered directive in nature is described in this practical test book in terms, such as "shall" and "must" indicating the actions are mandatory. Guidance information is described in terms, such as "should" and "may" indicating the actions are desirable or permissive, but not mandatory.

The FAA gratefully acknowledges the valuable assistance provided by many individuals and organizations throughout the aviation community who contributed their time and talent in assisting with the development of this practical test standard.

This practical test standard may be purchased from the Superintendent of Documents, U.S. Government Printing Office (GPO), Washington, DC 20402-9325, or from <a href="http://bookstore.gpo.gov">http://bookstore.gpo.gov</a>. This PTS is also available for download, in pdf format, from the Flight Standards Service web site at <a href="http://av-info.faa.gov">http://av-info.faa.gov</a>.

This practical test standard is published by the U.S. Department of Transportation, Federal Aviation Administration, Airman Testing Standards Branch, AFS-630, P.O. Box 25082, Oklahoma City, OK 73125. Comments regarding this handbook should be sent, in e-mail form, to AFS630comments@faa.gov.

#### **Practical Test Standards Concept**

Title 14 of the Code of Federal Regulations (14 CFR) part 61 specifies the AREAS OF OPERATION in which knowledge and skill must be demonstrated by the applicant before the issuance of a Private Pilot Certificate or rating. The CFRs provide the flexibility to permit the FAA to publish practical test standards containing the AREAS OF OPERATION and specific TASKs in which pilot competency shall be demonstrated. The FAA shall revise this book whenever it is determined that changes are needed in the interest of safety. Adherence to the provisions of the regulations and the practical test standards is mandatory for the evaluation of private pilot applicants.

#### **Practical Test Book Description**

This test book contains the following Private Pilot Practical Test Standards:

Section 1—Powered Parachute Land and Sea Section 2—Weight Shift Control Land and Sea

The Private Pilot Powered Parachute and Weight Shift Control Practical Test Standards includes the AREAS OF OPERATION and TASKs for the issuance of an initial Private Pilot Certificate and for the addition of category ratings and/or class ratings to that certificate.

#### **Practical Test Standards Description**

AREAS OF OPERATION are phases of the practical test arranged in a logical sequence within each standard. They begin with Preflight Preparation and end with Postflight Procedures. The examiner may conduct the practical test in any sequence that will result in a complete and efficient test. However, the ground portion of the practical test **shall** be accomplished before the flight portion.

TASKs are titles of knowledge areas, flight procedures, or maneuvers appropriate to an AREA OF OPERATION. The abbreviation(s) within parentheses immediately following a TASK refer to the category and/or class aircraft appropriate to that TASK. The meaning of each abbreviation is as follows.

PPL Powered Parachute Land
PPS Powered Parachute Sea
WSCL Weight Shift Control Land
WSCS Weight Shift Control Sea

When administering a test using this practical test standard, the TASKs appropriate to the class airplane (PPL, PPS, WSCL, or WSCS) used for the test shall be included in the plan of action.

NOTE is used to emphasize special considerations required in the AREA OF OPERATION or TASK.

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

These practical test standards are based on the following references.

14 CFR part 43	Maintenance, Preventive Maintenance, Rebuilding, and Alteration
14 CFR part 61	Certification: Pilots, Flight Instructors, and
14 Of IX part of	Ground Instructors
14 CFR part 91	General Operating and Flight Rules
AC 00-6	Aviation Weather
AC 00-45	Aviation Weather Services
AC 61-65	Certification: Pilot and Flight Instructors and
	Ground Instructors
AC 61-67	Stall and Spin Awareness Training
AC 61-84	Role of Preflight Preparation
AC 61-134	General Aviation Controlled Flight Into Terrain
	Awareness
AC 90-23	Aircraft Wake Turbulence
AC 90-48	Pilots' Role in Collision Avoidance
AC 90-66	Recommended Standard Traffic Patterns and
	Practices for Aeronautical Operations At
	Airports Without Operating Control Towers
AC 91-69	Seaplane Safety for FAR Part 91 Operations
AC 120-51	Crew Resource Management Training
FAA-H-8083-1	Aircraft Weight and Balance Handbook
FAA-H-8083-3	Airplane Flying Handbook
FAA-H-8083-9	Aviation Instructor's Handbook
FAA-H-8083-15	Instrument Flying Handbook
FAA-H-8083-23	Seaplane, Skiplane and Float/Ski Equipped
	Helicopter Flying Handbook
FAA-H-8083-25	Pilot's Handbook of Aeronautical Knowledge
AIM	Aeronautical Information Manual
AFD	Airport Facility Directory
NOTAMs	Notices to Airmen

#### PPC Flight Manual Trike Flight Manual Other

The Powered Parachute Bible—Begue'
Trikes – The Flex-Wing Flyers—Bartosik

Pilot Operating Handbook/ FAA-Approved Flight Manual Aeronautical Navigation Charts

Seaplane Supplement

The Objective lists the elements that must be satisfactorily performed to demonstrate competency in a TASK. The Objective includes:

- 1. specifically what the applicant should be able to do;
- 2. conditions under which the TASK is to be performed; and
- 3. acceptable performance standards.

#### **Abbreviations**

14 CFR Title 14 of the Code of Federal Re	egulations
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AC Advisory Circular

ADM Aeronautical Decision Making AFD Airport Facility Directory AFM Airplane Flight Manual

AFSS Automated Flight Service Station

AGL Above Ground Level

AIM Aeronautical Information Manual ASEL Airplane Single Engine Land ASES Airplane Single Engine Sea

ASOS Automated Surface Observing System

ATC Air Traffic Control

ATIS Automatic Terminal Information Service AWOS Automated Weather Observing System

CFIT Controlled Flight into Terrain
CRM Cockpit Resource Management
CTAF Common Traffic Advisory Frequency

FA Area Weather Forecast

FAA Federal Aviation Administration GPO Government Printing Office

METAR Meteorological Aviation Report (Routine)

NOTAM Notices to Airmen

NTSB National Transportation Safety Board

PPC Powered Parachute
PPL Powered Parachute Land
PPS Powered Parachute Sea
POH Pilot Operating Handbook
PTS Practical Test Standard
RPM Revolutions per Minute

SS Single-seat

SUA Special Use Airspace
TAF Terminal Aviation Forecast
TFR Temporary Flight Restrictions

VFR Visual Flight Rules

WSCL Weight Shift Control Land WSCS Weight Shift Control Sea

#### Use of the Practical Test Standards Book

The FAA requires that all private pilot practical tests be conducted in accordance with the appropriate private practical test standards and the policies set forth in the INTRODUCTION. Applicants shall be evaluated in **ALL** TASKs included in each AREA OF OPERATION of the appropriate practical test standard, unless otherwise noted.

An applicant, who holds at least a Private Pilot Certificate seeking an additional airplane category rating and/or class rating at the private pilot level, shall be evaluated in the AREAS OF OPERATION and TASKs listed in the Additional Ratings Task Table. At the discretion of the examiner, an evaluation of the applicant's competence in the remaining AREAS OF OPERATION and TASKs may be conducted.

If the applicant holds two or more category or class ratings at least at the private level, and the ratings table indicates differing required TASKS, the "least restrictive" entry applies. For example, if "ALL" and "NONE" are indicated for one AREA OF OPERATION, the "NONE" entry applies. If "B" and "B, C" are indicated, the "B" entry applies.

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

The examiner is not required to follow the precise order in which the AREAS OF OPERATION and TASKs appear in this book. The examiner may change the sequence or combine TASKs with similar Objectives to have an orderly and efficient flow of the practical test. For example, Radio Communications and ATC Light Signals may be combined with Traffic Patterns. The examiner's "plan of action" shall include the order and combination of TASKs to be demonstrated by the applicant in a manner that will result in an efficient and valid test.

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

#### **Special Emphasis Areas**

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

- 1. positive aircraft control;
- procedures for positive exchange of flight controls (who is flying the aircraft);
- 3. stall and spin awareness (if appropriate);
- collision avoidance;
- 5. wake turbulence and low level wind shear avoidance;
- 6. runway incursion avoidance;
- 7. controlled flight into terrain (CFIT);
- 8. aeronautical decision making/risk management;
- 9. checklist usage:
- 10. spatial disorientation;
- 11. temporary flight restrictions (TFR);
- 12. special use airspace (SUA):
- 13. aviation security: and
- 14. other areas deemed appropriate to any phase of the practical test.

Although these areas may not be specifically addressed under each TASK, they are essential to flight safety and will be evaluated during the practical test. In all instances, the applicant's actions will be evaluated in accordance to the standards of the TASKs and the ability to use good judgment with reference to the special emphasis areas listed above.

## Private Pilot—Powered Parachute and Weight Shift Control Practical Test Prerequisites

An applicant for the private pilot powered parachute or a weight shift control practical test is required by 14 CFR part 61 to:

- be at least 17 years of age;
- be able to read, speak, write, and understand the English language. If there is a doubt, use AC 60-28, English Language Skill Standards;
- have passed the appropriate private pilot knowledge test since the beginning of the 24th month before the month in which he or she takes the practical test;
- 4. have satisfactorily accomplished the required training and obtained the aeronautical experience prescribed;
- 5. possess at least a current third class medical certificate;

- have an endorsement from an authorized instructor certifying that the applicant has received and logged training time within 60 days preceding the date of application in preparation for the practical test, and is prepared for the practical test; and
- 7. have an endorsement certifying that the applicant has demonstrated satisfactory knowledge of the subject areas in which the applicant was deficient on the airman knowledge test.

#### Aircraft and Equipment Required for the Practical Test

The private pilot airplane applicant is required by 14 CFR part 61, section 61.45, to provide an aircraft that has a current Airworthiness Certificate and is in condition for safe flight for use during the practical test. This section further requires that the aircraft must:

- be of U.S., foreign or military registry of the same category, class, and type, if applicable, for the certificate and/or rating for which the applicant is applying;
- 2. have fully functioning dual controls, except as provided for in 14 CFR section 61.45(c) and (e);
- be capable of performing all AREAS OF OPERATION appropriate to the rating sought and have no operating limitations, which prohibit its use in any of the AREAS OF OPERATION, required for the practical test;
- 4. have an altitude and an airspeed indicating system, as appropriate, for all tasks that require demonstration of skill within an altitude/airspeed tolerance; and
- 5. at least two pilot stations with adequate visibility for each person to operate the aircraft safely, except as provided for in 14 CFR part 61, section 61-45 (b), (1), (iii).

#### Flight Instructor Responsibility

An appropriately rated flight instructor is responsible for training the private pilot applicant to acceptable standards in **ALL** subject matter areas, procedures, and maneuvers included in the TASKs within each AREA OF OPERATION in the appropriate private pilot practical test standard.

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

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

#### Examiner<sup>1</sup> Responsibility

The examiner conducting the practical test is responsible for determining that the applicant meets the acceptable standards of knowledge and skill of each TASK within the appropriate practical test standard. Since there is no formal division between the "oral" and "skill" portions of the practical test, this becomes an ongoing process throughout the test. Oral questioning, to determine the applicant's knowledge of TASKs and related safety factors, should be used judiciously at all times, especially during the flight portion of the practical test. Examiners shall test, to the greatest extent practicable, the applicant's correlative abilities rather than mere rote enumeration of facts throughout the practical test.

If the examiner determines that a TASK is incomplete, or the outcome uncertain, the examiner may require the applicant to repeat that TASK or portions of that TASK. This provision has been made in the interest of fairness and does not mean that instruction, practice, or the repeating of an unsatisfactory TASK is permitted during the certification process. When practical, the remaining TASKs of the practical test phase should be completed before repeating the questionable TASK.

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

#### **Satisfactory Performance**

Satisfactory performance to meet the requirements for certification is based on the applicant's ability to safely:

- perform the TASKs specified in the AREAS OF OPERATION for the certificate or rating sought within the approved standards;
- demonstrate mastery of the aircraft with the successful outcome of each TASK performed never seriously in doubt;
- demonstrate satisfactory proficiency and competency within the approved standards;
- 4. demonstrate sound judgment; and
- 5. demonstrate single-pilot competence if the aircraft is type certificated for single-pilot operations.

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<sup>&</sup>lt;sup>1</sup> The word "examiner" is used throughout the standards to denote either the FAA inspector or FAA designated pilot examiner who conducts an official practical test.

#### **Unsatisfactory Performance**

The tolerances represent the performance expected in good flying conditions. If, in the judgment of the examiner, the applicant does not meet the standards of performance of any TASK performed, the associated AREA OF OPERATION is failed and therefore, the practical test is failed.

The examiner or applicant may discontinue the test at any time when the failure of an AREA OF OPERATION makes the applicant ineligible for the certificate or rating sought. The test may be continued ONLY with the consent of the applicant. If the test is discontinued, the applicant is entitled credit for only those AREAS OF OPERATION and their associated TASKs satisfactorily performed. However, during the retest, and at the discretion of the examiner, any TASK may be reevaluated, including those previously passed.

Typical areas of unsatisfactory performance and grounds for disqualification are:

- 1. Any action or lack of action by the applicant that requires corrective intervention by the examiner to maintain safe flight.
- 2. Failure to use proper and effective visual scanning techniques to clear the area before and while performing maneuvers.
- 3. Consistently exceeding tolerances stated in the Objectives.
- Failure to take prompt corrective action when tolerances are exceeded.

When a Notice of Disapproval is issued, the examiner shall record the applicant's unsatisfactory performance in terms of the AREA OF OPERATION and specific TASK(s) not meeting the standard appropriate to the practical test conducted. The AREA(s) OF OPERATION/TASK(s) not tested and the number of practical test failures shall also be recorded. If the applicant fails the practical test because of a special emphasis area, the Notice of Disapproval shall indicate the associated TASK, i. e.: AREA OF OPERATION VIII, Maneuvering During Slow Flight, failure to use proper collision avoidance procedures.

#### Letter of Discontinuance

When a practical test is discontinued for reasons other than unsatisfactory performance (i.e., equipment failure, weather, or illness) FAA Form 8710-11, Application for an Airman Certificate and/or Rating, and, if applicable, the Airman Knowledge Test Report, shall be returned to the applicant. The examiner at that time shall prepare, sign, and issue a Letter of Discontinuance to the applicant. The Letter of Discontinuance should identify the AREAS OF OPERATION and their associated TASKs of the practical test that were successfully completed. The applicant shall be advised that the Letter of Discontinuance shall be presented to the examiner when the practical test is resumed and made part of the certification file.

#### **Single-Pilot Resource Management**

Single-pilot Resource Management refers to the effective use of **ALL** available resources: human resources, hardware, and information. It is similar to Crew Resource Management (CRM) procedures that are being emphasized in multi-crewmember operations except that only one crewmember (the pilot) is involved. Human resources "...includes all other groups routinely working with the pilot who are involved in decisions that are required to operate a flight safely. These groups include, but are not limited to dispatchers, weather briefers, maintenance personnel, and air traffic controllers." Pilot Resource Management is not a single TASK; it is a set of skill competencies that must be evident in all TASKs in this practical test standard as applied to single-pilot operation.

#### **Applicant's Use of Checklists**

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

#### **Use of Distractions During Practical Tests**

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

#### **Positive Exchange of Flight Controls**

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

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

#### **Aeronautical Decision Making and Risk Management**

The examiner shall evaluate the applicant's ability throughout the practical test to use good aeronautical decision making procedures in order to evaluate risks. The examiner shall accomplish this requirement by developing scenarios that incorporate as many TASKs as possible to evaluate the applicants risk management in making safe aeronautical decisions. For example, the examiner may develop a scenario that incorporates weather decisions and performance planning.

#### **SECTION 1**

# PRIVATE PILOT POWERED PARACHUTE (PPL and PPS)

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## APPLICANT'S PRACTICAL TEST CHECKLIST

#### **APPOINTMENT WITH EXAMINER:**

EXAMINER'S NAME_	
LOCATION	
DATE/TIME	

#### ACCEPTABLE AIRCRAFT

Aircraft Documents: Airworthiness Certificate, Registration
Certificate, and Operating Limitations
Aircraft Maintenance Records: Logbook Record of Airworthiness
Inspections and AD Compliance/Safety of Flight Reports
Pilot's Operating Handbook or FAA-Approved Flight Manual or
Manufacturer's Operating Instructions

#### PERSONAL EQUIPMENT

Current Aeronautical Charts Flight Logs Current AIM, AFD, and Appropriate Publications

#### PERSONAL RECORDS

Identification—Photo/Signature ID
Pilot Certificate
Medical Certificate
Completed FAA Form 8710-11, Application for an Airman
Certificate and/or Rating
Airman Knowledge Test Report
Logbook with Instructor's Endorsement
FAA Form 8060-5, Notice of Disapproval (if applicable)
Examiner's Fee (if applicable)

## EXAMINER'S PRACTICAL TEST CHECKLIST POWERED PARACHUTE LAND AND SEA

APPLICANT'S NAME_	
LOCATION	
DATE/TIME	

#### AREAS OF OPERATION

#### I. PREFLIGHT PREPARATION

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

#### II. PREFLIGHT PROCEDURES

- A. Preflight Inspection (PPL and PPS)
- B. Canopy Layout (PPL and PPS)
- C. Engine Warm Up/Starting (PPL and PPS)
- D. Cockpit Management (PPL and PPS)
- E. Taxiing (Canopy Inflated) (PPL)
- F. Taxiing and Sailing (PPS)
- G. Before Takeoff Check (PPL and PPS)

#### III. AIRPORT AND SEAPLANE BASE OPERATIONS

- A. Radio Communications and ATC Light Signals (PPL and PPS)
- B. Traffic Patterns (PPL and PPS)
- C. Airport and Seaplane Base Runway and Taxiway Signs, Markings, and Lighting (PPL and PPS)

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- B. Normal Approach and Landing (PPL and PPS)
- C. Glassy Water Takeoff and Climb (PPS)
- D. Glassy Water Approach and Landing (PPS)
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- F. Rough Water Approach and Landing (PPS)
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#### V. PERFORMANCE MANEUVER

A. Constant Attitude Turns (PPL and PPS)

#### VI. GROUND REFERENCE MANEUVERS

- A. Rectangular Course (PPL and PPS)
- B. S-Turns (PPL and PPS)
- C. Turns Around a Point (PPL and PPS)

#### VII. NAVIGATION

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- C. Docking and Mooring (PPS)
- D. Ramping/Beaching (PPS)

#### ADDITIONAL RATINGS TASK TABLE

#### Addition of a **POWERED PARACHUTE LAND (PPL) Rating** to an existing

Private Pilot Certificate or Higher Certificate

Required TASKs are indicated by either the TASK letter(s) that apply(s) or an indication that all or none of the TASKs must be tested based on the notes in each AREA OF OPERATION.

#### PRIVATE PILOT RATING(S) HELD

AREAS OF OPERATION	ASEL	ASES	AMEL	AMES	RH	RG	Glider	Balloon	Airship	PPS	WSCL	wscs
I	B, F, J, K	B, F, J, K	B, F, J, K	None	F, J, K	F, J, K						
II	All	Е	All	All								
III	None	None	None	None								
IV	All	A, B	All	All								
v	All	None	All	All								

AREAS OF OPERATION	ASEL	ASES	AMEL	ASES	RH	RG	Glider	Balloon	Airship	PPS	WSCL	wscs
VI	A or B or C	A or B or C	A or B or C	None	A or B or C	A or B or C						
VII	None	None	None	None	None	None						
VIII	A, B	A, B	A, B	None	A, B	A, B						
IX	None	None	None	None	None	None						
х	Α	Α	А	Α	Α	Α	А	А	А	None	А	А

NOTE 1: This table is used by the examiner in developing his/her plan of action for a practical test. The examiner may test additional TASKs not listed in the table that he/she deems necessary to ensure the pilot can operate the aircraft safely in the National Airspace System.

NOTE 2: The examiner shall select at least two takeoff and landings and the go- around maneuver.

#### ADDITIONAL RATINGS TASK TABLE

## Addition of a **POWERED PARACHUTE SEA (PPS) RATING** to an existing Private Pilot Certificate or Higher Certificate

Required TASKs are indicated by either the TASK letter(s) that apply(s) or an indication that all or none of the TASKs must be tested based on the notes in each AREA OF OPERATION.

#### PRIVATE PILOT RATING(S) HELD AREAS OF **ASEL ASES AMEL AMES** RH RG Glider Balloon **Airship** PPL WSCL **WSCS OPERATION** B, F, F. H. B, F, H. I F, J, H. I. H. I. H. I. J. K H, I, J. K H, I, H, I, J, H, I, J, I. J. K Κ J. K J, K J. K J. K J. K Κ Κ Ш ΑII ΑII ΑII ΑII ΑII ΑII ΑII ΑII ΑII F ΑII ΑII Ш None IV ΑII ν ΑII ΑII ΑII ΑII ΑII ΑII ΑII ΑII ΑII None ΑII ΑII

AREAS OF OPERATION	ASEL	ASES	AMEL	ASES	RH	RG	Glider	Balloon	Airship	PPL	WSCL	wscs
VI	A or B or C	A or B or C	A or B or C	None	A or B or C	A or B or C						
VII	None	None	None	None	None	None						
VIII	A, B	A, B	A, B	None	A, B	A, B						
IX	None	None	None	None	None	None						
х	All	Α	All	Α	All	All	All	ALL	All	B, C	All	А

Note 1: This table is used by the examiner in developing his/her plan of action for a practical test. The examiner may test additional TASKs not listed in the table that he/she deems necessary to ensure the pilot can operate the aircraft safely in the National Airspace System.

Note 2: The examiner shall select at least two takeoff and landings and the go-around maneuver.

#### I. AREA OF OPERATION: PREFLIGHT PREPARATION

#### A. TASK: CERTIFICATES AND DOCUMENTS (PPL and PPS)

REFERENCES: 14 CFR parts 43, 61, 91; FAA-H-8083-3, FAA-H-8083-25; POH/AFM/FAA Operating Limitations.

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

#### 1. Explaining—

- a. private pilot certificate privileges, limitations, and currency requirements.
- b. medical certificate class and duration.
- c. pilot logbook or flight records.

#### 2. Locating and explaining-

- a. airworthiness and registration certificates.
- operating limitations, placards, instrument markings, and flight manual information.
- c. weight and balance data and/or equipment list.

#### B. TASK: AIRWORTHINESS REQUIREMENTS (PPL and PPS)

REFERENCES: 14 CFR part 91; FAA-H-8083-25; Aircraft Operating Limitations.

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

#### Explaining—

- a. required instruments and equipment for day or night VFR.
- procedures and limitations for determining if the aircraft, with inoperative instruments and/or equipment, is airworthy or in condition for safe operation.
- requirements and procedures for obtaining a special flight permit.

#### 2. Explaining—

- airworthiness directives/safety of flight reports, compliance records. (As applicable to the aircraft brought for flight test.)
- b. maintenance/inspection requirements and appropriate record keeping.

#### C. TASK: WEATHER INFORMATION (PPL and PPS)

REFERENCES: 14 CFR part 91; AC 00-6, AC 00-45, AC 61-84; FAA-H-8083-25; AIM.

#### **Objective.** To determine that the applicant:

- Exhibits knowledge of the elements related to real time weather information appropriate to the aircraft by analyzing the following weather reports, charts, and forecasts from various sources, such as
  - a. METAR, TAF, and FA.
  - b. AWOS, ASOS, and ATIS reports.
  - c. Other aviation sources of weather information.
- Makes a competent "go/no-go" decision based on available weather information.

#### D. TASK: CROSS-COUNTRY FLIGHT PLANNING (PPL and PPS)

REFERENCES: 14 CFR part 91; FAA-H-8083-25; AC 61-84; Navigation Charts; AFD; AIM.

- Exhibits knowledge of the elements related to cross-country flight planning appropriate to the aircraft.
- 2. Uses appropriate and current aeronautical charts.
- 3. Properly identifies airspace, obstructions, and terrain features.
- 4. Selects easily identifiable en route checkpoints, as appropriate.
- Selects most favorable altitudes considering weather conditions and equipment capabilities.
- 6. Computes headings, flight time, and fuel requirements.
- Selects appropriate navigation system/facilities and communication frequencies, if so equipped.
- Applies pertinent information from NOTAMs, AFD, and other flight publications.
- 9. Completes a navigation log and simulates filing a VFR flight plan.

#### E. TASK: NATIONAL AIRSPACE SYSTEM (PPL and PPS)

REFERENCES: 14 CFR parts 71, 91; Navigation Charts; AIM.

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

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

#### F. TASK: OPERATION OF SYSTEMS (PPL and PPS)

REFERENCES: FAA-H-8083-25; POH/AFM.

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

- 1. Canopy/riser and control system.
- 2. Flight instruments and engine instruments.
- Landing gear.
- 4. Engine and propeller.
- 5. Fuel, oil, electrical and coolant system (if liquid cooled).
- 6. Avionics and auxiliary equipment, as installed.

#### G. TASK: AEROMEDICAL FACTORS (PPL and PPS)

REFERENCES: FAA-H-8083-25; AIM.

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

- 1. The effects of alcohol, drugs, and over-the-counter medications.
- The effects of excess nitrogen during scuba dives upon a pilot or passenger in flight.
- 3. The symptoms, causes, effects, and corrective actions of at least three (3) of the following
  - a. hypoxia.
  - b. hyperventilation.
  - c. middle ear and sinus problems.
  - d. spatial disorientation.
  - e. motion sickness.
  - f. carbon monoxide poisoning.
  - g. stress and fatigue.
  - h. dehydration.
  - i. hypothermia.

#### H. TASK: WATER AND SEAPLANE CHARACTERISTICS (PPS)

REFERENCE: FAA-H-8083-23.

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

- The characteristics of a water surface as affected by features, such as
  - a. size and location.
  - b. protected and unprotected areas.
  - c. surface wind.
  - d. direction and strength of water current.
  - e. floating and partially submerged debris.
  - f. sandbars, islands, and shoals.
  - q. vessel traffic and wakes.
  - h. other features peculiar to the area.
- 2. Float and hull construction and their effect on seaplane performance.
- 3. Causes of porpoising and skipping, and the pilot action required to prevent or correct these occurrences.

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

REFERENCES: FAA-H-8083-23: AIM.

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

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

#### J. TASK: PERFORMANCE AND LIMITATIONS (PPL and PPS)

REFERENCES: FAA-H-8083-1; PPC Training Manual.

**Objective.** To determine the applicant:

- Exhibits knowledge of the elements related to performance and limitations by explaining the effects of temperature, altitude, humidity, and wind.
- 2. Determines if weight and center of gravity is within limits.
- 3. Describes the effects of atmospheric conditions on the powered parachutes performance and limitations.
- 4. Explains the effects and hazards of high winds, referencing the ground speed, high rates of turn, and power requirements on making downwind turns in close proximity to the ground.

#### K. TASK: PRINCIPLES OF FLIGHT (PPL and PPS)

REFERENCES: FAA-H-8083-1; PPC Training Manual.

**Objective.** To determine the applicant exhibits knowledge of at least three (3) of the following aerodynamic principles:

- 1. Aerodynamics with respect to steering.
- 2. Propeller/Engine Torque Compensation.
- 3. Pendulum effect in a powered parachute.
- 4. Load factor effects in level flight and turns.
- 5. Wing flaring characteristics.
- 6. Stability and controllability.

#### II. AREA OF OPERATION: PREFLIGHT PROCEDURES

#### A. TASK: PREFLIGHT INSPECTION (PPL and PPS)

REFERENCES: PPC Training Manual; POH/AFM.

**Objective.** To determine that the applicant:

- Exhibits knowledge of the elements related to preflight inspection.
   This shall include which items must be inspected, the reasons for checking each item, and how to detect possible defects.
- Inspects the powered parachute with reference to an appropriate checklist.
- Ensures that risers are properly attached and the chute is properly trimmed.
- 4. Verifies the powered parachute is in condition for safe flight.

#### B. TASK: CANOPY LAYOUT (PPL and PPS)

REFERENCES: PPC Training Manual; POH/AFM.

**Objective.** To determine that the applicant:

- 1. Exhibits knowledge of the elements of canopy layout.
- Verifies that canopy and riser system is laid out properly and in condition for inflation.
- 3. Verifies suspension and steering lines are not tangled or twisted.

#### C. TASK: ENGINE WARM UP/STARTING (PPL and PPS)

REFERENCES: PPC Training Manual; POH/AFM.

- 1. Exhibits knowledge of the elements related to recommended engine starting/warm up procedures.
- 2. Positions the powered parachute properly considering structures, surface conditions, other aircraft, and the safety of nearby persons and property.

#### D. TASK: COCKPIT MANAGEMENT (PPL and PPS)

REFERENCES: FAA-H-8083-25; PPC Training Manual; POH/AFM.

**Objective.** To determine that the applicant:

- Exhibits knowledge of the elements related to cockpit management procedures.
- 2. Ensures all loose items in the cockpit and on each occupant removed, stowed, or secured.
- 3. Organizes material and equipment in an efficient manner so they are readily available.
- 4. Briefs occupant on the use of safety belts, shoulder harnesses, methods of egress, and other emergency procedures.

#### E. TASK: TAXIING (CANOPY INFLATED) (PPL)

REFERENCES: PPC Training Manual; POH/AFM.

- 1. Exhibits knowledge of the elements of taxiing with canopy inflated.
- 2. Positions powered parachute properly for existing wind conditions.
- 3. Monitors position and shape of canopy/riser system during taxi.
- 4. Centers the parachute using power and steering as required.
- 5. Avoids other aircraft and ground hazards.
- 6. Controls direction and speed for 100 feet of forward movement.
- 7. Completes proper engine shutdown and canopy deflation procedure.

#### F. TASK: TAXIING AND SAILING (PPS)

REFERENCES: FAA-H-8083-3; USCG Navigation Rules; International-Inland; POH/AFM.

#### **Objective**. To determine that the applicant:

- Exhibits knowledge of the elements related to water taxi and sailing procedures.
- Makes smooth and appropriate throttle applications as the canopy transitions from ground pickup through maximum drag to water taxi position.
- Plans and follows the most favorable course while taxiing or sailing considering wind, water current, water conditions, and maritime regulations.
- 4. Uses the appropriate idle, plow, or step taxi technique.
- 5. Uses flight controls, water rudder(s), and power correctly so as to follow the desired course while sailing.
- 6. Prevents and corrects for porpoising and skipping.
- 7. Avoids other aircraft, vessels, and hazards.
- 8. Complies with seaplane base signs, signals, and clearances.

#### G. TASK: BEFORE TAKEOFF CHECK (PPL and PPS)

REFERENCES: FAA-H-8083-3; PPC Training Manual; POH/AFM.

- Exhibits knowledge of the elements related to the before takeoff check. This shall include the reasons for checking each item and how to detect malfunctions.
- 2. Reviews takeoff performance, takeoff distances, departure, and emergency procedures.
- 3. Positions the powered parachute properly considering wind, other aircraft and surface conditions.
- Ensures that engine temperature and pressure are suitable for runup and takeoff.
- 5. Accomplishes the before takeoff checklist and ensures the powered parachute is in a safe operating condition.
- 6. Avoids runway incursions and/or ensures no conflict with traffic.

## III. AREA OF OPERATION: AIRPORT AND SEAPLANE BASE OPERATIONS

## A. TASK: RADIO COMMUNICATIONS AND ATC LIGHT SIGNALS (PPL and PPS)

**NOTE:** If the aircraft is not radio equipped, this TASK shall be tested orally for procedures ONLY.

REFERENCES: 14 CFR part 91; FAA-H-8083-25; AIM.

#### **Objective.** To determine that the applicant:

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

#### B. TASK: TRAFFIC PATTERNS (PPL and PPS)

REFERENCES: FAA-H-8083-3, FAA-H-8083-25; AC 90-66; AIM.

#### **Objective.** To determine that the applicant:

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

## C. TASK: AIRPORT AND SEAPLANE BASE RUNWAY AND TAXIWAY SIGNS, MARKINGS, AND LIGHTING (PPL and PPS)

REFERENCES: FAA-H-8083-23, FAA-H-8083-25; AIM.

- Exhibits knowledge of the elements related to airport/seaplane base, markings, and lighting with emphasis on runway incursion avoidance.
- 2. Properly identifies and interprets airport/seaplane base, markings and lighting.

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

#### A. TASK: NORMAL TAKEOFF AND CLIMB (PPL and PPS)

REFERENCES: FAA-H-8083-3, FAA-H-8083-23; PPC Training Manual; POH/AFM.

- 1. Exhibits knowledge of the elements related to normal takeoff and climb operations and rejected takeoff procedures.
- 2. Clears the area.
- 3. Divides attention inside and outside the cockpit.
- Makes smooth and appropriate throttle applications as the canopy transitions from ground pickup through maximum drag to taxi position.
- Checks canopy, ensuring that all end cells are fully inflated and canopy is centered, lines are free and unobstructed and in condition for takeoff.
- 6. Retracts the water rudders as appropriate, advances the throttle smoothly to takeoff power. (PPS)
- 7. Establishes and maintains the most efficient planing/lift-off attitude and corrects for porpoising and skipping. (PPS)
- 8. Maintains takeoff power to a safe maneuvering altitude.
- 9. Maintains directional control and proper wind-drift correction throughout the takeoff and climb.
- 10. Complies with noise abatement procedures.

# B. TASK: NORMAL APPROACH AND LANDING (PPL and PPS)

**NOTE:** The applicant's knowledge of minimizing crosswind elements shall be evaluated through oral testing.

REFERENCES: FAA-H-8083-3, FAA-H-8083-23; PPC Training Manual; POH/AFM.

#### **Objective.** To determine that the applicant:

- 1. Exhibits knowledge of the elements related to a normal approach and landing.
- 2. Adequately surveys the intended landing area. (PPS)
- 3. Considers the wind conditions, landing surface, obstructions, and selects a suitable touchdown point.
- 4. Establishes the recommended approach and landing configuration and adjusts power as required.
- 5. Maintains a stabilized approach.
- Makes smooth, timely, and correct control application during the flair and touchdown.
- 7. Contacts the water at the proper pitch attitude. (PPS)
- 8. Touches down smoothly. (PPS)
- 9. Maintains directional control throughout the approach and landing sequence and touchdown.
- Completes proper engine shutdown and canopy deflation procedure.

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#### C. TASK: GLASSY WATER TAKEOFF AND CLIMB (PPS)

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

REFERENCES: FAA-H-8083-3, FAA-H-8083-23; PPC Training Manual; POH/AFM.

#### **Objective.** To determine that the applicant:

- Exhibits knowledge of the elements related to glassy water takeoff and climb.
- Clears the area; selects an appropriate takeoff path considering surface hazards and/or vessels and surface conditions.
- 3. Retracts the water rudders as appropriate; advances the throttle smoothly to takeoff power.
- 4. Establishes and maintains an appropriate planing attitude, directional control, and corrects for porpoising, skipping, and increases in water drag.
- 5. Utilizes appropriate techniques to lift the powered parachute from the water considering surface conditions.
- 6. Establishes proper attitude.
- Repositions the landing gear, if appropriate, after a positive rate of climb is established.
- 8. Maintains takeoff power to a safe maneuvering altitude.
- 9. Maintains directional control and proper wind-drift correction throughout takeoff and climb.

#### D. TASK: GLASSY WATER APPROACH AND LANDING (PPS)

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

REFERENCES: FAA-H-8083-3, FAA-H-8083-25; PPC Training Manual; POH/AFM.

- Exhibits knowledge of the elements related to glassy water approach and landing.
- 2. Adequately surveys the intended landing area.
- 3. Considers the wind conditions, water depth, hazards, surrounding terrain, and other watercraft.
- 4. Selects the most suitable approach path and touchdown area.
- Establishes the recommended approach and landing configuration, and adjusts power as required.
- 6. Makes smooth, timely, and correct power and control adjustments to maintain proper pitch attitude and rate of descent to touchdown.
- 7. Contacts the water in the proper pitch attitude.
- 8. Maintains directional control throughout the approach and landing sequence.

# E. TASK: ROUGH WATER TAKEOFF AND CLIMB (PPS)

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

REFERENCES: FAA-H-8083-3, FAA-H-8083-23; PPC Training Manual; POH/AFM.

# **Objective.** To determine that the applicant:

- Exhibits knowledge of the elements related to rough water takeoff and climb.
- 2. Clears the area; selects an appropriate takeoff path considering wind, swells surface hazards, and/or vessels.
- 3. Retracts the water rudders as appropriate; advances the throttle smoothly to takeoff power.
- 4. Establishes and maintains an appropriate planing attitude, directional control, and corrects for porpoising, skipping, or excessive bouncing.
- Repositions the landing gear, if appropriate, after a positive rate of climb is established.
- 6. Maintains takeoff power to a safe maneuvering altitude.
- 7. Maintains directional control and proper wind-drift correction throughout takeoff and climb.

# F. TASK: ROUGH WATER APPROACH AND LANDING (PPS)

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

REFERENCES: FAA-H-8083-3, FAA-H-8083-23; PPC Training Manual; POH/AFM.

#### **Objective.** To determine that the applicant:

- Exhibits knowledge of the elements related to rough water approach and landing.
- 2. Adequately surveys the intended landing area.
- 3. Considers the wind conditions, water, depth, hazards, surrounding terrain, and other watercraft.
- 4. Selects the most suitable approach path and touchdown area.
- 5. Establishes the recommended approach and landing configuration, and adjusts power as required.
- 6. Makes smooth, timely, and correct power and control inputs during the roundout and touch down.
- 7. Contacts the water in the proper pitch attitude, considering the type of rough water.
- 8. Maintains directional control throughout the approach and landing sequence.

# G. TASK: GO-AROUND/REJECTED LANDING (PPL and PPS)

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REFERENCES: FAA-H-8083-3; PPC Training Manual, POH/AFM.

- Exhibits knowledge of the elements related to a go-around/rejected landing.
- 2. Makes a timely decision to discontinue the approach to landing.
- 3. Applies takeoff power immediately.
- 4. Retracts the water rudders as appropriate, after a positive rate of climb is established. (PPS)
- 5. Maneuvers to the side of the runway/landing area to clear and avoid conflicting traffic, if appropriate.
- 6. Maintains takeoff power to a safe maneuvering altitude.
- 7. Maintains directional control and proper wind-drift correction throughout the climb.

#### V. AREA OF OPERATION: PERFORMANCE MANEUVER

#### A. TASK: CONSTANT ATTITUDE TURNS (PPL and PPS)

REFERENCES: FAA-H-8083-3; PPC Training Manual.

- Exhibits knowledge of the elements related to constant attitude turns.
- 2. Plans the maneuver no lower than 200 feet AGL.
- 3. Rolls into a constant bank 360° turn.
- 4. Performs the task in the opposite direction, as specified by the examiner.
- Divides attention between powered parachute control and orientation.
- 6. Maintains altitude, ±100 feet.

#### VI. AREA OF OPERATION: GROUND REFERENCE MANEUVERS

**NOTE:** The examiner shall select at least one TASK.

#### A. TASK: RECTANGULAR COURSE (PPL and PPS)

REFERENCES: FAA-H-8083-3; PPC Training Manual.

**Objective.** To determine that the applicant:

- 1. Exhibits knowledge of the elements related to a rectangular course.
- 2. Selects a suitable reference area, considering all obstacles.
- 3. Plans the maneuver so as to not descend below 200 feet above ground level, at an appropriate distance from the selected reference area, 45° to the downwind leg.
- Applies adequate wind-drift correction during straight-and-turning flight to maintain a constant ground track around the rectangular reference area.
- Divides attention between powered parachute control and the ground track while maintaining coordinated flight.
- 6. Maintains altitude, ±100 feet.

# B. TASK: S-TURNS (PPL and PPS)

REFERENCES: FAA-H-8083-3; PPC Training Manual.

- 1. Exhibits knowledge of the elements related to S-turns.
- 2. Selects a suitable ground reference line, considering all obstacles.
- 3. Plans the maneuver so as to not descend below 200 feet above ground level, perpendicular to the selected reference line.
- Applies adequate wind-drift correction to track a constant radius turn on each side of the selected reference line.
- Reverses the direction of turn directly over the selected reference line.
- 6. Divides attention between powered parachute control and the ground track while maintaining coordinated flight.
- 7. Maintains altitude, ±100 feet.

# C. TASK: TURNS AROUND A POINT (PPL and PPS)

REFERENCES: FAA-H-8083-3; PPC Training Manual.

- 1. Exhibits knowledge of the elements related to turns around a point.
- 2. Selects a suitable ground reference point, considering all obstacles.
- 3. Plans the maneuver so as to not descend below 200 feet above ground level, at an appropriate distance from the reference point.
- 4. Applies adequate wind-drift correction to track a constant radius turn around the selected reference point.
- 5. Divides attention between powered parachute control and the ground track while maintaining coordinated flight.
- 6. Maintains altitude, ±100 feet.

#### VII. AREA OF OPERATION: NAVIGATION

**NOTE:** The applicant's knowledge of this AREA OF OPERATION will be evaluated through oral testing.

# A. TASK: FLIGHT PREPARATION AND PLANNING (PPL and PPS)

REFERENCES: FAA-H-8083-13; AIM.

#### **Objective.** To determine that the applicant:

- Exhibits knowledge of the elements related to flight preparations and planning.
- 2. Selects and uses current and appropriate aeronautical charts.
- 3. Plots a course and selects prominent en route checkpoints.
- Describes coordination procedures with air traffic control, as appropriate.

#### B. TASK: PILOTAGE AND DEAD RECKONING

REFERENCE: FAA-H-8083-25.

#### **Objective.** To determine that the applicant:

- Exhibits knowledge of the elements related to pilotage and dead reckoning, as appropriate.
- 2. Follows the preplanned course by reference to landmarks.
- 3. Identifies landmarks by relating surface features to chart symbols.
- 4. Verifies the powered parachutes position with 3 nautical miles of the flight-planned route.
- Determines there is sufficient fuel to complete the planned flight, if not, has an alternate plan.
- 6. Maintains the appropriate altitude, ±200 feet and headings, ±15°.

#### C. TASK: DIVERSION

REFERENCES: FAA-H-8083-25, AIM.

- Exhibits knowledge of the elements related to diversion.
- Selects an appropriate alternate airport or landing area and route.
- 3. Determines there is sufficient fuel to fly to the alternate airport or landing area.
- 4. Turns to and establishes a course to the selected alternate destination.
- Maintains the appropriate altitude, ±200 feet and headings, ±15°.

# D. TASK: LOST PROCEDURES

REFERENCES: FAA-H-8083-25; AIM.

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

#### VIII. AREA OF OPERATION: EMERGENCY OPERATIONS

# A. TASK: EMERGENCY APPROACH AND LANDING (SIMULATED) (PPL and PPS)

REFERENCES: FAA-H-8083-3, FAA-H-8083-23; PPC Training Manual; POH/AFM.

# **Objective.** To determine that the applicant:

- 1. Exhibits knowledge of the elements related to emergency approach and landing procedures.
- 2. Analyzes the situation and selects an appropriate course of action.
- 3. Plans and follows a flight pattern to the selected landing area considering altitude, wind, terrain, and obstructions.
- 4. Prepares for landing or go-around, as specified by the examiner.

# B. TASK: SYSTEMS AND EQUIPMENT MALFUNCTIONS (PPL and PPS)

REFERENCES: FAA-H-8083-3, FAA-H-8083-23; PPC Training Manual; POH/AFM.

- Exhibits knowledge of the elements related to causes, indications, and pilot actions for various systems and equipment malfunctions.
- 2. Analyzes the situation and takes appropriate action for simulated emergencies appropriate to the powered parachute provided for the practical test for at least three (3) of the following:
  - a. partial or complete power loss.
  - b. engine roughness or overheat.
  - c. carburetor or induction icing.
  - d. fuel starvation.
  - e. electrical malfunction.
  - f. flight instrument malfunctions.
  - g. pitot/ static.
  - h. landing gear malfunction.
  - i. smoke/fire/engine compartment fire.
  - i. Inadvertent prop strike.
  - k. any other emergency appropriate to the powered parachute.
- 3. Follows the appropriate checklist or procedure.

# C. TASK: EMERGENCY EQUIPMENT AND SURVIVAL GEAR (PPL and PPS)

REFERENCES: FAA-H-8083-3, FAA-H-8083-23; PPC Training Manual; POH/AFM.

- Exhibits knowledge of the elements related to emergency equipment appropriate to the aircraft used for the practical test by describing
  - a. purpose of such equipment.
  - b. location in the aircraft.
  - c. method of operation.
  - d. servicing requirements.
  - e. method of safe storage.
- Exhibits knowledge of the elements related to survival gear by describing—
  - a. survival gear appropriate for operation in various climatological and topographical environments.
  - b. location in the aircraft.
  - c. method of operation.
  - d. servicing requirements.
  - e. method of safe storage.

#### IX. AREA OF OPERATION: NIGHT OPERATION

#### A. TASK: NIGHT PREPARATION (PPL and PPS)

REFERENCES: FAA-H-8083-3, FAA-H-8083-25; AIM; POH/AFM.

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

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

#### X. AREA OF OPERATION: POSTFLIGHT PROCEDURES

**NOTE:** The examiner shall select TASK A and for PPS applicants at least one other TASK

# A. TASK: AFTER LANDING, PARKING, AND SECURING (PPL and PPS)

REFERENCES: FAA-H-8083-3, FAA-H-8083-23; PPC Training Manual; POH /AFM.

# **Objective.** To determine that the applicant:

- Exhibits knowledge of the elements related to after landing, parking, and securing procedures.
- Observes runway hold lines and other surface control markings and lighting.
- 3. Parks in an appropriate area, considering the safety of nearby persons and property.
- 4. Follows the appropriate procedure for engine shutdown.
- Protects canopy/riser system from the hot engine while stowing/securing.

# B. TASK: ANCHORING (PPS)

REFERENCES: FAA-H-8083-3, FAA-H-8083-23; PPC Training Manual; POH/AFM.

#### **Objective.** To determine that the applicant:

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

# C. TASK: DOCKING AND MOORING (PPS)

REFERENCES: FAA-H-8083-3, FAA-H-8083-23; PPC Training Manual; POH/AFM.

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

# D. TASK: RAMPING/BEACHING (PPS)

REFERENCES: FAA-H-8083-3, FAA-H-8083-23; PPC Training Manual; POH/AFM.

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

# **SECTION 2**

# PRIVATE PILOT WEIGHT SHIFT CONTROL (WSCL and WSCS)

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# APPLICANT'S PRACTICAL TEST CHECKLIST

# **APPOINTMENT WITH EXAMINER:**

EXAMINER'S N	IAME	 
LOCATION		
DATE/TIME		

#### ACCEPTABLE AIRCRAFT

Aircraft Documents: Airworthiness Certificate, Registration
Certificate, and Operating Limitations
Aircraft Maintenance Records: Logbook Record of Airworthiness
Inspections and AD Compliance/Safety of Flight Reports
Pilot's Operating Handbook or FAA-Approved Flight Manual or
Manufacturer's Operating Instructions

#### PERSONAL EQUIPMENT

Current Aeronautical Charts
Computer and Plotter
Flight Plan Form
Flight Logs
Current AIM, AFD, and Appropriate Publications

#### PERSONAL RECORDS

Identification—Photo/Signature ID
Pilot Certificate
Medical Certificate
Completed FAA Form 8710-11, Application for an Airman
Certificate and/or Rating
Airman Knowledge Test Report
Logbook with Instructor's Endorsement
FAA Form 8060-5, Notice of Disapproval (if applicable)
Examiner's Fee (if applicable)

#### **EXAMINER'S PRACTICAL TEST CHECKLIST**

APPLICANT'S NAME	
LOCATION	
DATE/TIME	

#### AREAS OF OPERATION

#### I. PREFLIGHT PREPARATION

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

#### II. PREFLIGHT PROCEDURES

- A. Assembly (WSCL and WSCS)
- B. Wing Tuning (WSCL and WSCS)
- C. Preflight Inspection (WSCL and WSCS)
- D. Cockpit Management (WSCL and WSCS)
- E. Engine Starting (WSCL and WSCS)
- F. Taxiing (WSCL)
- G. Taxiing and Sailing (WSCS)
- H. Before Takeoff Check (WSCL and WSCS)

#### III. AIRPORT AND SEAPLANE BASE OPERATIONS

- A. Radio Communications and ATC Light Signals (WSCL and WSCS)
- B. Traffic Patterns (WSCL and WSCS)
- C. Airport and Seaplane Base Runway and Taxiway Signs, Markings, and Lighting (WSCL and WSCS)

# IV. TAKEOFFS, LANDINGS, AND GO-AROUNDS

- A. Normal and Crosswind Takeoff and Climb (WSCL and WSCS)
- B. Power-On and Crosswind Approach and Landing (WSCL and WSCS)

- C. Glassy Water Takeoff and Climb (WSCS)
- D. Glassy Water Approach and Landing (WSCS)
- E. Rough Water Takeoff and Climb (WSCS)
- F. Rough Water Approach and Landing (WSCS)
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- A. Maneuvering During Slow Flight (WSCL and WSCS)
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- A. After Landing, Parking, and Securing (WSCL and WSCS)
- B. Anchoring (WSCS)
- C. Docking and Mooring (WSCS)
- D. Ramping/Beaching (WSCS)

# ADDITIONAL RATINGS TASK TABLE

# Addition of a **WEIGHT SHIFT CONTROL LAND (WSCL) RATING** to an existing Private Pilot Certificate or Higher Certificate

Required TASKs are indicated by either the TASK letter(s) that apply(s) or an indication that all or none of the TASKs must be tested based on the notes in each AREA OF OPERATION.

				PRIVA	TE PIL	OT RAT	ING(S)	HELD				
AREAS OF OPERATION	ASEL	ASES	AMEL	ASES	RH	RG	Glider	Balloon	Airship	PPL	PPS	
ı	B, F, J, K	B, F, J, K	B, F, J, K	F, J, K	F, J, K							
II	A, B, C, D, E, F, H	A, B, C, D, E, F, H	A, B, C, D, E, F, H	A, B, C, D, E, F, H	A, B, C, D, E, F, H							
III	None	None	None	None	None							
IV	A, B, G, H	A, B, G, H	A, B, G, H	A, B, G, H	A, B, G, H							
V	Α	Α	Α	А	Α	А	Α	А	А	А	Α	

AREAS OF OPERATION	ASEL	ASES	AMEL	ASES	RH	RG	Glider	Balloon	Airship	PPL	PPS	
VI	A or B or C	A or B or C	A or B or C	A or B or C	A or B or C							
VII	None	None	None	None	None	Α	Α	А	None	Α	А	
VIII	All	All	All	All	All							
IX	A, B	A, B	A, B	A, B	A, B							
х	None	None	None	None	None							
ΧI	А	Α	Α	Α	Α	Α	Α	А	А	Α	А	

NOTE: This table is used by the examiner in developing his/her plan of action for a practical test. The examiner may test additional TASKs not listed in the table that he/she deems necessary to ensure the pilot can operate the aircraft safely in the National Airspace System.

NOTE 2: The examiner shall select at least two takeoff and landings and the go-around maneuver.

## ADDITIONAL RATINGS TASK TABLE

# Addition of a **WEIGHT SHIFT CONTROL SEA (WSCS) RATING** to an existing Private Pilot Certificate or Higher Certificate

Required TASKs are indicated by either the TASK letter(s) that apply(s) or an indication that all or none of the TASKs must be tested based on the notes in each AREA OF OPERATION.

#### PRIVATE PILOT RATING(S) HELD AREAS OF **ASEL ASES AMEL AMES** RH RG Glider Balloon **Airship** PPL PPS **OPERATION** B, F, F, H, B, F, F,J, H. I. H, I, H. I. H, I, J. K H, I, J. K H, I, J, H, I, J, I. J. K J. K J, K J. K J. K J. K Κ Κ Ш ΑII F ΑII ΑII ΑII ΑII ΑII ΑII ΑII ΑII ΑII Ш None IV ΑII ν Α Α Α Α Α Α Α Α Α Α Α

AREAS OF OPERATION	ASEL	ASES	AMEL	ASES	RH	RG	Glider	Balloon	Airship	PPL	PPS	
VI	A or B or C	A or B or C	A or B or C	A or B or C	A or B or C							
VII	None	None	None	None	None	Α	Α	А	None	Α	Α	
VIII	All	All	All	All	All							
IX	A, B	A, B	A, B	A, B	A, B							
х	None	None	None	None	None							
ΧI	All	Α	All	Α	All	All	All	All	All	All	Α	

NOTE: This table is used by the examiner in developing his/her plan of action for a practical test. The examiner may test additional TASKs not listed in the table that he/she deems necessary to ensure the pilot can operate the aircraft in the National Airspace System.

NOTE 2: The examiner shall select at least two takeoff and landings and the go-around maneuver.

#### I. AREA OF OPERATION: PREFLIGHT PREPARATION

# A. TASK: CERTIFICATES AND DOCUMENTS (WSCL and WSCS)

REFERENCES: 14 CFR parts 43, 61, 91; FAA-H-8083-3, FAA-H-8083-25; POH/AFM/FAA Operating Limitations.

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

#### 1. Explaining—

- a. private pilot certificate privileges, limitations, and currency requirements.
- b. medical certificate class and duration.
- c. pilot logbook or flight records.

# 2. Locating and explaining—

- a. airworthiness and registration certificates.
- b. operating limitations, placards, instrument markings, and flight manual information.
- c. weight and balance data and/or equipment list.

# B. TASK: AIRWORTHINESS REQUIREMENTS (WSCL and WSCS)

REFERENCES: 14 CFR part 91; FAA-H-8083-25; Aircraft Operating Limitations.

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

# 1. Explaining—

- a. required instruments and equipment for day VFR.
- procedures and limitations for determining airworthiness of aircraft with inoperative instruments and equipment.
- requirements and procedures for obtaining a special flight permit.

# 2. Explaining—

- a. airworthiness directives/safety of flight reports, compliance records. (As applicable to the aircraft brought for flight test.)
- b. maintenance/inspection requirements and appropriate record keeping.

# C. TASK: WEATHER INFORMATION (WSCL and WSCS)

REFERENCES: 14 CFR part 91; AC 00-6, AC 00-45, AC 61-84; FAA-H-8083-25; AIM.

#### **Objective.** To determine that the applicant:

- Exhibits knowledge of the elements related to real time weather information appropriate to the aircraft by analyzing the following weather reports, charts, and forecasts from various sources, such as
  - a. METAR, TAF, and FA.
  - b. AWOS, ASOS, and ATIS reports.
  - c. other aviation sources of weather information.
  - d. Micrometeorology, gust fronts, rotors, and terrain features.
- Makes a competent "go/no-go" decision based on available weather information.

#### D. TASK: CROSS-COUNTRY FLIGHT PLANNING (WSCL and WSCS)

REFERENCES: 14 CFR part 91; FAA-H-8083-25; AC 61-84; Navigation Charts; AFD; AIM.

- 1. Exhibits knowledge of the elements related to cross-country flight planning appropriate to the aircraft.
- 2. Uses appropriate and current aeronautical charts.
- 3. Properly identifies airspace, obstructions, and terrain features.
- 4. Selects easily identifiable en route checkpoints, as appropriate.
- Selects most favorable altitudes considering weather conditions and equipment capabilities.
- 6. Determines headings, flight time, and fuel requirements.
- 7. Selects appropriate navigation system/facilities and communication frequencies, if so equipped.
- Applies pertinent information from NOTAMs, AFD, and other flight publications.
- 9. Completes a navigation log and simulates filing a VFR flight plan.

# E. TASK: NATIONAL AIRSPACE SYSTEM (WSCL and WSCS)

REFERENCES: 14 CFR parts 71, 91; Navigation Charts; AIM.

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

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

# F. TASK: OPERATION OF SYSTEMS (WSCL and WSCS)

REFERENCES: FAA-H-8083-25; POH/AFM.

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

- 1. Flight controls and trim.
- 2. Water rudders, if applicable.
- 3. Powerplant and propeller, if applicable.
- 4. Landing gear.
- 5. Fuel, oil, hydraulic, and coolant system (if liquid cooled).
- 6. Electrical.
- 7. Avionics and auxiliary equipment (if installed).
- 8. Pitot-static, vacuum/pressure, and associated flight instruments, as appropriate.

# G. TASK: AEROMEDICAL FACTORS (WSCL and WSCS)

REFERENCES: FAA-H-8083-25; AIM.

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

- The effects of alcohol, drugs, and over-the-counter medications.
- The effects of excess nitrogen during scuba dives upon a pilot or passenger in flight.
- 3. The symptoms, causes, effects, and corrective actions of at least three (3) of the following
  - a. hypoxia.
  - b. hyperventilation.
  - c. middle ear and sinus problems.
  - d. spatial disorientation.
  - e. motion sickness.
  - f. carbon monoxide poisoning.
  - g. stress and fatigue.
  - h. dehydration.

# H. TASK: WATER AND SEAPLANE CHARACTERISTICS (WSCS)

REFERENCE: FAA-H-8083-23.

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

- The characteristics of a water surface as affected by features, such as—
  - a. size and location.
  - b. protected and unprotected areas.
  - c. surface wind.
  - d. direction and strength of water current.
  - e. floating and partially submerged debris.
  - f. sandbars, islands, and shoals.
  - g. vessel traffic and wakes.
  - h. other features peculiar to the area.
- 2. Float and hull construction, and their effect on seaplane performance.
- 3. Causes of porpoising and skipping, and the pilot action required to prevent or correct these occurrences.

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

REFERENCES: FAA-H-8083-23: AIM.

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

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

# J. TASK: PERFORMANCE AND LIMITATIONS (WSCL and WSCS)

REFERENCES: FAA-H-8083-1, FAA-H-8083-23, FAA-H-8083-25; POH/AFM.

#### **Objective.** To determine the applicant:

- Exhibits knowledge of the elements related to performance and limitations by explaining the use of charts, tables and data, if appropriate, to determine performance and the adverse effects of exceeding limitations.
- 2. Exhibits knowledge of the center of gravity on weight shift control performance.
- 3. Describes the effects of atmospheric conditions on the weight shift control performance.
- 4. Explains the effects and hazards of high wind, referencing the ground speed, high rates of turn and power requirements on making downwind turns in close proximity to the ground.

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# K. TASK: PRINCIPLES OF FLIGHT (WSCL and WSCS)

REFERENCES: FAA-H-8083-25; AFM/POH.

**Objective.** To determine the applicant exhibits knowledge of basic aerodynamics and principles of flight including:

- Forces acting on a weight shift control in various flight maneuvers.
- 2. Weight shift control stability and controllability.
- 3. Loads and load factors.
- 4. Angle of attack, stalls and stall recovery, including flight situations in which unintentional stalls may occur.
- 5. Effects and use of flight controls including the purpose of each control and proper technique for use.

#### II. AREA OF OPERATION: PREFLIGHT PROCEDURES

#### A. TASK: ASSEMBLY (WSCL and WSCS)

**NOTE**: If, in the judgment of the examiner, the demonstration of the WSC assembly is impractical, competency may be determined by oral testing.

REFERENCES: POH/AFM.

#### **Objective.** To determine that the applicant:

- Exhibits knowledge of the elements related to the assembly procedures following the manufacturers procedures.
- Selects a suitable assembly area and provides sufficient crewmembers for assembly.
- 3. Follows the appropriate checklist.
- 4. Uses proper tools.
- 5. Handles components properly.
- 6. Cleans and lubricates parts, as appropriate.
- 7. Accounts for all tools and parts at the completion of assembly.
- 8. Performs post-assembly inspections, including a control check.

# B. TASK: WING TUNING (WSCL and WSCS)

REFERENCES: POH/AFM.

- Exhibits knowledge of the elements related to wing tuning procedures.
- Describes the correct procedures for tuning the wing to fly straight.
- Describes the correct procedures for tuning the wing to fly faster or slower.
- 4. Exhibits knowledge of the relationship between speed and stability with regard to wing tuning.

#### C. TASK: PREFLIGHT INSPECTION (WSCL and WSCS)

REFERENCES: AC 61-84: POH/AFM.

**Objective.** To determine that the applicant:

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

# D. TASK: COCKPIT MANAGEMENT (WSCL and WSCS)

REFERENCES: FAA-H-8083-25; POH/AFM.

**Objective.** To determine that the applicant:

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

#### E. TASK: ENGINE STARTING (WSCL and WSCS)

REFERENCES: FAA-H-8083-25; POH/AFM.

- Exhibits knowledge of the elements related to recommended engine starting procedures.
- Positions the weight shift control aircraft properly considering structures, surface conditions, other aircraft, and the safety of nearby persons and property.

# F. TASK: TAXIING (WSCL)

REFERENCES: FAA-H-8083-25; POH/AFM.

#### **Objective.** To determine that the applicant:

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

# G. TASK: TAXIING AND SAILING (WSCS)

REFERENCES: FAA-H-8083-23; USCG Navigation Rules; International-Inland; POH/AFM.

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

# H. TASK: BEFORE TAKEOFF CHECK (WSCL and WSCS)

REFERENCES: FAA-H-8083-3, FAA-H-8083-23; POH/AFM.

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

# III. AREA OF OPERATION: AIRPORT AND SEAPLANE BASE OPERATIONS

# A. TASK: RADIO COMMUNICATIONS AND ATC LIGHT SIGNALS (WSCL and WSCS)

**NOTE**: If the aircraft is not radio equipped, this TASK shall be tested orally for procedures ONLY.

REFERENCES: 14 CFR part 91; FAA-H-8083-25; AIM.

**Objective.** To determine that the applicant:

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

# B. TASK: TRAFFIC PATTERNS (WSCL and WSCS)

REFERENCES: FAA-H-8083-3, FAA-H-8083-25; AC 90-66; AIM.

**Objective.** To determine that the applicant:

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

# C. TASK: AIRPORT AND SEAPLANE BASE RUNWAY AND TAXIWAY SIGNS, MARKINGS, AND LIGHTING (WSCL and WSCS)

REFERENCES: FAA-H-8083-23, FAA-H-8083-25; AIM.

- Exhibits knowledge of the elements related to airport/seaplane base, markings and lighting with emphasis on runway incursion avoidance.
- 2. Properly identifies and interprets airport/seaplane base markings and lighting.

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

# A. TASK: NORMAL AND CROSSWIND TAKEOFF AND CLIMB (WSCL and WSCS)

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

REFERENCES: FAA-H-8083-3, FAA-H-8083-23; POH/AFM.

### **Objective.** To determine that the applicant:

- Exhibits knowledge of the elements related to normal and crosswind takeoff and climb operations and rejected takeoff procedures.
- 2. Positions the flight controls for the existing wind conditions.
- 3. Clears the area; taxies into the takeoff position and aligns the weight shift control aircraft on the runway center/takeoff path.
- 4. Retracts the water rudders as appropriate, advances the throttle smoothly to takeoff power. (WSCS)
- Establishes and maintains the most efficient planing/lift off attitude and corrects for porpoising and skipping. (WSCS)
- 6. Lifts off at the recommended airspeed and accelerates to appropriate climb speed.
- Establishes a pitch attitude that will maintain appropriate climb speed +10/-5 knots or speed recommended by the POH/AFM to maintain control if you have a power failure.
- 8. Repositions the landing gear, if appropriate, after a positive rate of climb is established. (WSCS)
- 9. Maintains takeoff power to a safe maneuvering altitude.
- 10. Maintains directional control and proper wind-drift correction throughout the takeoff and climb.

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# B. TASK: POWER-ON AND CROSSWIND APPROACH AND LANDING (WSCL and WSCS)

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

REFERENCES: FAA-H-8083-3, FAA-H-8083-23; POH/AFM.

- 1. Exhibits knowledge of the elements related to a normal and crosswind approach and landing.
- 2. Adequately surveys the intended landing area. (WSCS)
- 3. Considers the wind conditions, landing surface, obstructions, and selects a suitable touchdown point.
- 4. Establishes the recommended approach and landing configuration and airspeed, and adjusts pitch attitude and power, as required.
- 5. Maintains a stabilized approach and recommended airspeed.
- Makes smooth, timely, and correct control application during the roundout and touchdown.
- 7. Contacts the water at the proper pitch attitude. (WSCS)
- 8. Touches down smoothly at appropriate airspeed. (WSCL)
- Touches down at or within 400 feet beyond a specified point, with no drift, and with the weight shift control aircraft's flight path aligned with and over the runway center/landing path.
- 10. Maintains directional control throughout the approach and landing sequence.

# C. TASK: GLASSY WATER TAKEOFF AND CLIMB (WSCS)

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

REFERENCES: FAA-H-8083-23; POH/AFM.

# **Objective.** To determine that the applicant:

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

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# D. TASK: GLASSY WATER APPROACH AND LANDING (WSCS)

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

REFERENCES: FAA-H-8083-23; POH/AFM.

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

# E. TASK: ROUGH WATER TAKEOFF AND CLIMB (WSCS)

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

REFERENCES FAA-H-8083-23; POH/AFM.

- Exhibits knowledge of the elements related to rough water takeoff and climb.
- 2. Positions the flight controls for the existing conditions.
- 3. Clears the area; selects an appropriate takeoff path considering wind, swells surface hazards, and/or vessels.
- Establishes and maintains an appropriate planing attitude, directional control, and corrects for porpoising, skipping, or excessive bouncing.
- Lifts off at minimum airspeed and accelerates to best climb or speed recommended by the POH/AFM, +10/-5 knots before leaving ground effect.
- Repositions the landing gear, if appropriate, after a positive rate of climb is established. (WSCS)
- 7. Maintains takeoff power to a safe maneuvering altitude.
- 8. Maintains directional control and proper wind-drift correction throughout takeoff and climb.

# F. TASK: ROUGH WATER APPROACH AND LANDING (WSCS)

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

REFERENCES: FAA-H-8083-23; POH/AFM.

- 1. Exhibits knowledge of the elements related to rough water approach and landing.
- 2. Adequately surveys the intended landing area.
- 3. Considers the wind conditions, water, depth, hazards, surrounding terrain, and other watercraft.
- 4. Selects the most suitable approach path, and touchdown area.
- 5. Establishes the recommended approach and landing configuration and airspeed, and adjusts pitch attitude and power, as required.
- 6. Maintains a stabilized approach and the recommended approach airspeed, +10/-5 knots with wind gust factor applied.
- 7. Makes smooth, timely, and correct power and control application during the roundout and touch down.
- 8. Contacts the water in the proper pitch attitude, and at the proper airspeed, considering the type of rough water.
- 9. Maintains directional control throughout the approach and landing sequence.

# G. TASK: STEEP APPROACH TO A LANDING (WSCL and WSCS)

REFERENCES: FAA-H-8083-3; POH/AFM.

#### **Objective.** To determine that the applicant:

- Exhibits knowledge of the elements related to a steep approach to a landing.
- Considers the wind conditions, landing surface and obstructions, and selects the most suitable touchdown point.
- 3. Demonstrates effective use of controls at the point from which a landing can be made using steep approach techniques.
- Establishes a ground track aligned with the runway centerline and an airspeed, which results in minimum float during the roundout.
- Makes smooth, timely, and correct control application during the recovery from the maneuvers, the roundout, and the touchdown.
- Touches down smoothly at an appropriate speed, at or within 400 feet beyond a specified point, with no side drift, and with the weight shift aircraft's ground track aligned with and over the runway centerline.
- Maintains directional control throughout the approach and landing.

# H. TASK: GO-AROUND/REJECTED LANDING (WSCL and WSCS)

REFERENCES: FAA-H-8083-3; POH/AFM.

- Exhibits knowledge of the elements related to a goaround/rejected landing.
- 2. Makes a timely decision to discontinue the approach to landing.
- Applies takeoff power immediately and transitions to climb pitch attitude for best climb and maintains appropriate climb or speed recommended by the POH/AFM +10/-5 knots.
- 4. Repositions the landing gear, if appropriate, after a positive rate of climb is established. (WSCS)
- Maneuvers to the side of the runway/landing area to clear and avoid conflicting traffic.
- 6. Maintains takeoff power to a safe maneuvering altitude.
- 7. Maintains directional control and proper wind-drift correction throughout the climb.

#### V. AREA OF OPERATION: PERFORMANCE MANEUVERS

### A. TASK: STEEP TURNS (WSCL and WSCS)

REFERENCES: FAA-H-8083-3; POH/AFM.

**Objective**. To determine that the applicant:

- 1. Exhibits knowledge of the elements related to steep turns.
- 2. Establishes the manufacturers recommended airspeed.
- 3. Rolls into a 360° turn; maintains a 45° bank.
- Performs the task in opposite direction, as specified by the examiner.
- Divides attention between aircraft control and orientation.
- 6. Maintains the entry altitude ±100 feet, airspeed ±10 knots, bank ±10°, and rolls out on the entry heading ±10°.

### B. TASK: ENERGY MANAGEMENT (WSCL and WSCS)

REFERENCES: FAA-H-8083-3; POH/AFM.

- 1. Exhibits knowledge of the elements o energy management.
- 2. Coordinates power and pitch control in flight.
- 3. Controls altitude with coordinated power and pitch control.

# VI. AREA OF OPERATION: GROUND REFERENCE MANEUVERS

**NOTE:** The examiner shall select at least one TASK.

A. TASK: RECTANGULAR COURSE (WSCL and WSCS)

REFERENCE: FAA-H-8083-3.

**Objective.** To determine that the applicant:

- Exhibits knowledge of the elements related to a rectangular course.
- 2. Selects a suitable reference area.
- 3. Plans the maneuver so as to enter a left or right pattern, 400 to 800 feet AGL at an appropriate distance from the selected reference area, 45° to the downwind leg.
- Applies adequate wind-drift correction during straight-andturning flight to maintain a constant ground track around the rectangular reference area.
- 5. Divides attention between aircraft control and the ground track.
- 6. Maintains altitude, ±100 feet; maintains airspeed, ±10 knots.

# B. TASK: S-TURNS (WSCL and WSCS)

REFERENCE: FAA-H-8083-3.

- 1. Exhibits knowledge of the elements related to S-turns.
- 2. Selects a suitable ground reference line.
- 3. Plans the maneuver so as to enter at 400 to 800 feet AGL, perpendicular to the selected reference line.
- 4. Applies adequate wind-drift correction to track a constant radius turn on each side of the selected reference line.
- Reverses the direction of turn directly over the selected reference line.
- 6. Divides attention between aircraft control and the ground track.
- 7. Maintains altitude, ±100 feet; maintains airspeed, ±10 knots.

# C. TASK: TURNS AROUND A POINT (WSCL and WSCS)

REFERENCE: FAA-H-8083-3.

- Exhibits knowledge of the elements related to turns around a point.
- 2. Selects a suitable ground reference point.
- 3. Plans the maneuver so as to enter left or right at 400 to 800 feet AGL, at an appropriate distance from the reference point.
- 4. Applies adequate wind-drift correction to track a constant radius turn around the selected reference point.
- 5. Divides attention between aircraft control and the ground track.
- 6. Maintains altitude, ±100 feet; maintains airspeed, ±10 knots.

#### VII. AREA OF OPERATION: NAVIGATION

#### A. TASK: PILOTAGE AND DEAD RECKONING

REFERENCE: FAA-H-8083-25.

#### **Objective.** To determine that the applicant:

- 1. Exhibits knowledge of the elements related to pilotage and dead reckoning, as appropriate.
- 2. Follows the preplanned course by reference to landmarks.
- Identifies landmarks by relating surface features to chart symbols.
- 4. Verifies the gyroplane's position with 3 nautical miles of the flight-planned route.
- Determines there is sufficient fuel to complete the planned flight, if not, has an alternate plan.
- 6. Maintains the appropriate altitude,  $\pm 200$  feet and headings,  $\pm 15^{\circ}$ .

#### B. TASK: DIVERSION

REFERENCES: FAA-8083-25; AIM.

#### **Objective.** To determine that the applicant:

- 1. Exhibits knowledge of the elements related to diversion.
- Selects an appropriate alternate airport or landing area and route.
- 3. Determines there is sufficient fuel to fly to the alternate airport or landing area.
- Turns to and establishes a course to the selected alternate destination.
- Maintains the appropriate altitude, ±200 feet and headings, ± 15.

#### C. TASK: LOST PROCEDURES

REFERENCES: FAA-H-8083-25; AIM.

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

#### VIII. AREA OF OPERATION: SLOW FLIGHT AND STALLS

# A. TASK: MANEUVERING DURING SLOW FLIGHT (WSCL and WSCS)

REFERENCES: FAA-H-8083-3; POH/AFM.

### **Objective.** To determine that the applicant:

- Exhibits knowledge of the elements related to maneuvering during slow flight.
- 2. Selects an entry altitude that will allow the task to be completed no lower than 1,000 feet AGL.
- 3. Establishes and maintains a minimum flying airspeed.
- 4. Accomplishes straight-and-level flight, turns, climbs, and descents specified by the examiner.
- Divides attention between weight shift control aircraft control and orientation.
- Maintains the specified altitude, ±100 feet; specified heading, ±10°; airspeed, +10/-5 knots and specified angle of bank, ±10°.

# B. TASK: POWER-OFF STALLS (WSCL and WSCS)

REFERENCES: AC 61-67; FAA-H-8083-3; POH/AFM.

- 1. Exhibits knowledge of the elements related to power-off stalls.
- 2. Selects an entry altitude that allows the task to be completed no lower than 1,000 feet AGL.
- Establishes a stabilized descent in the approach or landing configuration, as specified by the examiner. Transitions smoothly from the approach or landing attitude to a pitch attitude that will induce a stall.
- Maintains a specified heading, ±10°, in straight flight; maintains a specified angle of bank not to exceed 20°, ±10°; in turning flight, while inducing the stall.
- Recognizes and recovers promptly after the stall occurs by simultaneously reducing the angle of attack, increasing power to maximum allowable, and leveling the wing to return to a straight-and-level flight attitude with a minimum loss of altitude appropriate for the weight shift control aircraft.
- Repositions the landing gear, if retractable, after a positive rate of climb is established. (WSCS)
- Accelerates to normal speed; returns to the altitude, heading, and airspeed specified by the examiner.

# C. TASK: WHIP STALL AND TUMBLE AWARENESS (WSCL and WSCS)

**NOTE:** The applicant's knowledge of whipstall and tumble awareness shall be evaluated through oral testing only.

REFERENCES: AC 61-67; FAA-H-8083-3; POH/AFM.

**Objective.** To determine that the applicant exhibits knowledge of the elements related to whip stall and tumble awareness by explaining:

- 1. Elements related to whip stalls and tumbles.
- 2. Flight situations where unintentional whip stalls and tumbles may occur.
- 3. The techniques used to avoid whipstalls and tumbles.
- 4. The likely results of executing a whip stall or tumble.

#### IX. AREA OF OPERATION: EMERGENCY OPERATIONS

# A. TASK: EMERGENCY APPROACH AND LANDING (SIMULATED) (WSCL and WSCS)

REFERENCES: FAA-H-8083-3; POH/AFM.

#### **Objective.** To determine that the applicant:

- 1. Exhibits knowledge of the elements related to emergency approach and landing procedures.
- Establishes and maintains the recommended best glide and airspeed, ±10 knots.
- 3. Selects a suitable landing area.
- Plans and follows a flight pattern to the selected landing area considering altitude, wind, terrain, and obstructions.
- 5. Prepares for landing, or go-around, as specified by the examiner.

# B. TASK: SYSTEMS AND EQUIPMENT MALFUNCTIONS (WSCL and WSCS)

REFERENCES: FAA-H-8083-25; POH/AFM.

- Exhibits knowledge of the elements related to causes, indications and pilot actions for various systems and equipment malfunctions system and equipment malfunctions.
- 2. Analyzes the situation and takes appropriate action for simulated emergencies appropriate to the weight shift control aircraft provided for the practical test for at least three (3) of the following:
  - a. partial or complete power loss.
  - b. engine roughness or overheat.
  - c. carburetor or induction icing.
  - d. loss of oil pressure.
  - e. fuel starvation.
  - f. electrical malfunction.
  - g. flight instruments malfunction.
  - h. pitot/static.
  - i. landing gear malfunction.
  - smoke/fire/engine compartment fire.
  - k. inadvertent prop strike.
  - I. any other emergency appropriate to the weight shift aircraft.
- 3. Follows the appropriate procedure.

# C. TASK: EMERGENCY EQUIPMENT AND SURVIVAL GEAR (WSCL and WSCS)

REFERENCES: FAA-H-8083-23, FAA-H-8083-25; POH/AFM.

### **Objective.** To determine that the applicant:

- Exhibits knowledge of the elements related to emergency equipment appropriate to the aircraft used for the practical test by describing
  - a. purpose of such equipment.
  - b. location in the aircraft.
  - c. method of operation.
  - d. servicing requirements.
  - e. method of safe storage.
- Exhibits knowledge of the elements related to survival gear by describing—
  - a. survival gear appropriate for operation in various climatological and topographical environments.
  - b. location in the aircraft.
  - c. method of operation.
  - d. servicing requirements.
  - e. method of safe storage.

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#### X. AREA OF OPERATION: NIGHT OPERATION

# A. TASK: NIGHT PREPARATION (WSCL and WSCS)

REFERENCES: FAA-H-8083-3, FAA-H-8083-25; AIM; POH/AFM.

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

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

#### XI. AREA OF OPERATION: POSTFLIGHT PROCEDURES

**NOTE:** The examiner shall select TASK A and for WSCS applicants at least one other TASK.

# A. TASK: AFTER LANDING, PARKING, AND SECURING (WSCL and WSCS)

REFERENCES: FAA-H-8083-3, FAA-H-8083-23; POH/AFM.

# **Objective.** To determine that the applicant:

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

# B. TASK: ANCHORING (WSCS)

REFERENCES: FAA-H-8083-23; POH/AFM.

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

# C. TASK: DOCKING AND MOORING (WSCS)

REFERENCES: FAA-H-8083-23; POH/AFM.

**Objective.** To determine that the applicant:

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

# D. TASK: RAMPING/BEACHING (WSCS)

REFERENCES: FAA-H-8083-23; POH/AFM.

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