

PRIVATE PILOT SINGLE ENGINE AIRPLANE

Hursa Corp x Lucky Aviation 2021

Table of Contents

Introduction to Flight	6
Fundamentals of Flight	8
Maneuvers	13
Systems Validation	21
Procedures Validation	22
Maneuvers Validation	23
Landings	24
Emergencies	32
Solo Validation	41
Supervised Solo Flight	46
Basic Instrument Maneuvers	48
Performance Takeoffs and Landings	52
REVIEW AND SOLO PRACTICE	57
CROSS-COUNTRY AND NIGHT TRAINING	60
Course Review	74
Knowledge Validation	77
Maneuvers Validation	78

Ground Lessons

Induction to Flight	7
Aircraft Systems	12
Fundamentals of Flight	15
Legal Requirements for Flight	17
Airport Operations	24
Performance and Limitations	28
National Airspace System	31
Stage One Review	38
Solo Knowledge Validation	42

Stage One

Objectives

To teach the student the aeronautical knowledge, and give them the aeronautical experience required for solo flight.

Completion Standards

This stage will be complete when the student exhibits aeronautical knowledge and skills describe in 14 CFR Part 61.87 - Requirements for Solo Flight and is prepared to conduct safe solo flight.

Introduction to Flight

Induction to Flight Stage 1 Lesson 1 Dual Flight Lesson Time 1.0

Objectives

Introduce the student flight.

SBT

Plan a costal sight-seeing flight choosing a land mark to orbit.

Tasks

Pre Flight

Use of Checklists

Positive Exchange of Flight Controls

Taxiing

Normal Takeoff

Climbs

Straight and Level

Turns

Decents

Normal / Crosswind Landing

Post Flight

Completion Standards

The student has been introduced to and completed the tasks of the lesson.

Induction to Flight Stage 1 Lesson 2 Ground Lesson Lesson Time 2.0

Induction to Flight

Objectives

This lesson will serve as the student's initial ground briefing on Fundamentals of Flight, Pro Standards Flight Operations, Pro Standards checklists, and Pro Standards Procedures. Additionally, the instructor will introduce the aeronautical knowledge elements required prior to initial solo referencing applicable POH, the AFH, and the PHAK.

SBT

>>

Tasks

Introduction to Pro Standards Training Program

Course Overview

Required Course Materials

Course Policies

Being PIC

Command-ability

Professionalism

Human Factors

ADM

SRM

CRM

TEM

Local Operations

Practice Area Review

Collision Hazards

Aviation Security

Runway Incursion Avoidance

National Airspace System

Operation of Systems

Flight Deck Management

Completion Standards

The student demonstrates an understanding of the knowledge elements required for Fundamentals of Flight, Safety of Flight Items, and the required aeronautical knowledge elements relating to Operation of Systems and National Airspace system. The lesson will be complete once the instructor has introduced all the required Tasks and subsequent elements to the student.

Fundamentals of Flight

Fundamentals of Flight Stage 1 Lesson 3 Procedures Training Lesson Time 1.0

Objectives

The instructor will introduce the student to the required callouts, flows, and checklist Items in accordance with the Pro Standards' SOPA.

SBT



Tasks

Pro Standards Checklist Philosophy (SOPA) Initial Aircraft Acceptance (SOPA)

Standard Callouts (SOPA)

Use of Checklists

Positive Exchange of Flight Controls

Before Start (SOPA)

Engine Priming (SOPA)

Engine Starting (SOPA)

Before Taxi (SOPA)

Before Takeoff (SOPA)

Takeoff (SOPA)

Climb (SOPA)

Cruise (SOPA)

Pre-Maneuver Flow (SOPA)

Decent (SOPA)

After Landing (SOPA)

Shutdown/Secure (SOPA)

Flight Deck Management

Taxiing

Completion Standards

The student demonstrates an understanding of the knowledge elements required for checklist philosophy, use of flows, cockpit procedures, safety of flight items, and the required aeronautical knowledge elements relating to operation of systems. The lesson will be complete once the instructor has introduced all the required Tasks and subsequent elements to the student.

Fundamentals of Flight Stage 1 Lesson 4 Maneuvers Brief Lesson Time 0.5

Objectives

This lesson will serve as the student's first opportunity to practice the skills and knowledge acquired in previous lessons relating to Fundamentals of Flight, callouts, flows, checklists and procedures. Additionally, the instructor will discuss with the student elements relating to Preflight Assessment to include Weather Information, Initial Aircraft Acceptance, and Performance and Limitations.

SBT

>>

TASKS

Control and Performance Method Overview Straight-and-Level Flight (Visual Reference) Constant Airspeed Climbs (Visual Reference) Constant Airspeed Descents (Visual Reference) Turns to Headings (Visual Reference) Climbing Turns (Visual Reference) Descending Turns (Visual Reference)

Completion Standards

The student demonstrates an understanding of the knowledge elements required for Fundamentals of Flight, Safety of Flight Items,

Fundamentals of Flight Stage 1 Lesson 5 Dual Flight Lesson Time 2.0

Objectives

This lesson will serve as the student's first opportunity to practice the skills and knowledge acquired in previous lessons relating to Fundamentals of Flight, callouts, flows, checklists and procedures.

SBT

>>

TASKS

Airworthiness Acceptance

Standard Callouts (SOPA)

Use of Checklists

Positive Exchange of Flight Controls

Collision Hazards

Runway Incursion Avoidance

Weather Information

Performance and Limitations

Preflight Assessment

Flight Deck Management

Engine Starting

Taxiing

Before Takeoff Check

Communications, Light Signals, and Runway Lighting Systems

Traffic Patterns

Normal Takeoff and Climb

Normal Approach and Landing

Control and Performance Method Overview

Coordination Demonstration (Standardization Manual)

Adverse Yaw Demonstration (Standardization Manual)

Lateral Stability Demonstration (Standardization Manual)

Straight-and-Level Flight (Visual Reference)

Constant Airspeed Climbs (Visual Reference)

Constant Airspeed Descents (Visual Reference)

Turns to Headings (Visual Reference)

Climbing Turns (Visual Reference)

Descending Turns (Visual Reference)

After Landing, Parking and Securing

Notes: 1.4 Hrs. Dual Flight Training and 0.5 hrs. Pre and Post Briefing (Suggested)

Completion Standard

The student demonstrates the aeronautical knowledge and skill required to perform the tasks related to Fundamentals of Flight. The lesson will be complete once the instructor has introduced all the required Tasks and subsequent elements to the student.

Fundamentals of Flight Stage 1 Lesson 6 Ground Lesson Lesson Time 4.0

Aircraft Systems

Objectives

Exhibit knowledge of the principles of powerplants and aircraft systems.

SBT



TASK

Powerplant and Propeller Ignition System **Engine Cooling Systems Exhaust Systems** Starting System Combustion Fuel and Oil Systems Electrical System Hydraulic Systems Landing Gear Environmental Oxygen Systems Anti-ice and Deice Systems Electronic Flight Instruments Pitot-Static Flight Instruments Gyroscopic Flight Instruments Compass Systems

Completion Standards

Exhibit knowledge of the principles of aircraft systems through written and oral examination.

Maneuvers

Maneuvers Stage 1 Lesson 7 Maneuvers Briefing Lesson Time 1.0

Objectives

All maneuvers will be introduced in accordance with the Pro Standards Standardization Manual with reference to the applicable POH, the AFH, and the PHAK.

SBT

>>

TASK

Safety of Flight

Aeronautical Decision Making and Risk Management

Collision Hazards

Controlled Flight into Terrain Awareness

Situational Awareness

Wire Strike Avoidance

Aviation Security

Pilot Qualifications

Weather Information

Performance and Limitations

Traffic Patterns

Airport, Taxiway, and Runway Signs and Markings

Normal Takeoff and Climb

Normal Approach and Landing

Steep Turns

Maneuvering During Slow Flight

Power-Off Stalls

Power-On Stalls

Spin Awareness

Completion Standard

The student demonstrates an understanding of the required knowledge of the tasks related to Preflight Assessment, Normal Takeoffs and Landings, basic Traffic Pattern and Airport Operations, Stalls, Slow Flight, and Steep Turns. The lesson will be complete once the instructor has introduced all the required Tasks and subsequent elements to the student.

Maneuvers Stage 1 Lesson 8 Dual Flight Lesson Time 2.0

Objectives

The student will practice the skills associated with Preflight Assessment, Normal Takeoffs and Landings, basic Traffic Pattern and Airport Operations, Stalls, Slow Flight, and Steep Turns.

SBT

>>

TASK

Safety of Flight

Aeronautical Decision Making and Risk Management

Collision Hazards

Weather Information

Performance and Limitations

Preflight Assessment

Flight Deck Management

Engine Starting

Taxiing

Before Takeoff Check

Communications, Light Signals, and Runway Lighting Systems

Traffic Patterns

Normal Takeoff and Climb

Normal Approach and Landing

Steep Turns

Maneuvering During Slow Flight

Power-Off Stalls

Power-On Stalls

Spin Awareness

After Landing, Parking and Securing

Notes: 1.0 Pre Brief / 1.5 Flight / .3 Post Briefing

Completion Standard

This lesson will be graded at +50% ACS. The student demonstrates an understanding of the elements related to the tasks of Stalls, Slow Flight, and Steep Turns by performing the tasks in accordance to the Pro Standards Standardization Manual within the prescribed standards of the Private Pilot Airplane Airman Certification Standards, and at no time will the safe outcome of the flight be in doubt.

Maneuvers Stage 1 Lesson 9 Ground Lesson Lesson Time 2.0

Fundamentals of Flight

OBJECTIVES

Exhibit knowledge of the principles of aerodynamics, and stall awareness, spin entry, spins, and spin recovery techniques.

SBT



TASKS

Lift and Basic Aerodynamics
Major Components and Subcomponents
Types of Aircraft Construction
Structure of the Atmosphere
Theories in the Production of Lift
Airfoil Design

Forces Acting on the Aircraft

Wingtip Vortices and Ground Effect

Axes of an Aircraft

Aircraft Design Characteristics

Aerodynamic Forces in Flight Maneuvers

Stalls and Spins

Stall/Spin Awareness

Propeller Principles

Load Factors

Primary Flight Controls

Secondary Flight Controls

Coordinated Flight

Adverse Yaw

Completion Standards

Exhibit knowledge of the principles of aerodynamics, and stall awareness, spin entry, spins, and spin recovery techniques through written and oral examination.

Maneuvers
Stage 1 Lesson 10
Dual Flight
Lesson Time 2.0

Objectives

The student will practice the skills associated with Preflight Assessment, Normal Takeoffs and Landings, basic Traffic Pattern and Airport Operations, Stalls, Slow Flight, and Steep Turns. Emphasis will be on developing the student's understanding of the associated tasks and the relevant aircraft performance.

SBT



TASK

Safety of Flight
Weather Information
Performance and Limitations
Preflight Assessment
Flight Deck Management
Engine Starting
Taxiing

Before Takeoff Check

Communications, Light Signals, and Runway Lighting Systems

Traffic Patterns

Normal Takeoff and Climb

Normal Approach and Landing

Steep Turns

Maneuvering During Slow Flight

Power-Off Stalls

Power-On Stalls

Spin Awareness

After Landing, Parking and Securing

Notes: 1.4 Hrs. Dual Flight Training and 0.5 hrs. Pre and Post Briefing (Suggested)

Completion Standard

This lesson will be graded at +50% ACS. The student demonstrates an understanding of the elements related to the tasks of Stalls, Slow Flight, and Steep Turns by performing the tasks in accordance with the Pro Standards Standardization Manual within the prescribed standards of the Private Pilot Airplane Airman Certification Standards, and at no time will the safe outcome of the flight be in doubt.

Maneuvers Stage 1 Lesson 11 Ground Lesson Lesson Time 2.0

Legal Requirements for Flight

OBJECTIVES

Exhibit knowledge of applicable federal aviation regulations for private pilot privileges, limitations, and flight operations; accident reporting requirements of the National Transportation Safety Board; and applicable subjects of the "Aeronautical Information Manual" and appropriate FAA advisory circulars.

SBT



TASKS

Federal Aviation Regulations (14 CFRs)

14 CFR Part 1 – Definitions and Abbreviations

14 CFR Part 43 – Maintenance, Preventive Maintenance, Rebuilding and Alteration

14 CFR Part 61 - Certification: Pilots, Flight Instructors, and Ground Instructors

14 CFR Part 91 – General Operating and Flight Rules

Aeronautical Information Manual

Advisory Circulars

NTSB Part 830

Airplane Flight Manuals

Aircraft Documents

Aircraft Inspections

Preventative Maintenance

Minimum Equipment Lists

Operations with Inoperative Equipment

Aircraft Owner/Operator Responsibilities

Airworthiness Directives

Completion Standards

Maneuvers Stage 1 Lesson 12 Maneuver Briefing Lesson Time 1.0

Objectives

The student will practice the skills associated with Preflight Assessment, Normal Takeoffs and Landings, basic Traffic Pattern and Airport Operations, Stalls, Slow Flight, and Steep Turns. Emphasis will be on developing the student's understanding of the associated tasks and the relevant aircraft performance.

SBT



TASK

Ground ref

Maneuvers Stage 1 Lesson 13 Dual Flight Lesson Time 2.0

Objectives

The student will practice the skills Preflight Assessment, Normal Takeoffs and Landings, Traffic Pattern and Airport Operations, Stalls, Steep Turns and Ground Reference Maneuvers.

SBT

>>

TASK

Safety of Flight

Runway Incursion Avoidance

Land and Hold Short Operations (LAHSO)

Wind Shear and Wake Turbulence Avoidance

Weather Information

Performance and Limitations

Preflight Assessment

Flight Deck Management

Engine Starting

Taxiing

Before Takeoff Check

Communications, Light Signals, and Runway Lighting Systems

Traffic Patterns

Normal Takeoff and Climb

Normal Approach and Landing

Steep Turns

Ground Reference Maneuvers (S-turns)

Ground Reference Maneuvers (Turns around a point)

Power-Off Stalls

Spin Awareness

Accelerated Stall (Standardization Manual)

Crossed-Control Stall (CFI Demonstration)

After Landing, Parking and Securing

Completion Standard

This lesson will be graded at +50% ACS. The student demonstrates an understanding of the elements related to the tasks of Stalls, Steep Turns, S-Turns, and Turns Around a Point by performing the tasks in accordance to the Pro Standards Standardization Manual within the prescribed standards of the Private Pilot Airplane Airman Certification Standards, and at no time will the safe outcome of the flight be in doubt.

Maneuvers Stage 1 Lesson 14 Dual Flight Lesson Time 2.0

SBT



Objectives

The student will practice the skills Preflight Assessment, Normal Takeoffs and Landings, basic Traffic Pattern and Airport Operations, Stalls, Steep Turns and Ground Reference Maneuvers.

TASK

Safety of Flight

Weather Information

Performance and Limitations

Preflight Assessment

Flight Deck Management

Engine Starting

Taxiing

Before Takeoff Check

Communications, Light Signals, and Runway Lighting Systems

Traffic Patterns

Normal Takeoff and Climb

Normal Approach and Landing

Ground Reference Maneuvers (Rectangular course)

Ground Reference Maneuvers (S-turns)

Ground Reference Maneuvers (Turns around a point)

Power-On Stalls

Spin Awareness

Elevator Trim Stalls (CFI Demonstration)

Secondary Stall (CFI Demonstration)

After Landing, Parking and Securing

Completion Standard

This lesson will be graded at +50% ACS. The student demonstrates an understanding of the elements related to the tasks of Stalls, Steep Turns, and Ground Reference Maneuvers by performing the tasks in accordance to the Pro Standards Standardization Manual within the prescribed standards of the Private Pilot Airplane Airman Certification Standards, and at no time will the safe outcome of the flight be in doubt.

Systems Validation

Systems Validation Stage 1 Lesson 15 Validation Lesson Time 2.0

SBT



Objectives

The student will recite the aircraft limitations and demonstrate systems knowledge of the aircraft.

TASKS

Aircraft Limitations Aircraft Systems

Completion Standard

The student completes each task, from memory.

Procedures Validation

Procedures Validation Stage 1 Lesson 16 Validation Lesson Time 2.0

SBT



Objectives

The student will complete each checklist in a CPT as a flow pattern, followed by the checklist verification with no more than one missed flow item per checklist with no missed items during checklist verification.

TASKS

Before Start (SOPA)
Engine Priming (SOPA)
Engine Starting (SOPA)
Before Taxi (SOPA)
Before Takeoff (SOPA)
Takeoff (SOPA)
Climb (SOPA)
Cruise (SOPA)
In-Range (SOPA)
After Landing (SOPA)
Shutdown/Secure (SOPA)

Completion Standard

The student completes each checklist, from memory, with a maximum on one missed item per checklist, with no missed items allowed during checklist verification.

Maneuvers Validation

Maneuvers Validation Stage 1 Lesson 17 Validation Lesson Time 2.0

Objectives

The student will demonstrate the skills associated with Preflight Assessment, Normal Takeoffs and Landings, basic Traffic Pattern and Airport Operations, Stalls, Steep Turns and Ground Reference Maneuvers on a flight conducted by an instructor other than the student's assigned instructor. Emphasis will be on ensuring the student's understanding of the associated tasks and the relevant aircraft performance while focusing on VFR flight techniques.

SBT

>>

TASKS

Safety of Flight
Weather Information
Performance and Limitations
Preflight Assessment
Flight Deck Management
Engine Starting
Taxiing

Before Takeoff Check

Communications, Light Signals, and Runway Lighting Systems

Traffic Patterns

Normal Takeoff and Climb

Normal Approach and Landing

Steep Turns

Ground Reference Maneuvers

Maneuvering During Slow Flight

Power-Off Stalls

Power-On Stalls

Spin Awareness

After Landing, Parking and Securing

Completion Standard

This lesson will be graded at +50% ACS. The student demonstrates an understanding of the elements related to the tasks of Stalls, Maneuvering During Slow Flight, Steep Turns, and Ground Reference Maneuvers by performing the tasks in accordance to the Pro Standards Standardization Manual within the Private Pilot Airplane Airman Certification Standards, and at no time will the safe outcome of the flight be in doubt

Landings

Landings Stage 1 Lesson 18 Ground Lesson Lesson Time 4.0

Airport Operations

Objectives

Exhibits knowledge of safe and efficient operation of aircraft, including collision avoidance, and recognition and avoidance of wake turbulence; runway incursion avoidance and land and hold short operations; radio communications procedures; radar and ATC services and preflight action including how to obtain information on runway lengths at airports of intended use.

SBT

>>It is time to start training for the Pro Standards Annual Pro Pilot Cup.

TASK

Towered and Non-Towered Airports
Sources for Airport Data
Airport Markings and Signs
Airport Lighting
Wind Direction Indicators
Traffic Patterns
Phraseology
Phonetic Alphabet
Air Traffic Control Services
Lost Communication Procedures
Collision Avoidance
Wake Turbulence Avoidance
Runway Incursion Avoidance
Land and Hold Short Operations (LAHSO)
Controlled Flight Into Terrain (CFIT)

Completion Standards

Exhibit knowledge of the principles of Airport Operations through written and oral examination.

Landings Stage 1 Lesson 19 Maneuvers Briefing Lesson Time 1.0

Objectives

The instructor will introduce the student to the concepts required to develop the aeronautical knowledge and skill to perform Crosswind Takeoffs and Landings in accordance with the Pro Standards Standardization Manual, Pro Standards Flight Operations Manual, and the Pro Standards Private Pilot, Stage 1 Course Standards.

SBT

>>

TASK

Pro Standards Flight Operations Manual
Pilot Qualifications
Airworthiness Requirements
Weather Information
Performance and Limitations
Operation of Systems
Airport Operations
Traffic Patterns
Airport, Taxiway, and Runway Signs and Markings
Crosswind Takeoff and Climb (Standardization Manual)
Crosswind Approach and Landing (Standardization Manual)
Go-Around/Rejected Landing

Notes: 2.0 Hrs. Ground Briefing (Suggested)

Completion Standard

This lesson will be graded at +50% ACS. The student demonstrates an understanding of the procedures required to perform Crosswind Takeoffs and Landings in accordance with the applicable POH, the AFH, the PHAK, and the Pro Standards Standardization Manual. Additionally, the student demonstrates an understanding of the relevant safety of flight considerations as well as an understanding of the required aeronautical knowledge elements prescribed in the Private Pilot Airplane Airman Certification Standards.

Landings Stage 1 Lesson 20 Dual Flight Lesson Time 2.0

Objectives

The instructor will demonstrate and then have the student practice Normal Takeoffs and Landings as well as Airport Operations. This lesson will be conducted in calm winds and weather to further develop the student's knowledge and skills of the fundamentals of Normal Approaches and Landings.

SBT

>>

TASK

Pro Standards Flight Operations Manual Safety of Flight Weather Information Performance and Limitations Operation of Systems Preflight Assessment Flight Deck Management **Engine Starting Taxiing** Before Takeoff Check **Airport Operations** Communications, Light Signals, and Runway Lighting Systems Traffic Patterns Normal Takeoff and Climb Normal Approach and Landing Go-Around/Rejected Landing After Landing, Parking and Securing

Completion Standard

This lesson will be graded at +50% ACS. The student performs the tasks in accordance with the Pro Standards Standardization Manual to the standards prescribed in the Private Pilot Airplane Airman Certification Standards, and at no time will the safe outcome of the flight be in doubt.

Landings Stage 1 Lesson 21 Dual Flight Lesson Time 2.0

Objectives

The instructor and student will discuss the previously introduced elements related to the effects of wind on Takeoffs, Landings, and the Traffic Pattern.

SBT



TASK

Safety of Flight
Collision Hazards
Runway Incursion Avoidance
Land and Hold Short Operations (LAHSO)
Wind Shear and Wake Turbulence Avoidance
Communications, Light Signals, and Runway Lighting Systems
Traffic Patterns
Takeoff and Climb (Headwind, Tailwind, Crosswind)
Approach and Landing (Headwind, Tailwind, Crosswind)
Forward Slip to a Landing
Go-Around/Rejected Landing

Notes: 2.0 Hrs. Ground Briefing (Suggested)

- This lesson may include training in the "X-Wind" crosswind simulator. This is optional.

Completion Standard

This lesson will be graded at +50% ACS. The student demonstrates an understanding of the skills required to successfully perform Crosswind Landings. Additionally, the student demonstrates the knowledge required to successfully perform Crosswind Landings. The student's understanding and knowledge will be based on the applicable POH, the AFH, the PHAK, and the Pro Standards Standardization Manual.

Landings Stage 1 Lesson 22 Ground Lesson Lesson Time 2.0

Performance and Limitations

OBJECTIVES

Exhibit knowledge of weight and balance computations, aircraft performance, including effects of density altitude on takeoff and climb performance, and preflight action including data on takeoff and landing distances.

SBT

Plan your first ski trip to Big Bear (L35). The pilot, instructor, and friend will fly to Big Bear with gear.

TASKS

Weight and Balance Computations Center of Gravity Moment and Moment Arm Importance of Performance Data Pressure Altitude Density Altitude Takeoff and Landing Performance Performance Speeds and Charts

Completion Standards

Exhibit knowledge of weight and balance computations, aircraft performance, including effects of density altitude on takeoff and climb performance, and preflight action including data on takeoff and landing distances by calculating a weight and balance and performance data in real time.

Landings Stage 1 Lesson 23 Dual Flight Lesson Time 2.0

Objectives

The instructor and student will practice Normal Takeoffs and Landings as well as Traffic Pattern operations. This lesson will further enhance the student's knowledge and skills required to perform the required tasks associated with Takeoffs, Landings, and Airport Operations.

SBT

>>

TASK

Pro Standards Flight Operations Manual Safety of Flight Weather Information Performance and Limitations Operation of Systems Preflight Assessment Flight Deck Management **Engine Starting Taxiing** Before Takeoff Check Communications, Light Signals, and Runway Lighting Systems Traffic Patterns Normal Takeoff and Climb Normal Approach and Landing Go-Around/Rejected Landing After Landing, Parking and Securing

Notes: 1.3 Hrs. Dual Flight Training and 0.5 hrs. Pre and Post Briefing (Suggested)

Completion Standard

This lesson will be graded at +50% ACS. The student performs the tasks in accordance with the Pro Standards Standardization Manual to the standards prescribed in the Private Pilot Airplane Airman Certification Standards, and at no time will the safe outcome of the flight be in doubt.

Landings Stage 1 Lesson 24 Dual Flight Lesson Time 2.0

Objectives

The instructor and student will practice Normal Takeoffs and Landings as well as Traffic Pattern operations. This lesson will further enhance the student's knowledge and skills required to perform the required tasks associated with Takeoffs, Landings, and Airport Operations.

SBT

>>

TASK

Pro Standards Flight Operations Manual Safety of Flight Weather Information Performance and Limitations Operation of Systems Preflight Assessment Flight Deck Management **Engine Starting Taxiing** Before Takeoff Check Communications, Light Signals, and Runway Lighting Systems Traffic Patterns Normal Takeoff and Climb Normal Approach and Landing Forward Slip to a Landing Go-Around/Rejected Landing After Landing, Parking and Securing

Notes: 1.4 Hrs. Dual Flight Training and 0.5 hrs. Pre and Post Briefing (Suggested)

Completion Standard

This lesson will be graded at +50% ACS. The student performs the tasks in accordance with the Pro Standards Standardization Manual to the standards prescribed in the Private Pilot Airplane Airman Certification Standards, and at no time will the safe outcome of the flight be in doubt.

Landings Stage 1 Lesson 25 Ground Lesson Lesson Time 2.0

National Airspace System

OBJECTIVE

Exhibits knowledge of the National Airspace System.

SBT

Operating a flight for Elon Musk from SAN to LAX, to look for suitable places to launch SpaceX's newest rocket.

TASKS

Categories and Types of Airspace
Controlled Airspace
Uncontrolled Airspace
Airspace and VFR Weather Minimums
Special VFR
Special-Use Airspace
Special Airspace Areas
Other Airspace Areas
Airspace and Weather Minimums Lab

COMPLETION STANDARDS

Exhibits knowledge of the National Airspace System through written and oral examination.

Emergencies

Emergencies Stage 1 Lesson 26 Maneuvers Briefing Lesson Time 2.0

Objectives

The instructor will introduce the student to the concepts required to safely operate the aircraft in emergency conditions and with various systems and equipment malfunctions.

SBT

>>

TASK

Pro Standards Publications
Pro Standards Checklist Philosophy (SOPA)
Initial Aircraft Acceptance (SOPA)
Standard Callouts (SOPA)
Safety of Flight
Use of Checklists
Aeronautical Decision Making and Risk Management
Automation Management
Airworthiness Requirements
Operation of Systems
Emergency Descent
Emergency Approach and Landing (Simulated)
Systems and Equipment Malfunctions (Various)
Avionics Malfunctions and Failures

Notes: 2.0 Hrs. Ground Briefing (Suggested)

Emergency Equipment and Survival Gear

- The instructor will brief the student on acceptable methods for simulating malfunctions with the Avionics as outlined in the FOM.

Completion Standard

This lesson will be graded at +50% ACS. The student demonstrates an understanding of all tasks in accordance with the requirements of the Private Pilot Airplane Airman Certification Standards as well as all procedures outlined in the Pro Standards Standardization Manual.

Emergencies
Stage 1 Lesson 27
Procedures Training
Lesson Time 2.0

Objectives

The student will complete each checklist in a CPT as a flow pattern, followed by the checklist verification with no more than one missed flow item per checklist with no missed items during checklist verification.

SBT



TASK

Excessive Fuel Vapor (SOPA)

Flooded Engine Start (SOPA)

Operation of Systems

Engine Troubleshoot (SOPA)

Engine Secure (SOPA)

Emergency Landing Without Power (SOPA)

Precautionary Landing with Engine Power (SOPA)

Engine Fire on Ground (SOPA)

Engine Fire in Flight (SOPA)

Wing Fire (SOPA)

Air Data System Failure (SOPA)

Attitude and Heading Reference System Failure (SOPA)

Electrical Faults (SOPA)

Illumination of Oil Pressure Annunciator (SOPA)

Illumination of CO LVL HIGH Annunciator (SOPA)

Illumination of High Volts Annunciator or M. Batt Amps more than 40 (SOPA)

Completion Standard

This lesson will be graded at +50% ACS. The student completes each checklist, from memory, with a maximum on one missed item per checklist, with no missed items allowed during checklist verification.

Emergencies
Stage 1 Lesson 28
Dual Flight
Lesson Time 2.0

Objectives

The student will practice various Systems and Equipment Malfunctions in the aircraft while also generating an understanding of the aircraft's operation and handling during emergency operations.

SBT



TASK

Safety of Flight

Airworthiness Requirements

Weather Information

Performance and Limitations

Operation of Systems

Preflight Assessment

Flight Deck Management

Engine Starting

Taxiing

Before Takeoff Check

Communications, Light Signals, and Runway Lighting Systems

Traffic Patterns

Normal Takeoff and Climb

Normal Approach and Landing

Emergency Descent

Emergency Approach and Landing (Simulated)

Engine Failure in the Traffic Pattern

Systems and Equipment Malfunction

Systems and Equipment Malfunction (Partial / Complete Power Loss)

Systems and Equipment Malfunctions (Various)

Engine Fire in Flight (SOPA)

Wing Fire (SOPA)

Avionics Malfunctions and Failures

Emergency Equipment and Survival Gear

After Landing, Parking and Securing

Completion Standard

This lesson will be graded at +50% ACS. Student demonstrates an understanding of the elements related to Systems and Equipment Malfunctions by performing all the tasks in accordance with the Pro Standards Standardization Manual and the Pro Standards SOPA to the standards prescribed in the Private Pilot Airplane Airman Certification Standards, and at no time will the safe outcome of the flight be in doubt.

Emergencies Stage 1 Lesson 29 Dual Flight Lesson Time 2.0

Objectives

The student will practice various Systems and Equipment Malfunctions in the aircraft while also generating an understanding of the aircraft's operation and handling during emergency operations.

SBT



TASK

Safety of Flight

Airworthiness Requirements

Weather Information

Performance and Limitations

Operation of Systems

Preflight Assessment

Flight Deck Management

Engine Starting

Taxiing

Before Takeoff Check

Communications, Light Signals, and Runway Lighting Systems

Traffic Patterns

Normal Takeoff and Climb

Normal Approach and Landing

Emergency Descent

Emergency Approach and Landing (Simulated)

Engine Failure in the Traffic Pattern

Systems and Equipment Malfunction

Systems and Equipment Malfunction (Partial / Complete Power Loss)

Systems and Equipment Malfunctions (Various)

Malfunctions and Failures

Electrical Faults (SOPA)

Electrical/Cabin Fire (SOPA)

Emergency Equipment and Survival Gear

After Landing, Parking and Securing

Completion Standard

This lesson will be graded at +50% ACS. Student demonstrates an understanding of the elements related to Systems and Equipment Malfunctions by performing all the tasks in accordance with the Pro Standards Standardization Manual and the Pro Standards SOPA to the

standards prescribed in the Private Pilot Airplane Airman Certification Standards, and at no time will the safe outcome of the flight be in doubt.

Emergencies Stage 1 Lesson 30 Ground Lesson Lesson Time 2.0

Stage One Review

Objectives

The student will demonstrate the required knowledge to conduct solo flight through an oral review with the instructor.

SBT

>>

TASK

Pilot Qualifications
Weather Information
National Airspace System
Performance and Limitations
Operation of Systems
Communications, Light Signals, and Runway Lighting Systems
Airport, Taxiway, and Runway Signs and Markings

Notes: 2.0 Hrs. Ground Briefing (Suggested)

Completion Standard

The student will demonstrate the required aeronautical knowledge to conduct solo flight through an oral review with the instructor.

Emergencies
Stage 1 Lesson 31
Dual Flight
Lesson Time 2.0

Objectives

The student will demonstrate the required aeronautical knowledge and skill to safely operate the aircraft in solo flight operations by performing all the required tasks.

SBT



TASK

Initial Aircraft Acceptance (SOPA)

Standard Callouts (SOPA)

Safety of Flight

Use of Checklists

Collision Hazards

Runway Incursion Avoidance

Wind Shear and Wake Turbulence Avoidance

Weather Information

Performance and Limitations

Preflight Assessment

Flight Deck Management

Engine Starting

Taxiing

Before Takeoff Check

Traffic Patterns

Normal Takeoff and Climb

Normal Approach and Landing

Go-Around/Rejected Landing

Steep Turns

Ground Reference Maneuvers (Turns around a point)

Power-Off Stalls

Power-On Stalls

Spin Awareness

Emergency Approach and Landing (Simulated)

Systems and Equipment Malfunction (Partial / Complete Power Loss)

Emergency Equipment and Survival Gear

After Landing, Parking and Securing

Optional Tasks

Communications, Light Signals, and Runway Lighting Systems

No-Flap Landing (Standardization Manual) Forward Slip to a Landing Maneuvering During Slow Flight

Completion Standard

This lesson will be graded at +50% ACS. The student successfully demonstrates the knowledge and skill to operate the aircraft safely in solo operations by performing all tasks in accordance with the Pro Standards Standardization Manual and meeting the standards prescribed in the Private Pilot Airplane Airman Certification Standards, and at no time will the safe outcome of the flight be in doubt.

Solo Validation

Solo Validation Stage 1 Lesson 32 Validation Lesson Time 1.0

Objectives

To determine through written exam that the student demonstrates satisfactory proficiency of aeronautical knowledge and skill to competently and safely operate an airplane in solo flight in accordance with 14 CFR Part 141 Appendix B(6)(b).

SBT

>>

TASKS

Stage One Exam

Completion Standards

The student is completes the Stage One Exam with 80% or better and the student and instructor correct the exam to 100%

Solo Validation Stage 1 Lesson 33 Validation Lesson Time 2.0

Solo Knowledge Validation

Objectives

The student will demonstrate the required proficiency of aeronautical knowledge and skill to safely operate the aircraft in solo flight operations by performing all the required tasks.

SBT

>>

TASK

Safety of Flight
Use of Checklists
Aeronautical Decision Making and Risk Management
Collision Hazards
Runway Incursion Avoidance
Wind Shear and Wake Turbulence Avoidance
Weather Information
Performance and Limitations
Operation of Systems
National Airspace System

Completion Standard

The student completes each checklist, from memory, with a maximum of one missed item per checklist, with no missed items allowed during checklist verification, additionally the student successfully demonstrates, through oral questioning and a flight check, the knowledge and skill to operate the aircraft safely in solo operations by performing all tasks in accordance with the Pro Standards Standardization Manual and meeting the standards prescribed in the Private Pilot Airplane Airman Certification Standards, and at no time will the safe outcome of the flight be in doubt.

Solo Validation Stage 1 Lesson 34 Validation Lesson Time 2.0

Objectives

The student will demonstrate the required proficiency of aeronautical knowledge and skill to safely operate the aircraft in solo flight operations by performing all the required tasks.

SBT

>>

TASK

Safety of Flight

Use of Checklists

Aeronautical Decision Making and Risk Management

Collision Hazards

Runway Incursion Avoidance

Wind Shear and Wake Turbulence Avoidance

Weather Information

Performance and Limitations

Operation of Systems

Preflight Assessment

Flight Deck Management

Engine Starting

Taxiing

Before Takeoff Check

Communications, Light Signals, and Runway Lighting Systems

Traffic Patterns

Normal Takeoff and Climb

Normal Approach and Landing

Go-Around/Rejected Landing

Systems and Equipment Malfunction (Partial / Complete Power Loss)

Emergency Equipment and Survival Gear

After Landing, Parking and Securing

Notes: 1.4 Hrs. Dual Flight Training and 0.9 hrs. Pre and Post Briefing (Suggested)

Completion Standard

This lesson will be graded at +50% ACS. The student completes each checklist, from memory, with a maximum of one missed item per checklist, with no missed items allowed during checklist verification, additionally the student successfully demonstrates, through oral questioning and a flight check, the knowledge and skill to operate the aircraft safely in solo

operations by performing all tasks in accordance with the Pro Standards Standardization Manual and meeting the standards prescribed in the Private Pilot Airplane Airman Certification Standards, and at no time will the safe outcome of the flight be in doubt.

Stage Two

Overview

Objectives

Completion Standards

Supervised Solo Flight

Supervised Solo Flight Stage 2 Lesson 30 Flight Lesson Lesson Time 2.0

Objectives

The student will complete their first solo as a supervised solo in the Traffic Pattern. The flight will consist of a Dual Flight in the Traffic Pattern with the student's instructor followed immediately by a solo flight.

SBT

>>The student will demonstrate the tasks to the instructor then perform them solo

TASKS

Preflight Assessment Flight Deck Management Use of Checklists Standard Callouts (SOPA)

Engine Starting

Communications, Light Signals, and Runway Lighting Systems

Taxiing

Runway Incursion Avoidance

Before Takeoff Check

Normal Takeoff and Climb

Collision Hazards

Traffic Patterns

Normal Approach and Landing

Go-Around (Rejected Landing)

Aeronautical Decision Making and Risk Management

After Landing, Parking and Securing

Notes: 1.4 Hrs. Dual Flight Training, 0.8 hrs. Solo Flight Training, and 0.5 hrs. Pre and Post Briefing (Suggested)
The flight instructor who conducts this lesson must verify prior to the start of this lesson that the student has in their possession valid student pilot certificate and the student has received the proper endorsements that authorize solo flight in accordance with 14CFR Part 61.87(n), 61.87(p), and 14CFR Part 141 Appendix B(6)(b).

Completion Standards

Student completes an initial solo flight in the traffic pattern in accordance with the limitations of the Pro Standards and its procedures.

Weather Stage 2 Lesson 31 Ground Lesson Lesson Time 2.0

Objectives

Exhibits knowledge of the recognition of critical weather situations from the ground and in flight, windshear avoidance, and the procurement and use of aeronautical weather reports and forecasts.

SBT

>>Get a weather briefing for your flight from KSAN to KLAS.

TASKS

Weather Theory

Atmosphere

Coriolis Force

Altitude and Atmospheric Pressure

Wind and Currents

Atmospheric Stability

Air Masses and Fronts

Weather Phenomena

Recognition of Critical Weather Situations - Ground and Inflight

Windshear Avoidance

Weather Services

Observations

Service Outlets

Weather Briefings

Aviation Weather Reports

Aviation Forecasts

Weather Charts

ATC Radar Weather Displays

Completion Standards

Exhibits knowledge of Weather theory and products through written and oral examination.

Basic Instrument Maneuvers

Basic Instrument Maneuvers Stage 2 Lesson 32 Maneuvers Briefing Lesson Time 2.0

Objectives

The instructor will introduce the concepts relating to the required aeronautical knowledge associated with Basic Instrument Maneuvers in addition to Human Factors. The instructor will emphasize avoidance procedures and operations during inadvertence VFR flight into Instrument Meteorological Conditions.

SBT

>>A new private pilot encounters IMC on the way to KSBA.

TASKS

Automation Management
Human Factors
Navigation Systems and Radar Services
Control and Performance Method Overview
Straight-and-Level Flight
Constant Airspeed Climbs
Constant Airspeed Descents
Turns to Headings
Recovery from Unusual Flight Attitudes
Radio Communications, Navigation Systems/Facilities, and Radar Services

Completion Standard

The student demonstrates an understanding of the aeronautical knowledge required by the Private Pilot ACS to operate the aircraft safely during inadvertent VFR flight into IMC conditions in accordance with the Airplane Flying Handbook and the Pro Standards Standardization Manual. Additionally, the student demonstrates an understanding of the aeronautical knowledge relating to Human Factors as required by the Private Pilot-Airplane ACS with reference to the PHAK.

Basic Instrument Maneuvers Stage 2 Lesson 32 Flight Lesson Lesson Time 2.0

Objectives

The student will practice the skills required to safely operate the aircraft during inadvertent VFR flight into IMC. The student and instructor will simulate scenarios in to include initial action items during inadvertent flight into IMC.

SBT

>>A new private pilot encounters IMC on the way to KSBA.

TASKS

Safety of Flight

Collision Hazards

Automation Management

Weather Information

Performance and Limitations

Preflight Assessment

Flight Deck Management

Engine Starting

Taxiing

Before Takeoff Check

Communications, Light Signals, and Runway Lighting Systems

Traffic Patterns

Normal Takeoff and Climb

Normal Approach and Landing

Straight-and-Level Flight

Constant Airspeed Climbs

Constant Airspeed Descents

Turns to Headings

Recovery from Unusual Flight Attitudes

Radio Communications, Navigation Systems/Facilities, and Radar Services

After Landing, Parking and Securing

Notes: 1.4 Hrs. Dual Flight Training and 0.5 hrs. Pre and Post Briefing (Suggested)

This lesson includes 1.0 hour of instrument training to be credited towards the requirements of 14
 CFR Part 141 Appendix B Section 4 (b) (1) (iii): three hours of instrument training in a single-engine airplane.

Completion Standard

The student demonstrates the required aeronautical knowledge and skill to fly the aircraft during inadvertent VFR flight into IMC by performing all the tasks in accordance with the Pro Standards Standardization Manual to the standards prescribed by the Private Pilot Airplane Airman Certification Standards.

Basic Instrument Maneuvers Stage 2 Lesson 33 Flight Lesson Lesson Time 2.0

Objectives

The student will complete a solo flight in the local practice areas practicing VFR maneuvers. This will help the student to develop confidence prior to Solo Cross-Country operations later in the flight course.

SBT

>>Fly to the practice area for maneuvers.

TASKS

Safety of Flight

Aeronautical Decision Making and Risk Management

Collision Hazards

Weather Information

Performance and Limitations

Preflight Assessment

Flight Deck Management

Engine Starting

Taxiing

Before Takeoff Check

Communications, Light Signals, and Runway Lighting Systems

Traffic Patterns

Normal Takeoff and Climb

Normal Approach and Landing

Go-Around/Rejected Landing

Steep Turns

Ground Reference Maneuvers

Maneuvering During Slow Flight

Power-Off Stalls

Power-On Stalls

After Landing, Parking and Securing

Notes: 1.0 Hrs. Solo Flight Training (Suggested)

Completion Standard

The student successfully completes a 1.0-hour solo flight in the local practice areas in accordance with the Pro Standards FOM, and Pro Standards SOPA.

Performance Takeoffs and Landings

Performance Takeoffs and Landings Stage 2 Lesson 34 Maneuvers Brief Lesson Time 2.0

Objectives

The instructor will introduce the aeronautical knowledge and skills required of the student to perform Performance Takeoffs and Performance Landings, with reference to the Pro Standards Standardization Manual, the applicable POH, and the AFH. Additionally, the instructor and student will review the aeronautical knowledge requirements related to Airworthiness Requirements, Performance and Limitations, and Operations of Systems, emergency operations and Systems and Equipment Malfunctions with reference to the applicable POH, the AFH, the PHAK, and the Pro Standards SOPA.

SBT

>>It is time to start training for the Oshkosh fly in.

TASK

Airworthiness Requirements
Performance and Limitations
Operation of Systems
Traffic Patterns
Taxiing
Soft-Field Takeoff and Climb
Soft-Field Approach and Landing
Short Field Takeoff and Maximum Performance Climb
Short Field Approach and Landing
Forward Slip to a Landing
Emergency Descent
Emergency Approach and Landing (Simulated)
Systems and Equipment Malfunction (Various)
Emergency Equipment and Survival Gear

Notes: 2.0 Hrs. Ground Briefing (Suggested)

Completion Standard

The student demonstrates an understanding of all tasks in accordance with the requirements of the Private Pilot Airplane Airman Certification Standards as well as all procedures outlined in the Pro Standards Standardization Manual.

Performance Takeoffs and Landings Stage 2 Lesson 35 Maneuvers Brief Lesson Time 2.0

Objectives

The student will practice the skills required to perform Performance Takeoffs and Landings in accordance with the Pro Standards Standardization Manual and the applicable POH.

SBT

>>It is time to start training for the Oshkosh fly in.

TASK

Safety of Flight
Collision Hazards
Automation Management
Weather Information
Performance and Limitations
Preflight Assessment
Flight Deck Management
Engine Starting

Taxiing

Before Takeoff Check

Communications, Light Signals, and Runway Lighting Systems

Traffic Patterns

Soft-Field Takeoff and Climb

Soft-Field Approach and Landing

Short Field Takeoff and Maximum Performance Climb

Short Field Approach and Landing

Forward Slip to a Landing

After Landing, Parking and Securing

Notes: 1.4 Hrs. Dual Flight Training and 0.5 hrs. Pre and Post Briefing (Suggested)

Completion Standard

This lesson will be graded at +50% ACS. The student demonstrates the knowledge and skills required for Performance Takeoffs and Landings by performing all required tasks to the standards prescribed by the Private Pilot Airplane Airman Certification Standards in accordance with the Pro Standards Standardization Manual and the applicable POH.

Performance Takeoffs and Landings Stage 2 Lesson 36 Maneuvers Brief Lesson Time 2.0

Objectives

The student will practice the skills required to perform Performance Takeoffs and Landings in accordance with the Pro Standards Standardization Manual and the applicable POH.

SBT

>>It is time to start training for the Oshkosh fly in.

TASK

Safety of Flight
Collision Hazards
Automation Management
Weather Information
Performance and Limitations
Preflight Assessment

Flight Deck Management

Engine Starting

Taxiing

Before Takeoff Check

Communications, Light Signals, and Runway Lighting Systems

Traffic Patterns

Soft-Field Takeoff and Climb

Soft-Field Approach and Landing

Short Field Takeoff and Maximum Performance Climb

Short Field Approach and Landing

Forward Slip to a Landing

After Landing, Parking and Securing

Notes: 1.4 Hrs. Dual Flight Training and 0.5 hrs. Pre and Post Briefing (Suggested)

Completion Standard

The student demonstrates the knowledge and skills required for Performance Takeoffs and Landings by performing all required tasks to the standards prescribed by the Private Pilot Airplane Airman Certification Standards in accordance with the Pro Standards Standardization Manual and the applicable POH.

Performance Takeoffs and Landings Stage 2 Lesson 37 Maneuvers Brief Lesson Time 2.0

Objectives

The student will review the skills and procedures to operate the aircraft during various Systems and Equipment Malfunctions, Emergencies, and inadvertent VFR flight into IMC. The student will also practice the skills required for Performance Takeoffs and Landings. The student will additionally review their knowledge of the applicable checklist flows and procedures in accordance with the Pro Standards SOPA and Pro Standards Standardization manual.

SBT

>>It is time to start training for the Pro Standards Annual Pro Pilot Cup.

TASK

Safety of Flight

Collision Hazards

Automation Management

Weather Information

Performance and Limitations

Preflight Assessment

Flight Deck Management

Engine Starting

Taxiing

Before Takeoff Check

Communications, Light Signals, and Runway Lighting Systems

Traffic Patterns

Soft-Field Takeoff and Climb

Soft-Field Approach and Landing

Straight-and-Level Flight

Constant Airspeed Climbs

Constant Airspeed Descents

Turns to Headings

Radio Communications, Navigation Systems/Facilities, and Radar Services

Power-off 180's

Emergency Descent

Emergency Landing Without Power (SOPA)

Precautionary Landing with Engine Power (SOPA)

Systems and Equipment Malfunction (Various)

After Landing, Parking and Securing

Notes: 1.4 Hrs. Dual Flight Training and 0.5 hrs. Pre and Post Briefing (Suggested)

- This lesson includes 0.4 hours of instrument training to be credited towards the requirements of 14 CFR Part 141 Appendix B Section 4 (b) (1) (iii): three hours of instrument training in a single-engine airplane.

Completion Standard

The student demonstrates the required knowledge, skills, and Aeronautical Decision Making by performing all of the tasks to the standards prescribed by the Private Pilot Airplane Airman Certification Standards in accordance with the Pro Standards Standardization Manual, Pro Standards SOPA, and the applicable POH.

REVIEW AND SOLO PRACTICE

Performance Takeoffs and Landings Stage 2 Lesson 38 FLight Lesson Lesson Time 2.0

Objectives

The student will complete a solo flight in the Traffic Pattern practicing takeoffs and landings. This will help the student to develop confidence prior to Solo Cross-Country operations later in the flight course.

SBT

>>It is time to start training for the Pro Standards Annual Pro Pilot Cup.

TASK

Safety of Flight

Aeronautical Decision Making and Risk Management

Collision Hazards

Weather Information

Performance and Limitations

Preflight Assessment

Flight Deck Management

Engine Starting

Taxiing

Before Takeoff Check

Communications, Light Signals, and Runway Lighting Systems

Traffic Patterns

Normal Takeoff and Climb

Normal Approach and Landing

Go-Around/Rejected Landing

Steep Turns

Ground Reference Maneuvers

Maneuvering During Slow Flight

Power-Off Stalls

Power-On Stalls

After Landing, Parking and Securing

Notes: 1.0 Hrs. Solo Flight Training (Suggested)

- The student must meet the requirements of 14 CFR Part 141 Appendix B(5)(a)(2): Three takeoffs and three landings to a full stop (with each landing involving a flight in the Traffic Pattern) at an airport with an operating control tower before this lesson can be completed.

Completion Standard

The student successfully completes a 1.0-hour solo flight in the Traffic Pattern in accordance with the Pro Standards FOM, Pro Standards Standards Standards And Pro Standards SOPA.

Performance Takeoffs and Landings Stage 2 Lesson 38 Ground Lesson Lesson Time 2.0

Objectives

Exhibit knowledge of Aeromedical Factors and aeronautical decision making and judgment.

SBT

>>It is time to start training for the Pro Standards Annual Pro Pilot Cup.

TASK

Aeromedical

Obtaining a Medical Certificate Health and Physiological Factors Vision in Flight Illusions and Spatial Disorientation

Aeronautical Decision Making

Crew Resource Management
Single-Pilot Resource Management
Hazard and Risk
The Decision Making Process
Situational Awareness
Risk Management
Human Behavior

Completion Standards

Exhibit knowledge of the principles of Human Factors through written and oral examination.

CROSS-COUNTRY AND NIGHT TRAINING

Cross-Country and Night Training Stage 3 Lesson 38 Ground Lesson Lesson Time 2.0

Objectives

The instructor will introduce the aeronautical knowledge and skills required to conduct Cross-Country planning, Airport Operations in accordance with the Pro Standards Standardization Manual with reference to the PHAK and the applicable POH.

Exhibits knowledge of aeronautical charts for VFR navigation using pilotage, dead reckoning, and navigation systems; and preflight action that includes how to obtain information on runway lengths at airports of intended use, data on takeoff and landing distances, weather reports and forecasts, and fuel requirements and how to plan for alternatives if the planned flight cannot be completed or delays are encountered.

SBT

>>It is time to start training for the Pro Standards Annual Pro Pilot Cup.

TASK

Aviation Security
Weather Information
Notices to Airmen
Cross-Country Flight Planning
National Airspace System
Performance and Limitations
Pilotage and Dead Reckoning
Airport Operations

UNIT 26 AERONAUTICAL CHARTS DISCUSS:

- 1. Types of Charts
- 2. Latitude and Longitude
- 3. Chart Symbology
- 4. Plotting Courses

UNIT 27 INTRODUCTION TO CROSS COUNTRY PLANNING

DISCUSS:

- 1. Flight Planning Considerations
- 2. Structure of a Flight Plan
- 3. Checkpoint Identification

UNIT 28 CROSS COUNTRY PERFORMANCE CHARTS

DISCUSS:

- 1. Pilot Information Manual
- 2. Performance Calculations

UNIT 29 FLIGHT COMPUTER CALCULATIONS

DISCUSS:

- 1. Effect of Wind
- 2. Conversions
- 3. Speed, Distance, and Time Computations
- 4. Fuel Computations
- 5. True Airspeed and Density Altitude
- 6. Determining Magnetic Heading and Groundspeed
- 7. Determining Wind Direction and Speed

UNIT 30 PILOTAGE AND DEAD RECKONING

DISCUSS:

1. Pilotage and Dead Reckoning

UNIT 31 LAB -- COMPLETE A FLIGHT PLAN AND DISCUSS:

- 1. Navigation log
- 2. Filing a flight plan

Completion Standard

The student demonstrates an understanding of the skills required to successfully plan Cross-Country flights and conduct Cross-Country Operations in accordance with the Pro Standards Standardization Manual, the PHAK, and the applicable POH to the standards prescribed in the Private Pilot Airplane Airman Certification Standards.

Cross-Country and Night Training Stage 3 Lesson 38 Ground Lesson Lesson Time 2.0

Objectives

This shorter duration Cross-Country will serve as the student's introduction to learning to apply the techniques discussed previously. The student will learn how to operate the aircraft during Cross-Country Operations, to include Flight Planning, Pilotage and Dead Reckoning, and Navigation Systems and Radar Services. Firelight should not be used on this lesson.

SBT

>>It is time to start training for the Pro Standards Annual Pro Pilot Cup.

TASK

Safety of Flight

Aeronautical Decision Making and Risk Management

Collision Hazards

Runway Incursion Avoidance

Weather Information

Cross-Country Flight Planning

Performance and Limitations

Preflight Assessment

Flight Deck Management

Engine Starting

Taxiina

Before Takeoff Check

Airport Operations

Communications, Light Signals, and Runway Lighting Systems

Traffic Patterns

Normal Takeoff and Climb

Normal Approach and Landing

Pilotage and Dead Reckoning

Navigation Systems and Radar Services

Straight-and-Level Flight

Constant Airspeed Climbs

Constant Airspeed Descents

Turns to Headings

Recovery from Unusual Flight Attitudes

Radio Communications, Navigation Systems/Facilities, and Radar Services

After Landing, Parking and Securing

Notes: 2.0 Hrs. Dual Flight Training and 0.8 hrs. Pre and Post Briefing (Suggested)

- This lesson includes 0.4 hours of instrument training to be credited towards the requirements of 14 CFR Part 141 Appendix B Section 4 (b) (1) (iii): three hours of instrument training in a single-engine airplane.

Completion Standard

Student demonstrates an understanding of the requirements and procedures to conduct Cross-Country operations by performing all tasks in accordance with the Pro Standards Standardization Manual to the standards prescribed in the Private Pilot Airplane Airman Certification Standards.

Cross-Country and Night Training Stage 3 Lesson 38 Ground Lesson Lesson Time 2.0

Objectives

The student will further review the techniques of Cross-Country operations while additionally learning how to conduct Diversions. The instructor will also introduce the required knowledge and skills for Night Preparation and conducting night operations in accordance with the Pro Standards Standardization Manual and the PHAK.

SBT

>>It is time to start training for the Pro Standards Annual Pro Pilot Cup.

TASK

Safety of Flight
Collision Hazards
Controlled Flight into Terrain Awareness
Situational Awareness
Wire Strike Avoidance
Cross-Country Flight Planning
Human Factors
Navigation Systems and Radar Services
Diversion
Lost Procedures
Inadvertent Flight into Instrument Meteorological Conditions
Night Preparation

Notes: 2.0 Hrs. Ground Briefing (Suggested)

Completion Standard

Student demonstrates an understanding of the aeronautical knowledge present in the AFH, PHAK, and Pro Standards Standardization Manual required for both Night Operations and Cross-Country Flight Planning and operations.

Cross-Country and Night Training Stage 3 Lesson 38 Ground Lesson Lesson Time 2.0

Objectives

Exhibit knowledge of navigation systems, lost procedures and how to plan for alternatives if the planned flight cannot be completed or delays are encountered.

SBT

>>It is time to start training for the Pro Standards Annual Pro Pilot Cup.

TASK

UNIT 32 RADIO NAVIGATION

DISCUSS:

- 1. VHF Omni-Directional Range (VOR)
- 2. Horizontal Situation Indicator (HSI)
- 3. Radio Magnetic Indicator (RMI)
- 4. Non-Directional Radio Beacon (NDB) and

Automatic Direction Finder (ADF)

UNIT 33 GPS NAVIGATION

DISCUSS:

- 1. GPS System
- 2. Using GPS for VFR Operations
- 3. VFR Waypoints

UNIT 34 LOST AND DIVERSION PROCEDURES

DISCUSS:

- 1. Lost Procedures
- 2. Diversion Procedures

Completion Standards

Exhibit knowledge of the principles of Navigation Systems through written and oral examination.

Cross-Country and Night Training Stage 3 Lesson 38 Night Flight Lesson Lesson Time 2.0

Objectives

This flight will serve as the student's first opportunity to apply the skills required to operate during night conditions. The instructor and student will focus on night operations in the Traffic Pattern to familiarize the student with flying at night including landings. The student will complete 6 takeoffs and 6 landings to be credited towards the requirements of 14 CFR Part 141 Appendix B Section 4 (b) (1) (ii) (B).

SBT

>>

TASK

Safety of Flight

Aeronautical Decision Making and Risk Management

Collision Hazards

Controlled Flight into Terrain Awareness

Weather Information

Performance and Limitations

Human Factors

Preflight Assessment

Flight Deck Management

Engine Starting

Taxiing

Before Takeoff Check

Communications, Light Signals, and Runway Lighting Systems

Traffic Patterns

Airport, Taxiway, and Runway Signs and Markings

Normal Takeoff and Climb

Normal Approach and Landing

Night Preparation

After Landing, Parking and Securing

Notes: 1.0 Hrs. Dual Flight Training and 0.5 hrs. Pre and Post Briefing (Suggested)

- This lesson includes 6 takeoffs and 6 landings to be credited towards the requirements of 14 CFR Part 141 Appendix B Section 4 (b) (1) (ii) (B): ten takeoffs and ten landings to a full stop (with each landing involving a flight in the Traffic Patterns) at an airport.

This lesson includes 1.0 hour of night flight training to be credited towards the requirements of 14 CFR Part 141 Appendix B Section 4 (b) (1) (ii): three hours of night flight training in a single-engine airplane.

Completion Standard

The student demonstrates the aeronautical skills required to operate the aircraft safely during night conditions by performing all of the tasks to the standards prescribed in the Private Pilot Airplane Airman Certification Standards.

Cross-Country and Night Training Stage 3 Lesson 38 XC Night Flight Lesson Lesson Time 2.0

Objectives

Develop the student's aeronautical knowledge and skills required for night operations by performing a Cross-Country flight at night. Additionally, the student will develop skills required for Cross-Country flying and will perform 4 takeoffs and landings at night.

SBT

>>

TASK

Safety of Flight

Aeronautical Decision Making and Risk Management

Collision Hazards

Controlled Flight into Terrain Awareness

Weather Information

Cross-Country Flight Planning

Performance and Limitations

Human Factors

Preflight Assessment

Flight Deck Management

Engine Starting

Taxiina

Before Takeoff Check

Communications, Light Signals, and Runway Lighting Systems

Traffic Patterns

Airport, Taxiway, and Runway Signs and Markings

Normal Takeoff and Climb

Normal Approach and Landing

Pilotage and Dead Reckoning

Diversion

Lost Procedures

Straight-and-Level Flight

Constant Airspeed Climbs

Constant Airspeed Descents

Turns to Headings

Radio Communications, Navigation Systems/Facilities, and Radar Services

Systems and Equipment Malfunction

Night Preparation

After Landing, Parking and Securing

Notes: 2.0 Hrs. Dual Flight Training and 0.8 hrs. Pre and Post Briefing (Suggested)

- This night dual cross-country flight must satisfy the requirements of 14 CFR Part 141 Appendix B(4)(b)(1)(ii)(A): A dual cross-country flight of at least 100 nautical miles total distance at night; Four takeoffs and landings from this lesson will be credited towards the requirements of 14 CFR Part 141 Appendix B(4)(b)(1)(ii)(B): 10 takeoffs and 10 landings to a full stop (with each landing involving a flight in the Traffic Patterns) at an airport.; This lesson includes 0.4 hours of instrument training to be credited towards the requirements of 14 CFR Part 141 Appendix B(4) (b)(1)(iii): three hours of instrument training in a single-engine airplane.; This lesson includes 2.0 hours of night flight training to be credited towards the requirements of 14 CFR Part 141 Appendix B(4)(b)(1)(ii): three hours of night flight training in a single-engine airplane."

Completion Standard

The student demonstrates the aeronautical skills required to operate the aircraft safely during Night Cross-Country operations by performing all of the tasks to the standards prescribed in the Private Pilot Airplane Airman Certification Standards.

Cross-Country and Night Training Stage 3 Lesson 38 Ground Lesson Lesson Time 2.0

Objectives

This flight will serve as the final Dual Cross-Country flight and as the final opportunity for the student to practice and demonstrate the skills necessary to operate the aircraft safely during Cross-Country operations as well as verifying the student's readiness to perform a Solo Cross-Country flight.

SBT



TASK

Safety of Flight

Aeronautical Decision Making and Risk Management

Collision Hazards

Weather Information

Cross-Country Flight Planning

Performance and Limitations

Preflight Assessment

Flight Deck Management

Engine Starting

Taxiing

Before Takeoff Check

Communications, Light Signals, and Runway Lighting Systems

Traffic Patterns

Normal Takeoff and Climb

Normal Approach and Landing

Pilotage and Dead Reckoning

Navigation Systems and Radar Services

Diversion

Lost Procedures

Straight-and-Level Flight

Constant Airspeed Climbs

Constant Airspeed Descents

Turns to Headings

Recovery from Unusual Flight Attitudes

Radio Communications, Navigation Systems/Facilities, and Radar Services

Emergency Approach and Landing (Simulated)

Systems and Equipment Malfunction

Emergency Equipment and Survival Gear

After Landing, Parking and Securing

Notes: 3.0 Hrs. Dual Flight Training and 0.8 hrs. Pre and Post Briefing (Suggested)
- This dual cross-country flight must satisfy the requirements of 14 CFR Part 141 Appendix B Section 4 (b) (1) (i): Three hours of cross-country flight training in a single-engine airplane.

Completion Standard

The student demonstrates the required knowledge and skills to safely operate the aircraft during Solo Cross-Country operations by performing all the tasks in accordance with the Pro Standards FOM, Pro Standards Standardization Manual, and Pro Standards SOPA to the standards prescribed in the Private Pilot Airplane Airman Certification Standards.

Cross-Country and Night Training Stage 3 Lesson 38 Solo XC Flight Lesson Lesson Time 2.0

Objectives

The student will complete a Solo Cross-Country that meets the requirements of 14 CFR Part 141 Appendix B Section 5(a): A Solo Cross-Country flight of at least 100 nautical miles total distance, with full-stop landings at a minimum of three points, and one segment of the flight consisting of a straight-line distance of at least 50 nautical miles between the takeoff and landings locations.

SBT

>>

TASK

Safety of Flight

Aeronautical Decision Making and Risk Management

Collision Hazards

Weather Information

Cross-Country Flight Planning

Performance and Limitations

Preflight Assessment

Flight Deck Management

Engine Starting

Taxiing

Before Takeoff Check

Communications, Light Signals, and Runway Lighting Systems

Traffic Patterns

Normal Takeoff and Climb

Normal Approach and Landing

Pilotage and Dead Reckoning

Navigation Systems and Radar Services

After Landing, Parking and Securing

Notes: 3.0 Hrs. Solo Flight Training (Suggested)

- This solo cross-country flight must satisfy the requirements of 14 CFR Part 141 Appendix B Section 5(a): A solo cross-country flight of at least 100 nautical mile total distance, with full-stop landings at a minimum of three points, and one segment of the flight consisting of a straight-line distance of at least 50 nautical miles between the takeoff and landing locations. This lesson may be completed out of lesson order after lesson 45 is completed but must be completed before lesson 50 is attempted."

Completion Standard

The student demonstrates the ability to safely operate the aircraft in Solo Cross-Country operations by successfully completing a flight meeting the requirements of 14 CFR Part 141 Appendix B Section 5(a).

Course Review

Course Review Stage 3 Lesson 38 Ground Lesson Lesson Time 2.0

Objectives

The instructor will review and evaluate the student's aeronautical knowledge to determine that he/she is adequately prepared for the Stage 2 Stage Check and End-Of-Course Evaluations.

SBT

>>

TASK

Safety of Flight
Pilot Qualifications
Airworthiness Requirements
Weather Information
Cross-Country Flight Planning
National Airspace System
Performance and Limitations
Operation of Systems
Human Factors
Emergency Equipment and Survival Gear
Night Preparation
Review Written Stage Exam
Review FAA Knowledge Test Deficient Areas

Notes: 2.0 Hrs. Ground Briefing (Suggested)

Completion Standard

Student demonstrates an understanding of the required aeronautical knowledge required by completing all the tasks to the standard prescribed by the Private Pilot-Airplane ACS and demonstrates an understanding of all required references to include the PHAK, AFH, applicable POH, and the FAR/AIM.

Course Review Stage 3 Lesson 38 Ground Lesson Lesson Time 2.0

Objectives

The instructor will review and evaluate the student's aeronautical skills to determine that he/she is adequately prepared for the Stage 2 Stage Check and End-Of-Course Evaluations.

SBT



TASK

Preflight Assessment Flight Deck Management Engine Starting

Taxiing

Before Takeoff Check

Communications, Light Signals, and Runway Lighting Systems

Traffic Patterns

Normal Takeoff and Climb

Normal Approach and Landing

Soft-Field Takeoff and Climb

Soft-Field Approach and Landing

Short-Field Takeoff and Maximum Performance Climb

Short-Field Approach and Landing

Forward Slip to a Landing

Go-Around/Rejected Landing

Steep Turns

Ground Reference Maneuvers

Pilotage and Dead Reckoning

Navigation Systems and Radar Services

Diversion

Lost Procedures

Maneuvering During Slow Flight

Power-Off Stalls

Power-On Stalls

Spin Awareness

Straight-and-Level Flight

Constant Airspeed Climbs

Constant Airspeed Descents

Turns to Headings

Recovery from Unusual Flight Attitudes

Radio Communications, Navigation Systems/Facilities, and Radar Services
Emergency Descent
Emergency Approach and Landing (Simulated)
Systems and Equipment Malfunction
Emergency Equipment and Survival Gear
After Landing, Parking and Securing

Notes: 1.4 Hrs. Dual Flight Training and 0.5 hrs. Pre and Post Briefing (Suggested)
- This lesson includes 0.4 hours of instrument training to be credited towards the requirements of 14 CFR Part 141 Appendix B Section 4 (b) (1) (iii): three hours of instrument training in a single-engine airplane."

Completion Standard

Student demonstrates the required aeronautical skills required by completing all the tasks to the standard prescribed by the Private Pilot Airplane Airman Certification Standards in accordance with the Pro Standards Standardization Manual and Pro Standards SOPA.

Knowledge Validation

Knowledge Validation Stage 3 Lesson 38 Ground Lesson Lesson Time 2.0

Objectives

To determine through oral evaluation that the student possesses the required aeronautical knowledge to safely conduct flight operations as an FAA certificated Private Pilot.

SBT

>>

TASK

Pilot Qualifications
Airworthiness Requirements
Weather Information
Cross-Country Flight Planning
National Airspace System
Performance and Limitations
Operation of Systems
Human Factors
Night Preparation

Notes: 2.0 Hrs. Ground Briefing (Suggested)

Completion Standard

The student demonstrates an understanding of the required aeronautical knowledge to safely conduct flight operations as an FAA certificated Private Pilot by meeting the standards prescribed in the Private Pilot Airplane Airman Certification Standards.

Maneuvers Validation

Maneuvers Validation Stage 3 Lesson 38 Ground Lesson Lesson Time 2.0

Objectives

To determine through flight evaluation that the student possesses the required aeronautical skills to safely conduct flight operations as an FAA certificated Private Pilot.

SBT

>>

TASK

Preflight Assessment

Flight Deck Management

Engine Starting

Taxiing

Runway Incursion Avoidance

Before Takeoff Check

Communications, Light Signals, and Runway Lighting Systems

Traffic Patterns

Normal Takeoff and Climb

Normal Approach and Landing

Soft-Field Takeoff and Climb

Soft-Field Approach and Landing

Short-Field Takeoff and Maximum Performance Climb

Short-Field Approach and Landing

Forward Slip to a Landing

Go-Around/Rejected Landing

Steep Turns

Ground Reference Maneuvers

Pilotage and Dead Reckoning

Navigation Systems and Radar Services

Diversion

Lost Procedures

Maneuvering During Slow Flight

Power-Off Stalls

Power-On Stalls

Spin Awareness

Straight-and-Level Flight

Constant Airspeed Climbs

Constant Airspeed Descents

Turns to Headings
Recovery from Unusual Flight Attitudes
Radio Communications, Navigation Systems/Facilities, and Radar Services
Emergency Descent
Emergency Approach and Landing (Simulated)
Systems and Equipment Malfunction
Emergency Equipment and Survival
After Landing, Parking and Securing

Notes: 1.6 Hrs. Dual Flight Training and 0.5 hrs. Pre and Post Briefing (Suggested)
- This lesson includes 0.2 hours of instrument training to be credited towards the requirements of 14 CFR Part 141 Appendix B Section 4 (b) (1) (iii): three hours of instrument training in a single-engine airplane."

Completion Standard

The student demonstrates the required aeronautical skills to safely conduct flight operations as an FAA certificated Private Pilot by meeting the standards prescribed in the Private Pilot-Airplane ACS on all tasks.

Cross-Country and Night Training Stage 3 Lesson 38 Ground Lesson Lesson Time 2.0

Objectives

Effectively review, evaluate, and summarize course content.

SBT

>>

TASK

Private Pilot Knowledge Areas

COURSE EXAM

- 1. Course Exam
- 2. Critique

Completion Standard

Cross-Country and Night Training Stage 3 Lesson 38 Ground Lesson Lesson Time 2.0

Objectives

The instructor will review and evaluate the student's aeronautical knowledge to determine that he/she is adequately prepared for the Course Validation.

SBT

>>

TASK

Review Deficient Training Items

Completion Standard

Student demonstrates an understanding of the required aeronautical knowledge required by completing all the tasks to the standard prescribed by the Private Pilot Airplane ACS and demonstrates an understanding of all required references to include the PHAK, AFH, applicable POH, and the FAR/AIM.

Cross-Country and Night Training Stage 3 Lesson 38 Ground Lesson Lesson Time 2.0

Objectives

To determine through oral evaluation that the student possesses the required aeronautical knowledge to safely conduct flight operations as an FAA certificated Private Pilot.

SBT

>>

TASK

Pilot Qualifications
Airworthiness Requirements
Weather Information
Cross-Country Flight Planning
National Airspace System
Performance and Limitations
Operation of Systems
Human Factors
Night Preparation

Notes: 2.0 Hrs. Ground Briefing (Suggested)

Completion Standard

The student demonstrates an understanding of the required aeronautical knowledge to safely conduct flight operations as an FAA certificated Private Pilot by meeting the standards prescribed in the Private Pilot Airplane Airman Certification Standards.

Course Validation Stage 3 Lesson 38 Ground Lesson Lesson Time 2.0

Objectives

To determine through flight evaluation that the student possesses the required aeronautical skills to safely conduct flight operations as an FAA certificated Private Pilot.

SBT

>>

TASK

Preflight Assessment

Flight Deck Management

Engine Starting

Taxiing

Runway Incursion Avoidance

Before Takeoff Check

Communications, Light Signals, and Runway Lighting Systems

Traffic Patterns

Normal Takeoff and Climb

Normal Approach and Landing

Soft-Field Takeoff and Climb

Soft-Field Approach and Landing

Short-Field Takeoff and Maximum Performance Climb

Short-Field Approach and Landing

Forward Slip to a Landing

Go-Around/Rejected Landing

Steep Turns

Ground Reference Maneuvers

Pilotage and Dead Reckoning

Navigation Systems and Radar Services

Diversion

Lost Procedures

Maneuvering During Slow Flight

Power-Off Stalls

Power-On Stalls

Spin Awareness

Straight-and-Level Flight

Constant Airspeed Climbs

Constant Airspeed Descents

Turns to Headings

Recovery from Unusual Flight Attitudes

Radio Communications, Navigation Systems/Facilities, and Radar Services
Emergency Descent
Emergency Approach and Landing (Simulated)
Systems and Equipment Malfunction
Emergency Equipment and Survival Gear
After Landing, Parking and Securing

Notes: 1.4 Hrs. Dual Flight Training and 0.5 hrs. Pre and Post Briefing (Suggested)
- This lesson includes 0.2 hours of instrument training to be credited towards the requirements of 14 CFR Part 141 Appendix B Section 4 (b) (1) (iii): three hours of instrument training in a single-engine airplane."

Completion Standard

The student demonstrates the required aeronautical skills to safely conduct flight operations as an FAA certificated Private Pilot by meeting the standards prescribed in the Private Pilot Airplane Airman Certification Standards on all tasks.