PRIVATE PILOT AIRPLANE SINGLE-ENGINE LAND

PRIVATE PILOT SYLLABUS

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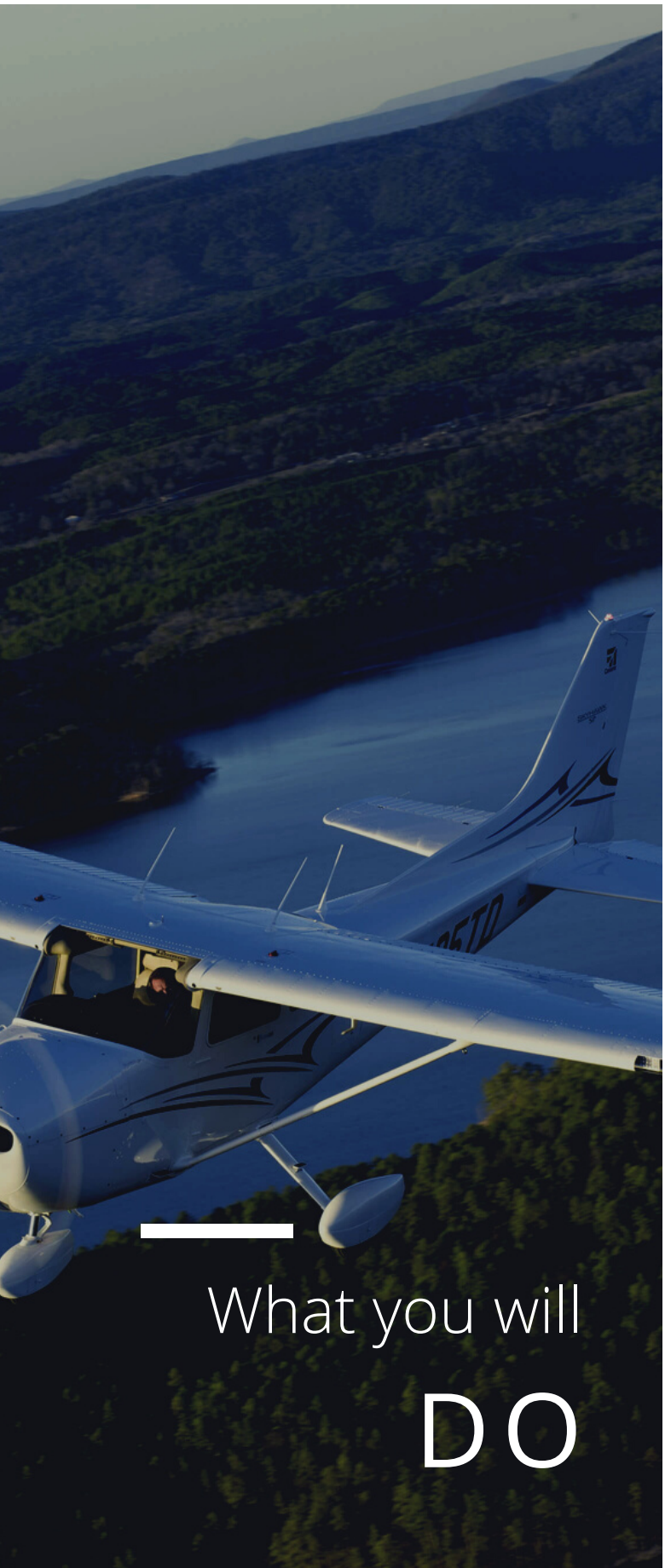

Introduction

PRIVATE PILOT SYLLABUS

Learning to fly! You will find it challenging, fun, and unforgettable. Flying, particularly the process of learning to fly, is intellectually, physically, and emotionally stimulating. You will find learning the art of piloting expands your mind and senses in a whole new way.

Your Flight Training Professional's Private Pilot syllabus utilizes key intentions honed over decades of flight training experience to develop you into a highly capable Private Pilot while minimizing time.

Your training will be tracked in Flight Training Professional's customized course tracking program. Each stage of the syllabus is divided into “phases,” each containing multiple knowledge lessons and flight scenarios. Progress checks are located in phases at key points where those mark the end of a stage.

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Requirements

BECOMING A PILOT

BECOMING A PILOT

Earning a certificate to operate as the "Pilot in Command" of a airplane while carrying passengers requires

- Be at least 17 years old (you can start training earlier)
- Pass medical exam
- Pass a test on aeronautical knowledge
- Complete the required flight training for the course (see Private Pilot Course Guide)
- Pass a practical test

Structure

COURSE REQUIREMENTS

COURSE REQUIREMENTS

Before progressing through the solo flight portion of the curriculum, you must

- Hold a Student Pilot certificate
- Hold a Third Class or Basic Medical certificate
- Hold a valid form if identification

Structure

COURSE STRUCTURE

COURSE STRUCTURE

The course utilizes an integration of both online pilot knowledge training provided by Cessna Aircraft Company and Flight Training Professional's training platforms

- Provides innovative and interactive learning exercises
- Can be downloaded to a mobile companion app

The unique design of the training program

- Integrates web-based knowledge sessions with the simulator and in-aircraft flight scenarios
- Ensures that before every flight you will have the required knowledge to succeed
- Includes flight preview videos to give you a pilot's view of what you will practice in the airplane

You and your instructor will discuss the schedule for your training and you will know

- When to complete the appropriate web-based knowledge instruction and flight previews
- What to bring with you for each flight scenario

Upon completion of each flight scenario, you and your instructor will

- Review the elements of the flight scenario and the scenario outcome
- Compare your performance to the completion standards
- Discuss the next flight scenario

Please note that it may take more than one flight to complete a scenario within the established standards.

Structure

COURSE STRUCTURE

COURSE STRUCTURE CONTINUED

The course is comprised of three stages. Each stage is organized around primary objectives that are achieved through a combination of ground briefings, simulator scenarios, flight scenarios, and at least one progress check.

Each ground briefing will require various levels of guided, self-study preparation. The session is designed to develop both the knowledge and the application of that knowledge to ensure you are prepared to be a safe, confident pilot.

Progress checks verify

- Proficiency in the prerequisites required to progress further in the course
- Consist of oral quizzing and/or a flight session
- Given by the Chief Flight Instructor, Assistant Chief Flight Instructor, or a designated check instructor.

Stage 1
Fundamentals and Pre-Solo

Stage 2
Solo and Cross-Country Flying

Stage 3
Practical Test Preparation

Structure

COURSE STRUCTURE

PHASES
Within each stage are phases.

Stage 1: Fundamentals and Pre-Solo
Phase 1: Learning Your Airplane
Phase 2: Improving Control
Phase 3: Takeoffs and Landings
Phase 4: Preparing for Solo Flight
Phase 5: Solo Flight

Stage 2: Solo & Cross-Country Flying
Phase 6: Getting Ready for Cross-Country Flying
Phase 7: Flying Cross-Country
Phase 8: Flying at Night
Phase 9: Advancing Your Skills

Stage 3: Preparing for Your Practical Test
Phase 10: Final Preparation for Your Practical Test

Structure

COURSE STRUCTURE

SCENARIOS

There are multiple flight scenarios within each phase. The completion standards for each phase are found in the phase proficiency checklist. Once all items within each phase are completed to the level of performance required for that phase, you can then move on to the next phase of training. You are not required to complete every flight scenario within a phase, but it is highly recommended that you do so, as the scenarios progress in complexity to give you maximum efficiency in your training.

Structure

COURSE STRUCTURE

PHASES

1. LEARNING YOUR AIRPLANE — In this phase, you learn how your airplane flies, how to control your airplane in flight, and how to complete a proper preflight inspection.

2. IMPROVING CONTROL — You learn the maneuvers that develop your ability to fly more precisely. You hone the skills you have already learned, and develop safety habits that will serve you well throughout your flying career. You will learn more about your airplane's systems. You will also fly with another instructor to check your progress.

3. TAKEOFFS AND LANDINGS — This is where you put into practice all of your skills, so you can make satisfying takeoffs and landings on your own. You will learn about the performance capabilities of your airplane and how to account for them. You will also be introduced to responding to abnormal and emergency scenarios.

4. PREPARING FOR SOLO FLIGHT — Here you practice varied airport operations, takeoffs and landings, emergency procedures, and ground reference maneuvers in order to ensure you are ready for solo flight. You will also receive a pre-solo briefing as well as take a pre-solo knowledge test.

5. SOLO FLIGHT — After passing a progress check to ensure you are safe and ready to fly on your own, you will fly your first solo flights. Experiences that you will remember for a lifetime.

Structure

COURSE STRUCTURE

PHASES

6. GETTING READY FOR CROSS-COUNTRY FLYING — In this phase, you learn short- and soft-field takeoff and landing techniques, navigation, and control of the airplane by reference to the flight display.

7. FLYING CROSS COUNTRY — You learn the steps involved in planning and flying a safe and successful cross-country. You will receive a solo cross-country briefing. You will be introduced to night operations during a night cross-country flight. After passing a progress check, you will complete your first solo cross-country flight.

8. FLYING AT NIGHT — In this phase you will continue to discover what night flying is all about by taking both a local flight at night.

9. POLISHING YOUR SKILLS — You will complete your longest solo cross-country flight and develop proficiency in all tasks while preparing for your end of course review.

10. FINAL PREPARATION FOR YOUR PRACTICAL TEST — In the final phase, you review everything you have learned. After passing the final progress check, you have completed the course and are ready for the FAA practical test.

Structure

COURSE STRUCTURE

COURSE FLEXIBILITY

Each phase builds on the foundation you have developed from the previous phases. It is advantageous that your training progress is in this order. However flexibility has been built into this course.

- Weather and other factors may make it impractical to conduct a particular flight scenario while another may be possible.
- In this case your instructor, with the approval of the chief instructor, may suggest out-of phase and out-of-stage scenarios that can be completed with the current conditions.
- Your instructor may also determine that you can complete all or portions of a flight scenario using an aviation training device or flight simulation software.
- These sessions will enhance your learning and allow you to continue progress on a scenario or phase when conditions preclude flight in the airplane.

PHASE COMPONENTS

Each phase has

- Required Web-based Knowledge Instruction
- Suggested Flight Scenarios
- Required Phase Ground Training Checklists
- Required Phase Proficiency Quizzes

Structure

COURSE STRUCTURE

Web-based Knowledge Instruction that

- Forms the customer's knowledge foundation to be used for the flight scenarios
- Is directly correlated to the phase
- Is to be completed before the corresponding phase can be considered complete

Flight Scenarios

- Are placed in a suggested order of completion
- Can be flown
  - Once
  - More than once
  - Not at all
- Can be completed out of phase or stage if approved by the Chief or Assistant Chief Instructor

Phase Ground Training Checklists

- Can be prepared for through study of the web-based curriculum, flight preview videos, and course materials including
  - FAA publications such as the Pilot's Handbook of Aeronautical Knowledge and Airplane Flying Handbook
  - Flight Training Professional's publications and manuals
- Contain knowledge areas that are new to this phase

Structure

COURSE STRUCTURE

Phase Ground Training Checklists

- These items
  - Can be recorded as 'Instruction Given', 'Describe' or 'Explain'
  - Must be demonstrated to the 'Explain' level to complete the phase
    - 'Instruction Given' indicates that your instructor briefed you on the subject
    - 'Describe' indicates that you are able to describe the physical characteristics of the maneuver or knowledge area
    - 'Explain' indicates that you are able to describe the task or knowledge area and understand the underlying concepts, principles and procedures

Phase Proficiency Checklists

- Contain tasks that are to be completed in order to the 'Perform' level in order to complete the phase
- Contain single-pilot resource management that is to be completed to the 'Manage/Decide' level
  - Grading criteria is discussed in detail later in this document
- Contains completion standards for the phase.

Structure

COURSE STRUCTURE

INTEGRATING AVIATION TRAINING DEVICES INTO THE COURSE

This syllabus has been designed to ensure maximum integration of computer simulation software and aviation training devices. These systems will develop

- Procedural familiarization through the introduction and practice of
  - Flight Training Professional's standard operating procedures for all course maneuvers
  - Aircraft flows established to configure the aircraft for a desired state
  - Checklist use familiarization and practice
- Situational awareness and decision making skills

Structure

COURSE USE PROCESS

PROCESS TO MAXIMIZE THE POTENTIAL USE OF THE SYSTEM

Flight Training Professional's training system is designed to provide the most benefit when

- The instructor assigns preparation for the next scenario
  - Web-based study
  - Required, recommended, and additional reading study materials (recommended study references are only available in online lesson briefs)
  - Scenario planning
- Prior to the next scenario, you
  - Study the required, recommended, and additional reading materials as applicable
  - Practice both the new and previously reviewed procedures (using your simulator or visualization exercise)
  - Study the potential scenario(s)
- During the preflight briefing
  - Your instructor reviews the new concepts
  - You ask any questions you may have and clarify your understanding of the knowledge areas and the upcoming scenario you will fly
  - Together you and your instructor brief the scenario planning
- During the postflight briefing you discuss the scenario outcome and compare desired outcomes to actual
- The instructor logs the scenario into the Flight Training Professional's course tracking

Structure

FAA INDUSTRY TRAINING STANDARDS

FAA-INDUSTRY TRAINING STANDARDS (FITS)

This flight training syllabus uses the concepts developed under the FAA-Industry Training Standards (FITS) program. There are two key elements that ensure real world skills are developed.

- Scenario-Based Training (SBT)
- Single-Pilot Resource Management (SRM)

Scenario-Based Training (SBT)

Scenario-Based Training uses real-world scenarios as the foundation of training. Flight maneuvers are a vital part of flight training, but the use of real-world scenarios help to develop a pilot's decision-making skills. The training presents situations and circumstances that pilots face every day as learning experiences. The goal of this training philosophy is the accelerated acquisition of higher-level decision making skills. Such skills are necessary to prevent pilot-induced accidents.

Structure

SCENARIO-BASED TRAINING

Scenario-Based Training (SBT) Continued

Scenario-based training goals include the development of

- Critical thinking skills
- Aeronautical decision making skills
- Situational awareness
- Pattern recognition (emergency procedures) and judgment skills
- Automation management skills
- Planning and execution skills
- Procedural knowledge
- Psychomotor (hand-eye coordination) skills
- Risk management skills
- Task management skills
- Controlled flight into terrain (CFIT) awareness

For scenario-based training to be effective there must be a purpose for the flight and consequences if the flight is not completed as planned. It is vital that you, the pilot-in-training, and the instructor communicate the following information in advance of the training session:

- Purpose of the flight
- Pressures to complete the flight (real or simulated)
- Risks/hazards associated with the scenario (real or simulated)
- Scenario destination(s)
- Desired outcomes
- Possible in-flight scenario changes or deviations (during later stages of the program)

Structure

SINGLE-PILOT RESOURCE MANAGEMENT (SRM)

SINGLE-PILOT RESOURCE MANAGEMENT (SRM)

Single-Pilot Resource Management is defined as the management all the resources (both within the aircraft and outside) available to a pilot flying in a single-pilot operation (prior to and during flight) to ensure that the successful outcome of the flight is never in doubt.

SRM includes

- Task Management (TM)
- Automation Management (AM)
- Risk Management (RM)
- Aeronautical Decision Making (ADM)
- Situational Awareness (SA)
- Controlled Flight Into Terrain (CFIT) awareness

SRM training develops a pilots ability to maintain situational awareness by

- Managing the technology in the aircraft as well as aircraft control and navigation tasks
- Enabling the pilot to accurately assess and manage risk while making accurate and timely decisions
- Helping pilots learn how to gather information, analyze it and make decisions

In most flight scenarios, there is no one correct answer. Pilots are expected to analyze each situation in light of their

- Experience level
- Personal minimums
- Current physical and mental condition
- Ability to make their own decisions to the best of their ability

Structure

SINGLE-PILOT RESOURCE MANAGEMENT (SRM)

SINGLE-PILOT RESOURCE MANAGEMENT STANDARDS

In order to achieve the objectives established for SRM, objective standards are referenced throughout the course as a basis for determining proficiency in each task.

Task	Standards
Task Management (TM)	Prioritize and select the most appropriate tasks (or series of tasks) to ensure successful completion of the training scenario.
Automation Management (AM)	Program and utilize the most appropriate and useful modes of cockpit automation to ensure successful completion of the training scenario.
Risk Management (RM)	Consistently make informed decisions in a timely manner based on the task at hand and a thorough knowledge and use of all available resources.
Aeronautical Decision-Making (ADM)	Consistently make informed decisions in a timely manner based on the task at hand and a thorough knowledge and use of all available resources.

Structure

SINGLE-PILOT RESOURCE MANAGEMENT (SRM)

Single-Pilot Resource Management Standards Continued

Task	Standards
Situational Awareness (SA)	Be aware of all factors such as traffic, weather, fuel state, aircraft mechanical condition, and pilot fatigue level that may have an impact on the successful completion of the training.
Controlled Flight Into Terrain (CFIT) Awareness	Understand, describe, and apply techniques to avoid CFIT during inadvertent encounters with instrument meteorological conditions during visual flight rules flight, periods of reduced visibility, or at night.

Structure

SINGLE-PILOT RESOURCE MANAGEMENT (SRM)

MANEUVER (TASK) GRADES

- Describe – At the completion of the ground training session, the pilot in training will be able to describe the physical characteristics of the task at a rote level
- Explain – At the completion of the ground training session, the pilot in training will be able to describe the task and display an understanding of the underlying concepts, principles, and procedures
- Practice – At the completion of the scenario the pilot in training will be able to plan and execute the scenario. Coaching, instruction, and/or assistance from the instructor will correct deviations and errors identified by the instructor
- Perform – At the completion of the scenario, the pilot in training will be able to perform the activity without assistance from the instructor. Errors and deviations will be identified and corrected by the customer in an expeditious manner. At no time will the successful completion of the activity be in doubt. ('Perform' will be used to signify that the pilot is satisfactorily demonstrating proficiency in traditional piloting and systems operation skills.)
- Not Graded – Any event not accomplished or required in the scenario

Structure

SINGLE-PILOT RESOURCE MANAGEMENT (SRM)

SINGLE-PILOT RESOURCE MANAGEMENT (SRM) GRADES

- Explain – At the completion of the ground training session, the pilot-in-training can verbally identify the risks inherent in the flight scenario
- Practice – The pilot-in-training can identify, describe, and understand the risks inherent in the scenario. The customer may need to be prompted to identify risks and make decisions
- Manage/Decide - The pilot-in-training can correctly gather the most important data available both within and outside the cockpit, identify possible courses of action, evaluate the risk inherent in each course of action, and make the appropriate decision. Instructor intervention is not required for the safe completion of the flight
- Not Graded – Any event not accomplished or required in the scenario

Structure

WEB-BASED KNOWLEDGE

KNOWLEDGE CONTENT - WEB-BASED KNOWLEDGE INSTRUCTION

Your web-based knowledge instruction should be completed before beginning the simulator and flight scenarios in each corresponding phase; you can work ahead as far in the course as you like at your discretion. However, the course is designed so that the web-based knowledge instruction corresponds to the flight scenarios within a phase.

If you have an extended time lapse between studying the web-based knowledge instruction and beginning the companion scenario, you will find it very helpful to take some time to review your last knowledge sessions just before you fly the associated scenario. You complete the web-based knowledge instruction satisfactorily by answering all the questions correctly.

Structure

WEB-BASED KNOWLEDGE

REQUIRED AERONAUTICAL KNOWLEDGE AREAS

Federal Regulations - 14 CFR Parts 61, list aeronautical knowledge areas that must be included in the ground training for a Private Pilot Certificate Course. All required areas are covered in this course, but they are distributed throughout the curriculum for subject continuity and logical development. You will find these required topics included in lessons listed as follows:

(1) Applicable Federal Aviation Regulations for private pilot privileges, limitations, and flight operations

- PHASE 1; 1.3.2 - Airworthiness of the Airplane
  - Certificates and Documents
  - Equipment Required for Flight
  - Required Inspections
  - Special Flight Permits
  - Basic Airplane Maintenance
- PHASE 4; 4.1.1 - Airspace
  - Basics of the Airspace System
  - Class G Airspace
  - Class E Airspace
  - Class D Airspace
  - Class C Airspace
  - Class B Airspace
  - Class A Airspace

Structure

WEB-BASED KNOWLEDGE

REQUIRED AERONAUTICAL KNOWLEDGE AREAS CONTINUED

- PHASE 4; 4.1.2 - Other Airspace
  - Special Use Airspace
  - Other Airspace Areas
  - Temporary Flight Restrictions
- PHASE 4; 4.1.3 Airspace Rules
  - Speed Limits
  - Weather Minimums
- PHASE 4; 4.2.1 - Rules Governing Pilots
  - Pilot and Airplane Certification
  - Medical Certification
  - Student Pilot, Sport Pilot, and Private Pilot Privileges
  - Staying Current and Qualified Before You Fly
- PHASE 4; 4.2.2 - Rules For Flight
  - Right-of-way Rules
  - Collision Avoidance
  - Flying at High or Low Altitude
  - Air Traffic Control and LAHSO
- PHASE 5; 5.1.1 - Solo Flight
  - Solo Flight
- PHASE 10; 10.1.1 - Coming Prepared to Your checkride
  - FAA Form 8710
  - Airplane Logbooks Items to Bring
  - Airman Certification Standards

Structure

WEB-BASED KNOWLEDGE

REQUIRED AERONAUTICAL KNOWLEDGE AREAS CONTINUED

- PHASE 10; 10.1.2 - The Oral Exam
  - Helpful Hints
- PHASE 10; 10.1.3 - The Flight Exam
  - You Are the PIC

(2) Accident reporting requirements of the National Transportation Safety Board
- PHASE 4; 4.2.3 - Rules for Reporting Accidents and Incidents
  - Accident and Incident Notification

(3) Applicable subjects of the "Aeronautical Information Manual" and the appropriate FAA advisory circulars
- PHASE 3; 3.4.2 FAA Publications
  - Chart Supplement
  - Notices to Airmen (NOTAMS)
  - FAA Reference Materials

(4) Aeronautical charts for VFR navigation using pilotage, dead reckoning, and navigation systems
- PHASE 2; 2.2.1 Using Your Airport
  - Coordinated Universal Time

Structure

WEB-BASED KNOWLEDGE

REQUIRED AERONAUTICAL KNOWLEDGE AREAS CONTINUED

- PHASE 3; 3.4.1 - VFR Aeronautical Charts
  - Locating Your Position Using Latitude and Longitude
  - Airport Symbols
  - Obstructions and Visual Checkpoints
  - VFR Chart Types
- PHASE 4; 4.4.1 - Advanced Navigation
  - Global Positioning System (GPS)
  - Getting There With GPS
- PHASE 4; 4.4.2 - Lost Procedures
  - Climb/Call/Get Help
  - Using Radios to Find Your Location
- PHASE 7; 7.1.1 - Sources of Flight Information
  - Sectional and/or Terminal Area Chart
- PHASE 7; 7.2.1 - Flight Computer
  - Mechanical Flight Computer
  - Electronic Flight Computer
  - Time-Speed-Distance Problems
  - Fuel Problems
  - Wind Problems
  - Navigation Plotter
  - E6B Functions on GPS/Multifunction Displays

Structure

WEB-BASED KNOWLEDGE

REQUIRED AERONAUTICAL KNOWLEDGE AREAS CONTINUED

- PHASE 7; 7.2.2 - Navigating Using Checkpoints on the Ground
  - Pilotage
  - Dead Reckoning
  - Basic Compass Navigation
- PHASE 7; 7.2.3 - Keeping Track of Your Location
  - Navigation Log
  - FAA Flight Plan
  - VFR Flight Following
- PHASE 8; 8.1.3 Flying Cross-Country at Night
  - Preparation and Equipment
  - Route and Altitude Selection
  - Using the G1000 at Night
- PHASE 8; 8.2.1 - Automatic Direction Finder (ADF)
  - Understanding the ADF
  - Using the ADF
  - Using the ADF to Determine Position
  - Using an RMI to Intercept and Track a Bearing
- PHASE 8; 8.2.2 - VHF Omnidirectional Range (VOR)
  - Understanding the VOR
  - Using VOR Radials
  - Testing VOR Accuracy

Structure

WEB-BASED KNOWLEDGE

REQUIRED AERONAUTICAL KNOWLEDGE AREAS CONTINUED

(5) Radio communication procedures

- PHASE 2; 2.2.2 - Radio Communications
  - Radios
  - Safety Equipment
  - Communicating by Radio
  - Composing What to Say
  - Lost Communications
  - Landing With a Radio Failure

(6) Recognition of critical weather situations from the ground and in flight, windshear avoidance, and the procurement and use of aeronautical weather reports and forecasts

- PHASE 3; 3.1.1 - Basic Weather Theory
  - What Makes Weather
  - The Atmosphere
  - Wind
  - Moisture
- PHASE 3; 3.1.2 - Weather Patterns
  - Stable and Unstable Air
  - Air Masses and Fronts

Structure

WEB-BASED KNOWLEDGE

REQUIRED AERONAUTICAL KNOWLEDGE AREAS CONTINUED

- PHASE 3; 3.1.3 - Weather Hazards
  - Fog
  - Thunderstorms
  - Wind Shear and Microbursts
  - Turbulence
  - Frost and Ice
- PHASE 3; 3.1.4 - Basic Sources of Weather Information
  - Telephone Weather Briefings
  - Online Weather Resources
- PHASE 3; 3.4.3 - Hazards
  - Wind Shear Awareness and Recovery procedures
- PHASE 6; 6.2.1 - Printed Reports and Forecasts
  - Aviation Routine Weather Reports (METARs)
  - Terminal Aerodrome Forecasts (TAFs)
  - Graphical Forecasts Aviation (GFA)
  - Winds and Temperatures Aloft Forecasts
  - Radar Weather Reports
  - In-flight Aviation Weather Advisories

Structure

WEB-BASED KNOWLEDGE

REQUIRED AERONAUTICAL KNOWLEDGE AREAS CONTINUED

- PHASE 6; 6.2.2 - Graphic Weather Products
  - Surface Analysis Chart
  - Weather Depiction Chart
  - Low-Level Significant Weather Prog Chart
  - Weather Radar Information
  - Convective Outlook Chart
- PHASE 6; 6.2.3 - More Sources of Weather Information
  - In-Flight Weather Services
  - Cockpit Weather Displays

(7) Safe and efficient operation of aircraft, including collision avoidance, and recognition and avoidance of wake turbulence

- PHASE 1; 1.1.2 - Getting Ready for Flight
  - Ready for Flight?
  - Safe Habits Around Airplanes
  - Checking the Airplane Before Flight
  - Engine Start
- PHASE 1; 1.1.3 - Controlling the Airplane's Motion
  - Controlling the Airplane on the Ground
  - Getting into the Air
  - Straight-and-Level Flight
  - Turns, Climbs, and Descents
  - After the Flight

Structure

WEB-BASED KNOWLEDGE

REQUIRED AERONAUTICAL KNOWLEDGE AREAS CONTINUED

- PHASE 2; 2.1.3 - Basic Aviation Physiology
  - Understanding Hypoxia, Dehydration and Other Physical Factors
  - How Alcohol and Drugs Affect Flying
- PHASE 2; 2.2.1 - Using Your Airport
  - Runway and Taxiway Markings
  - Progressive Taxi Directions
  - Ramp Hand Signals
- PHASE 2; 2.3.1 Learning About Ground Operations
  - Wind Direction and Runway to Use
  - Using Flight Controls While Taxiing
- PHASE 2; 2.3.2 - Flying Around Airports
  - The Traffic Pattern Around the Airport
  - Entering and Departing the Traffic Pattern
  - Communicating Your Intentions and Requests
  - Flying Safely in the Traffic Pattern
- PHASE 2; 2.3.3 - Correcting for Wind
  - Flying the Desired Path
  - Ground Reference Maneuvers
- PHASE 2; 2.4.1 - Normal and Crosswind Takeoffs and Landings
  - Takeoffs
  - Landings
  - Crosswind Landings

Structure

WEB-BASED KNOWLEDGE

REQUIRED AERONAUTICAL KNOWLEDGE AREAS CONTINUED

- Visual Glide Path Indicators
- Corrections While Landing
- Going Around

- PHASE 3; 3.3.1 - Faulty Approaches and Balked Landings
  - Final Approach
  - Roundout
  - Touchdown
  - Correcting for Crosswinds
- PHASE 3; 3.4.3 - Hazards
  - Wake Turbulence Avoidance
- PHASE 3; 3.4.4 - Emergencies
  - Emergencies in Flight
  - Basic Engine Failure Procedures
  - Emergency Approach and Landing
  - Engine Failure During and After Takeoff
  - Fires
  - Emergency Equipment and Survival Gear
- PHASE 4; 4.4.3 Recovering from Unusual Attitudes
  - Using Emergency Instrument Skills
- PHASE 6; 6.1.1 - Using Short or Soft Runways
  - Short-Field Takeoff and Landing
  - Soft-Field Takeoff and Landing

Structure

WEB-BASED KNOWLEDGE

REQUIRED AERONAUTICAL KNOWLEDGE AREAS CONTINUED

- PHASE 8; 8.1.1 - Vision in Flight
  - Night Vision
  - Visual Illusions
  - Spatial Disorientation
- PHASE 8; 8.1.2 - Night Operations
  - Sunset, Civil Twilight and Night
  - Preparation for Night Flying
  - Airplane and Airport Lighting
  - Night Emergencies
- PHASE 10; 10.2.1 - Your Responsibilities as a Certificated Pilot
  - Staying Current
  - Broadening Your Horizons
  - Transitions to Unfamiliar Airplanes
- PHASE 10; 10.2.2 - Passengers
  - Flying Safely and Risk Management
  - Making Your First Passenger Flight a Success

(8) Effects of density altitude on takeoff and climb performance

- PHASE 3; 3.2.1 - Predicting Performance
  - Factors Affecting Performance
  - More Factors Affecting Performance
  - Performance Speeds and Runway Conditions

Structure

WEB-BASED KNOWLEDGE

REQUIRED AERONAUTICAL KNOWLEDGE AREAS CONTINUED

- The Pilot's Operating Handbook (POH)
- Using Performance Charts

(9) Weight and balance computations

- PHASE 3; 3.2.2 - Airplane Loading
  - Airplane Weight and Balance
  - Methods of Weight and Balance Control

(10) Principles of aerodynamics, powerplants, and aircraft systems

- PHASE 1; 1.1.1 - Exploring the Airplane
  - The Main Parts of the Airplane
  - The Airplane’s Flight Controls
- PHASE 1; 1.2.1 - Basic Principles of Flight
  - The Forces of Flight
  - When Airflow is Disrupted
  - The Three Axes of Rotation
  - Using the Rudder
- PHASE 1; 1.2.2 - Controlling the Airplane in Flight
  - Making Turns
  - Understanding Load Factor
  - Understanding Maneuvering Speed
  - Climbs and Descents

Structure

WEB-BASED KNOWLEDGE

REQUIRED AERONAUTICAL KNOWLEDGE AREAS CONTINUED

    - Power-Off Descents
    - The Airplane's Left-Turning Tendencies
    - How to Control Left-Turning Tendencies
    - Flying in Ground Effect
    - Using Trim and Flaps
- PHASE 1; 1.3.1 - Learning about Your Airplane
    - Why an Airplane Flies
    - Straight–and-Level
    - Comparing the Instruments to the View Outside
    - Learning About Heading
    - Learning About Airspeed and Altitude
    - Learning About Slow Flight
- PHASE 1; 1.4.1 - Engine and Propeller
    - How the Engine Works
    - How the Engine Gets Air and Fuel
    - How Magnetos Work
    - Detonation and Preignition
    - How the Propeller Works
- PHASE 1; 1.4.2 - Airplane Systems
    - The Fuel, Oil and Hydraulic Systems
    - The Electrical System
    - The Environmental System

Structure

WEB-BASED KNOWLEDGE

REQUIRED AERONAUTICAL KNOWLEDGE AREAS CONTINUED

- PHASE 4; 4.3.1 - Primary Flight Displays
  - AHRS and Air Data Computer
  - Attitude Direction Indicator
  - Horizontal Situation Indicator
  - Engine and System Indicators
  - Map Display
  - Annunciations and Messages
- PHASE 4; 4.3.2 - Multifunction Displays
  - Engine and System Indicators
  - Map Display
- PHASE 4; 4.3.3 - Gyro-Based Instruments
  - Basic Gyroscopic Principles
  - Gyro-Based Instruments at Work
- PHASE 4; 4.3.4 - Basic Flight Instruments
  - Pitot-Static Instruments
  - Pitot-Static System Errors
  - Altimeter Errors
- PHASE 4; 4.3.5 - Magnetic Compass
  - Magnetic Compass Principles
  - Compass Errors
  - Using the Magnetic Compass

Structure

WEB-BASED KNOWLEDGE

REQUIRED AERONAUTICAL KNOWLEDGE AREAS CONTINUED

(11) If the course of training is for an airplane category or glider category rating, stall awareness, spin entry, spins, and spin recovery techniques

- PHASE 2; 2.4.2. - Learning About Stalls
  - Stall Theory
  - Mastering the Stall
  - Stall Situations
  - Spin Awareness

(12) Aeronautical decision making and judgment

- PHASE 2; 2.1.1 - Single-Pilot Resource Management (SRM)
  - Task Management (TM)
  - Automation Management (AM)
  - Risk Management (RM) and Aeronautical Decision Making (ADM)
  - Situational Awareness (SA)
  - Controlled Flight Into Terrain (CFIT) Awareness
- PHASE 7; 7.1.3 - Cockpit Resource Management
  - Using Cockpit Resources
  - Using Other Resources

Structure

WEB-BASED KNOWLEDGE

REQUIRED AERONAUTICAL KNOWLEDGE AREAS CONTINUED

(13) Preflight action that includes -

(i) 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

- PHASE 7; 7.1.1 - Sources of Flight Information
  - Chart Supplement
  - Sectional and/or Terminal Area Chart
  - Flight Service Station
  - Notices to Airmen (NOTAMS)
- PHASE 7; 7.1.2 - Planning and Organizing Your Cross-Country Flight
  - Selecting Your Route
  - Organizing Your Cross-Country Information\
  - Survival Gear

(ii) How to plan for alternatives if the planned flight cannot be completed or delays are encountered

- PHASE 2; 2.1.2 - Practical Application of SRM
  - The 5 Ps
  - PAVE and CARE Checklists
  - Personal Minimums
  - Cockpit Management
- PHASE 9; 9.1.1 - The Long Cross-Country Flight
  - Before You Go
  - Keeping Track of Your Progress

Structure

CESSNA KNOWLEDGE TEST

CESSNA FLIGHT TRAINING SYSTEM KNOWLEDGE TEST

Your Private course includes a separate FAA question review to help you prepare for the required written knowledge test. The web-based program

- Contains examples of FAA knowledge test questions
- Provides the answers and explanations of the correct and incorrect answer choices
- Prepares you to take the Cessna Flight Training System and the FAA knowledge tests

Before your first solo cross-country in Phase 7, you will take your Cessna Flight Training System knowledge test. This test

- Has questions covering the required FAA knowledge areas
- Is taken and proctored at your flight school using the Randomly Generated Exam feature section of your course selecting
    - Practice Exams
    - Randomly Generated Exam
    - Start New
    - If previous random exams taken, select OK to overwrite previous results

When you have finished all questions in your Cessna Flight Training System knowledge test

- Select “Finish / Suspend”
- Select “Finish”, and then
- Your proctor will Select View Exam Results and note any question not answered correctly

Stage 1

CESSNA KNOWLEDGE TEST

When you have finished the test, your instructor will

- Review the results with you
- Assign appropriate areas for review if necessary

After taking the Cessna Flight Training System knowledge test, you should then take the FAA Airman Knowledge test as soon as possible since the information will be fresh in your memory.

Stage 1

STAGE 1: FUNDAMENTALS AND PRE-SOLO

STAGE 1

Stage 1 consists of five Phases

- Learning Your Airplane
- Improving Control
- Takeoffs and Landings
- Preparing for Solo Flight
- Solo Flight

Stage Objectives

- Become familiar with the training airplane
- Learn safe practices and checklist use
- Learn how the aircraft controls are used to establish and maintain specific flight attitudes
- Learn about aircraft envelopes and the limits or aircraft capabilities to include stall and spin awareness and performance maneuvers
- Be introduced to ground reference maneuvers in order to learn methods of controlling for wind drift
- Learn appropriate emergency operations
- Be introduced to basic instrument maneuvers
- Learn and practice takeoffs, landings, and operations to and from local airports
- Perform solo flights

Each phase contains multiple Flight Scenarios that can be repeated as needed or omitted if all items in the Phase Proficiency Checklist are completed to standard.

Stage 1, Phase 1

PHASE 1: LEARNING YOUR AIRPLANE

PHASE 1

Phase Objective:

- Preflight procedures
- Flows and checklist use
- Ground operations
- Basic aircraft control
- Introduction to maneuvering at minimum controllable airspeed
- Introduction to stall/spin awareness
- Postflight procedures

Flight Scenarios

Your First Flight
Controlling the Airplane
Increasing Awareness

Note - Flight scenarios will be repeated as necessary to reach the desired proficiency*

Stage 1, Phase 1

SCENARIO 1: YOUR FIRST FLIGHT

Scenario 1: Your First Flight (1 - Ground, 2 - Sim, 3 - Airplane)

Objectives

Introduce new terms, preflight procedures, ground operations, basic aircraft control, and postflight procedures

Where to go:

One of Flight Training Professional's Practice Areas:

1. Northwest practice area
2. Southeast practice area
3. West practice area

How to get there:

Pilotage - use of charts and familiar landmarks

Planned deviations:

None

Planned malfunctions:

None

Purpose/pressures (real or simulated)

- Conduct normal checklist procedures for all appropriate phases of flight with instructor input
- Become familiar with normal airplane operations
- Area familiarization
- Observe normal takeoff and climb operations
- Observe normal approach and landing operations

Risks (real or simulated):

Traffic, Obstacles and terrain

Completion Standard

- See each individual task's completion standards

Stage 1, Phase 1

SCENARIO 1: YOUR FIRST FLIGHT

Required Study

CESSNAFLIGHTTRAINING.COM

- PHASE 1; 1.1.1 Exploring the Airplane
- PHASE 1; 1.1.2 Getting Ready for Flight
- FLIGHT PREVIEWS – Learning Your Airplane – Preflight Inspection
  - Interior
  - Exterior
- FLIGHT PREVIEWS – Learning Your Airplane – Engine Starting
- PHASE 1; 1.1.3 Controlling the Airplane's Motion
- FLIGHT PREVIEWS – Learning Your Airplane – Taxiing and Before Takeoff Check
- FLIGHT PREVIEWS – Learning Your Airplane
  - Normal Takeoff and Climb
  - Straight-and-Level Flight
- PHASE 1; 1.2.1 Basic Principles of Flight
- PHASE 1; 1.2.2 Controlling the Airplane in Flight
- FLIGHT PREVIEWS – Learning Your Airplane
  - Climbs
  - Descents
  - Use of Trim
  - Turns
- PHASE 1; 1.3.1 Learning about Your Airplane
- FLIGHT PREVIEWS – Learning Your Airplane – Primary Flight Display

Pitch and Power Table

- Review the pitch and power settings for all configurations

Cessna C172S NAV II AND NAV III Maneuver Standard Operating Procedures

- Page 1 – Introduction

Stage 1, Phase 1

SCENARIO 1: YOUR FIRST FLIGHT

Cessna C172S NAV III Flows and Amplified Checklist Procedures

- Page 1-2 – Introduction
- Pages 2-1 to 2-9 – Preflight Inspection
- Pages 6-1 to 6-5 – Passenger Briefing

C172S NAVIII Skyhawk SP NAV III Avionics Option-GFC 700 AFCS Pilots Information Manual

- Page 4 – 23 to 4 – 27 – Review the C172S Preflight and Engine Start Guidance

Additional Reading

Airplane Flying Handbook

- Chapter 2 and Chapter 3

Pilot's Handbook of Aeronautical Knowledge

- Pages 3-1 to 3-7, Chapter 4, Pages 5-1 to 5-8

Private Pilot - Airplane Airman Certification Standards

- Pages 1 to 2 – Introduction – Airman Certification Standards Concept

Ground Training Checklist

Study material and habits
Flight Training Professional's safety practices and procedures
Four fundamentals of flight
Three axis of an airplane
Four forces of flight
Checklist use
Preflight inspection
Operation of systems
Runway incursion avoidance
Normal takeoff and climb – instructor will demonstrate in flight
Normal approach and landing – instructor will demonstrate in flight

Stage 1, Phase 1

SCENARIO 1: YOUR FIRST FLIGHT

Proficiency Checklist

Preflight inspection
Checklist usage
Location of fire extinguisher
Seat Height and Position
Doors and safety belts
Positive exchange of flight controls
Engine starting and warm-up
Taxiing
Before takeoff check
Engine run-up
Runway incursion avoidance
Climbs and descents
Use of trim
Level off
Straight-and-level flight
Area familiarization
Collision avoidance
Stability demo (yaw-pitch-roll)
Medium banked turns
Turn coordination
Back pressure in a turn
Turn entry and roll out
After landing, parking and securing

Stage 1, Phase 1

SCENARIO 2: CONTROLLING THE AIRPLANE

Scenario 2: Controlling the Airplane (1 - Ground/Sim, 2 - Airplane)

Objectives

Learn proper rudder usage, get more comfortable with the airplane controls, and continue to learn how to set the airplane pitch/power combination for your desired phase of flight.

Where to go:

One of Flight Training Professionals Practice Areas:

1. Northwest practice area
2. East practice area
3. West practice area

How to get there:

Pilotage - use of charts and familiar landmarks

Planned deviations:

None

Planned malfunctions:

None

Purpose/pressures (real or simulated):

You have a close friend in town whom you only see every few years. You have plans to take your friend flying for a great experience to a coastal airport which has a wonderful restaurant on-field. The trouble is you are running late and the rental airplane is only available for a limited time.

Risks (real or simulated):

Simulated - Possible poor preflight preparation due to the pressure to rush as a result of running late

Traffic, obstacles and terrain.

Completion Standard

- See each individual task's completion standards

Stage 1, Phase 1

SCENARIO 2: CONTROLLING THE AIRPLANE

Required Study
CESSNAFLIGHTTRAINING.COM

- PHASE 1; 1.3.2 Airworthiness of the Airplane
  - Certificates and Documents
  - Equipment Required for Flight
  - Required Inspections
  - Special Flight Permits
  - Basic Airplane Maintenance
- PHASE 2; 2.1.1 Single-Pilot Resource Management (SRM)
  - Risk Management (RM) and Aeronautical Decision Making (ADM)
  - (Review basic risk management concepts that should be used as part of every flight's preparation and execution)
- PHASE 2; 2.1.2 Practical Application of SRM
  - Cockpit Management
- PHASE 1; 1.2.2 Controlling the Airplane in Flight
  - Making Turns
  - Climbs and Descents
  - Power-Off Descents
  - The Airplane's Left-Turning Tendencies
  - How to Control Left-Turning Tendencies
  - Flying in Ground Effect
  - Using Trim and Flaps
- FLIGHT PREVIEWS – Learning Your Airplane
  - Entering, Departing & Flying Traffic Patterns
  - Normal Approach and Landing
  - After Landing, Parking and Securing
- PHASE 2; 2.2.1 Using Your Airport
  - Runway and Taxiway Markings
  - Progressive Taxi Directions

Stage 1, Phase 1

SCENARIO 2: CONTROLLING THE AIRPLANE

Pitch and Power Table
- Review the pitch and power settings for all configurations

Cessna C172S NAV II AND NAV III Maneuver Standard Operating Procedures
- Pages 2 and 3 – Normal Takeoff and Climb

Cessna C172S NAV III Flows and Amplified Checklist Procedures
- Pages 1-3 to 1-6 – Flight Deck Roles, Duties, and Communication
- Page 2-10 to 2-17 – Preflight Inspection
- Page 6-6 – Pilot In Command Briefing

Additional Reading:
Airplane Flying Handbook
- Chapter 2 and Chapter 3

Pilot's Handbook of Aeronautical Knowledge
- Pages 2-1 to 2-9, Pages 5-12 to -5-19, Pages 5-22 to 5-24, 9-6 to 9-13

Ground Training Checklist
- Risk management
- Flight deck management
- Left turning tendencies
- Flight Training Professional's safety practices and procedures
- Study material and habits
- Preflight inspection
- Checklist use
- Operation of systems

Stage 1, Phase 1

SCENARIO 2: CONTROLLING THE AIRPLANE

Proficiency Checklist

Risk management
Preflight inspection
Flight deck management
Checklist use
Positive exchange of flight controls
Engine starting and warm-up
Taxiing
Before takeoff check
Engine run-up
Runway incursion avoidance
Left turning tendencies
Constant airspeed climbs and descents
Climbing and descending turns
Level off
Use of trim
Straight-and-level flight
Area familiarization
Collision avoidance
Aileron/Rudder coordination exercise
Medium banked turns
Turn coordination
Back pressure in a turn
Turn entry and roll out
Descents with/without flaps
Power-off descent at best glide airspeed
Descent at approach airspeed in landing configuration
After landing, parking and securing

Stage 1, Phase 1

SCENARIO 3: INCREASING AWARENESS

Scenario 3: Increasing Awareness (1 - Ground/Sim, 2 - Airplane)

Objectives

Perform preflight procedures, ground operations, basic aircraft control and postflight procedures with minimal instructor assistance. Practice flying slowly near stall speed.

Where to go:

One of Flight Training Professionals Practice Areas:

1. Northwest practice area
2. Southeast practice area
3. West practice area

Additionally, determine a specific point of interest near or within the chosen practice area.

How to get there:

Pilotage - use of charts and familiar landmarks

Purpose/pressures (real or simulated):

You are scheduled for your pre-solo progress check today, but you had only 4 hours of sleep last night because of a personal emergency. You have been misplacing things throughout the day and feel frustrated. You should cancel the progress check. However you are leaving town next week. If you don't complete the progress check today, you might not be able to fly your first solo flight before you have to leave.

Risks (real or simulated):

(Simulated: Pilot fatigue and the external pressure of missing out on soloing and the possible increased cost and delay associated with this)

Completion Standard

- See each individual task's completion standards
- Complete the Phase 1 Proficiency Quiz
- Correct any deficiencies on the quiz with your instructor

Stage 1, Phase 1

SCENARIO 3: INCREASING AWARENESS

Required Study

CESSNAFLIGHTTRAINING.COM

- FLIGHT PREVIEWS – Learning Your Airplane – Communications
- PHASE 2; 2.1.1
  - Single-Pilot Resource Management (SRM)
  - Task Management (TM)
  - Automation Management (AM)
  - Risk Management (RM) and Aeronautical Decision Making (ADM)
  - Situational Awareness (SA)
  - Controlled Flight Into Terrain (CFIT) Awareness
- PHASE 2; 2.1.2 Practical Application of SRM
  - The 5 Ps
  - PAVE and CARE Checklists
  - Personal Minimums
  - Flight Deck Management
- PHASE 1; 1.2.3 More About Your Airplane
  - Learning about Your Airplane
  - Learning About Slow Flight
- FLIGHT PREVIEWS – Learning Your Airplane – Maneuvering During Slow Flight
- PHASE 2; 2.4.2 Learning About Stalls
  - Stall Theory
  - Mastering the Stall
  - Stall Situations
  - Spin Awareness
- FLIGHT PREVIEWS – Learning Your Airplane – Power Off Stalls

Stage 1, Phase 1

SCENARIO 3: INCREASING AWARENESS

- PHASE 1; 1.4.1 Engine and Propeller
  - How the Engine Works
  - How the Engine Gets Air and Fuel
  - How Magnetos Work
  - Detonation and Preignition
  - How the Propeller Works
- PHASE 1; 1.4.2 Airplane Systems
  - The Fuel, Oil and Hydraulic Systems
  - The Electrical System
  - The Environmental System

Cessna C172S NAV II AND NAV III Maneuver Standard Operating Procedures

- Review and "chair fly" each procedure:
  - Pages 9 to 10 – Clearing Turns
  - Page 11 – Position Report
  - Page 12 – Slow Flight – Clean Configuration
  - Pages 13 to 14 – Slow Flight – Landing Configuration
  - Pages 17 to 18 – Power Off Stall – Landing Configuration

Cessna C172S NAV III Flows and Amplified Checklist Procedures

- Pages 1-7 to 1-12 – Checklist Use and Callouts
- Page 3-1 to 3-12 – Flows and Amplified Checklist Procedures (Review and "chair fly" procedures)
- Pages 6-7 to 6-9 – Departure Briefing
- Pages 6-10 – VFR Approach Briefing

Stage 1, Phase 1

SCENARIO 3: INCREASING AWARENESS

Additional Reading:

Airplane Flying Handbook

- Pages 5-1 to 5-24

Pilot's Handbook of Aeronautical Knowledge

- Chapter 2
- Pages 7-1 to 7-11
- Pages 7-15 to 7-18
- Pages 7-25 to 7-34

Ground Training Checklist

Flight Training Professional's safety practices and procedures
Study material and habits
Preflight inspection
Checklist use
Operation of systems
Single-pilot resource management (SRM)
Risk management
Task management
Runway incursion avoidance
Normal takeoff and climb – instructor will demonstrate in flight
Maneuvering during slow flight
Power-off stalls (imminent)
Normal approach and landing – instructor will demonstrate in flight

Proficiency Checklist

Single-pilot resource management (SRM)
Task management

Stage 1, Phase 1

SCENARIO 3: INCREASING AWARENESS

Risk management
Preflight inspection
Flight deck management
Checklist use
Positive exchange of flight controls
Engine starting and warm-up
Taxiing
Before takeoff check
Engine run-up
Runway incursion avoidance
Left turning tendencies
Constant airspeed climbs and descents
Climbing and descending turns
Level off
Use of trim
Straight-and-level flight
Area familiarization
Collision avoidance
Aileron/Rudder coordination exercise
Medium banked turns
Turn coordination
Back pressure in a turn
Turn entry and roll out
Maneuvering during slow flight
Power-off stalls (imminent)
Descents with/without flaps
Power-off descent at best glide airspeed
Descent at approach airspeed in landing configuration
After landing, parking and securing

Stage 1, Phase 1

PHASE 1 PROFICIENCY QUIZ

1. During preparation for a flight, you would like to find out what minimum fuel you will need according to Flight Training Professionals' operational requirements. Where would this information be located? What is the minimum dispatch amount?

_____

_____

2. After completing the session with your instructor for Cessna Private Pilot Syllabus – Stage 1, Phase 1, Scenario 3, what is required to review according to the Flight Training Professionals Study Guide?

_____

_____

3. Explain how to "chair fly" a maneuver? What minimum reference is needed in order to practice chair flying a maneuver? What maneuvers, according to the Flight Training Professionals study guide, must you "chair fly" for Cessna Private Pilot Syllabus – Stage 1, Phase 1, Scenario 3?

_____

_____

_____

_____

_____

_____

4. Who is responsible to ensure the airworthiness of the airplane? What part does the Aircraft Acceptance checklist hold in carrying out this process?

_____

_____

Stage 1, Phase 1

PHASE 1 PROFICIENCY QUIZ

6. What approximate voltage should be read on the main bus voltmeter just prior to engine start? What should be read after engine start? What does this tell us about the voltage measurements for the main battery and alternator?

_____
_____

7. Of the four strokes used in a reciprocating engine, on which stroke does the intake valve open?

_____
_____

8. How does the turning of the flight control cause the ailerons to move? Why does turning the flight control to the left cause a roll in the same direction?

_____
_____
_____
_____

9. Why must right rudder be increased as pitch is rotated during takeoff?

_____
_____
_____

10. What practices should be utilized during a climb to avoid collisions? What practices should be observed prior to practicing a maneuver?

_____
_____

Stage 1, Phase 1

PHASE 1 PROFICIENCY QUIZ

11. Why is more power required to fly slower while maneuvering during slow flight? Below what speed does this principle become true?

_____

_____

12. Why is step 10 in the POWER OFF STALL - LANDING CONFIGURATION standard operating procedure key to appropriate recovery?

_____

_____

_____

_____

Stage 1, Phase 1

PHASE 1 PROFICIENCY STANDARDS

SRM

Single-pilot resource management - *Utilizes resources available to ensure the successful completion of the flight*

Task management - *Prioritizes and selects the most appropriate tasks with assistance*

Risk management - *Is able to identify problems, analyze the information and make an informed decision with assistance*

Preflight procedures

Preflight inspection - *Can perform a safe preflight inspection with instructor assistance*

Flight deck management - *Organizes the flight deck, has easy access to the checklist and utilizes items such as a tablet, strap, organizer, kneeboard, paper and pen/pencil to record information*

Checklist use - *Uses checklist for preflight and all phases of flight preferably using a Do/Verify method*

Location of fire extinguisher - *Confirms location and is able to use if necessary*

Doors and safety belts - *Can demonstrate the operation of doors and safety belts during a passenger briefing*

Engine starting and warm-up - *Uses checklist, clears the area before cranking and sets to 800-900 RPM after starting*

Positive exchange of flight controls - *Uses the 3-part verification system to confirm who has official control of the airplane*

Stage 1, Phase 1

PHASE 1 PROFICIENCY STANDARDS

Runway incursion avoidance - *Uses airport diagram, briefs and is aware of any hot spots, and records and briefs taxi clearance with assistance. Clears intersecting runways and turns all lights on before crossing*

Taxiing - *Taxis at a jog in uncongested areas/movements area and at a walk in congested/non-movements areas. Exhausts rudder before use of brakes for directional steering, and does not ride the brakes*

Engine run-up - *Follows checklist, looks outside to confirm parking brake is holding during run-up*

Before takeoff check - *Follows checklist*

In-flight

Left turning tendencies - *Applies rudder correction during climb to maintain coordinated flight*

Climbs and descents - *Uses proper techniques and power settings*

Constant airspeed climbs and descents - *Utilizes a constant power setting and uses pitch to control airspeed*

Climbing and descending turns - *Clears for traffic before beginning the turn. Uses proper rudder/control wheel inputs to maintain coordinated flight*

Level off - *Leads level off as needed. Sets pitch, applies power as appropriate and then trims in the proper order and as appropriate*

Use of trim - *Uses the appropriate amount of trim after desired pitch and power settings are attained*

Stage 1, Phase 1

PHASE 1 PROFICIENCY STANDARDS

Straight-and-level flight - *Uses outside references (horizon, nose, and wingtips) to confirm* orientation

Area familiarization - *Is able to identify local landmarks and reporting points with assistance*

Collision avoidance - *Looks and lifts wing before turning, knows of possible congestion and collisions hazards around local airport reporting points and navigation aids*

Stability demo (yaw-pitch-roll) - *Observes the stability of the airplane if displaced*

Aileron/Rudder coordination - P*ractice the exercise 30° bank side to side while keeping the nose level to the horizon on a specific point through the coordinated use of rudder and aileron inputs*

Medium banked turns - *Altitude (+/- 250 feet), heading (+/- 20°), airspeed (+/- 10 knots), bank (+/- 10°)*

Turn coordination - *Utilizes rudder to make coordinated rolls, and as needed, turns*

Back pressure in a turn - *Uses back pressure during turns to maintain altitude, releases back pressure when rolling out of the turn to prevent a gain in altitude*

Turn entry and roll out - *Smoothly applies rudder and control wheel pressures as necessary, leads the roll out by ½ the bank angle*

Maneuvering during slow flight - *Follow Flight Training Professional's standard operating procedures and* is *able to get into and out of slow flight using the proper techniques, altitude (+/- 300 feet)* with assistance

Stage 1, Phase 1

PHASE 1 PROFICIENCY STANDARDS

Power-off stalls (imminent) - Follow Flight Training Professional's standard operating procedures and recovers at the stall warning with assistance

Descents with/without flaps - Performs descents with/without flaps while noting the different descent rates with assistance

Power-off descent at best glide airspeed - Notes the pitch attitude required to maintain best glide airspeed with assistance. Maintains airspeed (+/- 10 knots), notes descent rate and glide distance with assistance.

Descent at approach airspeed in landing configuration - *Maintains airspeed (+/- 10 knots), notes pitch attitude*

Postflight procedures

After landing, parking and securing - *Completes appropriate checklists with assistance*

Postflight inspection - Completes a thorough postflight inspection, and notes/reports any discrepancies as appropriate

Stage 1, Phase 2

PHASE 2: IMPROVING CONTROL

PHASE 2

Phase Objective:

- Analyze basic flight conditions and recognize hazards for a go/no-go decision
- Control the airplane in all basic ground and flight operations with minimal instructor assistance
- Engage in effective radio communications
- Perform unassisted takeoffs
- Compensate for wind drift
- Recognize and recover from stalls

Flight Scenarios

Recognizing and Recovering from Stalls
Correcting for the Wind In Flight
Making Steep Turns
PROGRESS CHECK

Note - Flight scenarios will be repeated as necessary to reach the desired proficiency*

Stage 1, Phase 2

SCENARIO 1: RECOGNIZING AND RECOVERING FROM STALLS

Scenario 1: Recognizing and Recovering From Stalls (1 - Ground, 2 - Sim, 3 - Airplane)

Objectives

Learn how to correct for the wind while taxiing, perform effective radio communications, improve overall aircraft control, and learn the skills to recognize, avoid and recover from a stall as well as local traffic pattern operations

Where to go:

Flight Training Professional's southeast practice area

- Fly to the vicinity of the highest obstacle in the area (Bithlo TV antennas). Remain, the appropriate safe, legal distance (vertical and horizontal) from the obstacle and then to the southeast practice area for maneuvers.

How to get there:

Pilotage - use of charts and landmarks

Possible deviations:

None

Possible malfunctions:

None

Purpose/pressures (real or simulated):

Your route to your destination airport takes you through an area with tall tower obstacles. The base of the clouds are low and that means a cruising altitude near the height of the towers. You'll need to exercise caution in carefully planning out the flight.

Risks (real or simulated):

Traffic, flying at or near stall speed, flying near a high obstacle

Completion Standard

See each individual task's completion standards

Stage 1, Phase 2

SCENARIO 1: RECOGNIZING AND RECOVERING FROM STALLS

Required Study

CESSNAFLIGHTTRAINING.COM

- PHASE 2; 2.2.1 Using Your Airport
  - Coordinated Universal Time
  - Runway and Taxiway Markings
  - Progressive Taxi Directions
  - Ramp hand Signals
- PHASE 2; 2.2.2 Radio Communications
  - Radios
  - Safety Equipment
  - Communicating by Radio
  - Composing What to Say
  - Lost Communications
  - Landing With a Radio Failure
- FLIGHT PREVIEWS – Learning Your Airplane – Communications
- PHASE 2; 2.3.1 Learning About Ground Operations
  - Wind Direction and Runway to Use
  - Using Flight Controls While Taxiing
- FLIGHT PREVIEWS – Improving Control – Crosswind Taxi
- PHASE 2; 2.3.2 Flying Around Airports
  - The Traffic Pattern Around the Airport
  - Entering and Departing the Traffic Pattern
  - Communicating Your Intentions and Requests
  - Flying Safely in the Traffic Pattern
- FLIGHT PREVIEWS – Learning Your Airplane – Entering, Departing, & Flying Traffic Patterns

Stage 1, Phase 2

SCENARIO 1: RECOGNIZING AND RECOVERING FROM STALLS

- PHASE 2; 2.4.1 Normal and Crosswind Takeoffs and Landings
  - Takeoffs
  - Landings
  - Crosswind Landings
  - Visual Glide Path Indicators
  - Corrections While Landing
  - Going Around
- FLIGHT PREVIEWS – Learning Your Airplane – Normal Takeoff and Climb
- FLIGHT PREVIEWS – Improving Control
  - Crosswind Takeoff and Climb
  - Crosswind Approach and Landing
- PHASE 2; 2.4.2 Learning About Stalls
  - Stall Theory
  - Mastering the Stall
  - Stall Situations
  - Spin Awareness
- FLIGHT PREVIEWS – Learning Your Airplane – Power On Stalls

Cessna C172S NAV II AND NAV III Maneuver Standard Operating Procedures
Review and “chair fly” each procedure

- Page 3 – Normal Takeoff and Climb
- Page 4 – Crosswind Takeoff and Climb
- Pages 9 to 10 – Clearing Turns
- Page 11 – Position Report
- Pages 15 to 16 – Power On Stall – Takeoff Configuration
- Pages 40 to 41 – Normal Approach To A Landing

Stage 1, Phase 2

SCENARIO 1: RECOGNIZING AND RECOVERING FROM STALLS

Ground Training Checklist

Stall/spin awareness
Power-off stalls (landing configuration)
Power-on stalls (imminent- takeoff configuration)
Roll control at high angles of attack (rudder usage)
Use of power in stall recovery
Use of rudder in stall recovery
Demonstrated stalls
Normal approach and landing

Proficiency Checklist

Single-pilot resource management (SRM)
Preflight inspection
Checklist use
Operation of systems
Radio communications
Positive exchange of flight controls
Runway incursion avoidance
Crosswind taxi
Normal/crosswind takeoff and climb
Use of trim
Collision avoidance
Aileron/Rudder coordination exercise
Turn coordination
Maneuvering during slow flight
Low-Altitude Stall on Approach to Landing (SIMULATOR ONLY)
Low-Altitude Stall on Takeoff and Climb (SIMULATOR ONLY)
Demonstrated stalls

Stage 1, Phase 2

SCENARIO 1: RECOGNIZING AND RECOVERING FROM STALLS

Power-off stalls (landing configuration)
Power-on stalls (imminent- takeoff configuration)
Traffic pattern entry and departure procedures
Normal/crosswind approach and landing
After landing, parking and securing

Stage 1, Phase 2

SCENARIO 2: CORRECTING FOR THE WIND IN FLIGHT

Scenario 2: Correcting for the Wind in Flight (1 - Ground, 2 - Sim, 3 - Airplane)

Objectives

Learn how to properly correct for wind drift in flight and near the ground, use previously learned rudder coordination skills to perform a coordinated, full power-on stall.

Where to go:

One of Flight Training Professionals Practice Areas:

1. Southeast practice area
2. West practice area

A point that allows for easy visual tracking of a straight line along the ground.

How to get there:

Pilotage - use of charts and familiar landmarks

Possible deviations:

None

Possible malfunctions:

None

Purpose/pressures (real or simulated):

You want to improve the accuracy of your intended flight path while operating in the traffic pattern.

Risks (real or simulated):

Traffic, terrain and obstacles

Completion Standard

- See each individual task's completion standards

Required Study

CESSNAFLIGHTTRAINING.COM

- PHASE 2; 2.3.3 The Airport Environment and Correcting for Wind
  - Correcting for Wind
  - Flying the Desired Path
  - Ground Reference Maneuvers

Stage 1, Phase 2

SCENARIO 2: CORRECTING FOR THE WIND IN FLIGHT

- FLIGHT PREVIEWS – Improving Control
  - Sideslip
  - Forward Slip
  - Rectangular Course
  - Turns Around A Point
  - S-Turns

Cessna C172S NAV II AND NAV III Maneuver Standard Operating Procedures
Review and "chair fly" each procedure

- Pages 9 to 10 – Clearing Turns
- Page 11 – Position Report
- Page 35 – Turns Around a Point
- Page 36 – S-Turns
- Page 37 – Rectangular Pattern

Cessna C172S NAV III Flows and Amplified Checklist Procedures

- Page 3-31 to 3-37 – Flows and Amplified Checklist Procedures - (Review and "chair fly" procedures)

Private Pilot - Airplane Airman Certification Standards

- Page 16 – Preflight Assessment – Review: Risk Management Section
- Page 45 – Forward Slip to A Landing – Review: Skills Section
- Page 49 – Ground Reference Maneuvers – Review: Knowledge and Skills Sections

Additional Reading:
Airplane Flying Handbook

- Pages 7-1 to 7-10

Stage 1, Phase 2

SCENARIO 2: CORRECTING FOR THE WIND IN FLIGHT

Ground Training Checklist

Stall/spin awareness
Power-off stalls (landing configuration)
Power-on stalls (imminent- takeoff configuration)
Roll control at high angles of attack (rudder usage)
Use of rudder in stall recovery
Use of power in stall recovery
Crabbing
Ground reference maneuver
Sideslip
Forward slip
Normal approach and landing

Proficiency Checklist

Preflight inspection
Checklist use
Positive exchange of flight controls
Operation of systems
Radio communications
Runway incursion avoidance
Crosswind taxi
Normal/crosswind takeoff and climb
Use of trim
Collision avoidance
Power-on stall (takeoff configuration)
Crabbing
Sideslip
Forward slip
Ground reference maneuver

Stage 1, Phase 2

SCENARIO 2: CORRECTING FOR THE WIND IN FLIGHT

Descent at approach airspeed in landing configuration
Traffic pattern entry and departure procedures
Normal/crosswind approach and landing
After landing, parking and securing

Stage 1, Phase 2

SCENARIO 3: MAKING STEEP TURNS

Scenario 3: Making Steep Turns (1 - Ground, 2 - Sim, 3 - Airplane)

Objectives

Develop planning, timing and coordination skills while practicing how to properly roll in and out of a steep turn; manipulating the proper controls to maintain a constant airspeed and altitude throughout the steep turn. Learn how to control the airplane by reference to instruments only.

Where to go:

One of Flight Training Professionals Practice Areas:

1. Northwest practice area
2. Southeast practice area
3. West practice area

How to get there:

Pilotage - use of charts and familiar landmarks

Possible deviations:

None

Possible malfunctions:

Radio failure

Purpose/pressures (real or simulated):

This is the only training block you could get all week with your instructor. The airplane you are dispatched has the following written up for the airplane:

- Landing light inoperative
- The controller reported difficulty understanding radio transmissions from the airplane.

Risks (real or simulated):

Traffic, increased load factor and stall speed during steep turns, pilot disorientation during flight by reference to instruments only

Stage 1, Phase 2

SCENARIO 3: MAKING STEEP TURNS

Completion Standard

See each individual task's completion standards
Complete the Phase 2 Proficiency Quiz
Correct any deficiencies on the quiz with your instructor

Required Study

CESSNAFLIGHTTRAINING.COM

- PHASE 2; 2.1.3 Basic Aviation Physiology
  - Understanding Hypoxia, Dehydration and Other Physical Factors
  - How Alcohol and Drugs Affect Flying
- FLIGHT PREVIEWS – Improving Control
  - Basic Instrument Maneuvers
  - Steep Turns
- Pitch and Power Table
  - Review the pitch and power settings for all configurations

Cessna C172S NAV II AND NAV III Maneuver Standard Operating Procedures
Review and “chair fly” each procedure

- Pages 9 to 10 – Clearing Turns
- Page 11 – Position Report
- Page 27 to 29 – Steep Turns

Cessna C172S NAV III Flows and Amplified Checklist Procedures
Page 3-38 to 3-48 – Flows and Amplified Checklist Procedures (Review and “chair fly” procedures)

Stage 1, Phase 2

SCENARIO 3: MAKING STEEP TURNS

C172S NAVIII Skyhawk SP NAV III Avionics Option-GFC 700 AFCS Pilots Information Manual

- Page 2 – 4 – Review the C172S VA Speed Limitations
- Page 2 – 10 to 2 – 11 – Review the C172S Maneuver Limits
- Page 5 – 13 – review the C172S Stall Speed relationship to Bank Angle

Private Pilot - Airplane Airman Certification Standards

- Page 13 – Human Factors – Review: All Sections
- Page 16 – Preflight Assessment – Review: Risk Management Section
- Page 48 – Steep Turns – Review: Skills Section

Additional Reading:

Airplane Flying Handbook

- Pages 10-1 to 10-3

Aeronautical Information Manual

- AIM Chapter 8, Section 1 (AIM 8-1-1 to 8-1-6)

Instrument Flying Handbook

- Pages 6-15 to 6-28

Pilot's Handbook of Aeronautical Knowledge

- Pages 17-1 to 17-22

Ground Training Checklist

Stall/spin awareness
Power-off stalls (landing configuration)
Power-on stalls (imminent- takeoff configuration)
Roll control at high angles of attack (rudder usage)
Use of rudder in stall recovery

Stage 1, Phase 2

SCENARIO 3: MAKING STEEP TURNS

Use of power in stall recovery
Crabbing
Ground reference maneuver
Sideslip
Forward slip
Aeronautical decision making
Steep turns
Basic instrument maneuvers (IR)
Normal approach and landing

Proficiency Checklist
Single-pilot resource management (SRM)
Aeronautical decision making
Preflight inspection
Checklist use
Operation of systems
Radio communications
Positive exchange of flight controls
Runway incursion avoidance
Crosswind taxi
Normal/crosswind takeoff and climb
Use of trim
Collision avoidance
Turn coordination
Basic instrument maneuvers (IR)
Maneuvering during slow flight
Power-off stalls (landing configuration)
Power-on stall (takeoff configuration)
Steep turns

Stage 1, Phase 2

SCENARIO 3: MAKING STEEP TURNS

Descent at approach airspeed in landing configuration
Crabbing
Sideslip
Traffic pattern entry and departure procedures
Normal/crosswind approach and landing
After landing, parking and securing

Stage 1, Phase 2

PHASE 2 PROFICIENCY QUIZ

1. While training for single-pilot operations, what tools can you use to systematically evaluate risks for a flight?

_____

_____

_____

2. What are some good practices before pressing the push-to-talk to make an initial radio call?

_____

_____

_____

3. When give taxi instructions from a control tower, especially if those instructions are confusing or while operating at an unfamiliar airport, what are good operating practices?

_____

_____

_____4. What response should be used to a controller's instruction if you are either concerned about the safety of or unsure if you can comply with the instructions?

_____

_____

5. What tools can you use while taxiing to maintain awareness of the wind direction in relationship to your taxiing airplane? What are the appropriate control inputs while taxiing with a right-quartering tailwind?

_____

_____

_____

6. What is the difference between an airplane's pitch attitude and angle of attack?

_____

_____

_____

Stage 1, Phase 2

PHASE 2 PROFICIENCY QUIZ

7. What are signs of an imminent stall? What are signs of a full stall?

_____
_____
_____
_____

8. Why does an airplane enter a spin? Where do inadvertent spins occur more commonly? . What are the proper recovery procedures?

_____
_____
_____
_____

9. While reviewing the material for steep turns in the Private Pilot Study Guide, Lesson 5, you need to "chair fly" the maneuver. According to the standard operating procedures, rolling through what bank angle requires an increase in power and pitch? Why must power be added?

_____
_____
_____
_____

10. According to the standard operating procedures, how many points should be chosen for reference during turns around a point? How wide is the radius of the maneuver? Where should the maneuver always begin in relation to the wind?

_____
_____

11. Refer to the Private Pilot Airman Certification Standards, Area of Operation VII, Task C, Power On Stalls. In your own words describe why Skill 9, " Configure the airplane as recommended by the manufacturer, and accelerate to Vx or Vy." is important.

_____
_____
_____

Stage 1, Phase 2

SCENARIO 4: PROGRESS CHECK REVIEW

Objectives

To prepare for the introductory experience of being evaluated by a check instructor.

Where to go:

One of Flight Training Professionals Practice Areas:

1. Northwest practice area
2. East practice area
3. West practice area

How to get there:

Pilotage - use of charts and familiar landmarks

Planned deviations:

None

Planned malfunctions:

None

Purpose/pressures (real or simulated):

This is your first flight with another instructor to demonstrate that you are progressing through the course at the desired level of learning. Many feelings, including stress and anxiety, are common during this experience.

Risks (real or simulated):

Problems that can occur while flying slowly near the ground, appropriately correcting for the wind, traffic, hazards and communication in the traffic pattern, and the natural feelings that arise with having your performance evaluated

Completion Standard

See the Progress Check Lesson Sheets:

Oral

Stage 1, Phase 2

SCENARIO 4: PROGRESS CHECK REVIEW

Required Study

For this Progress Check, you will be scheduled for a 2-hour oral block and a 2-hour flight block. They may or may not be booked for the same day. In the oral, you will be evaluated primarily on aerodynamics, stalls, spins, and aircraft systems.
You will also need to be familiar with company policies, limitations, and safety protocols. Part of the Oral will be the preflight inspection of the airplane. The check instructor will accompany you to the airplane and observe the preflight. You'll be asked what you're looking for and why. During the flight, the check instructor will evaluate your taxi technique, ATC communication, and aircraft handling skills.

You will need to bring the following items to the Progress Check:
- A copy of the POH for the Airplane you are flying.
- Pilots Handbook of Aeronautical Knowledge.
- A Jacksonville Sectional/electronic map
- Your Flight Training Professional's SOPs and Operations Manual
- Other reference books as appropriate.

All these items can be electronic on an iPad, Tablet, or Laptop. If electronic, the maps must be on a device that you can access while in flight.

Ground Training Checklist

Aerodynamics - Four forces
Aerodynamics - Production of lift
Aerodynamics - Stalls
Stall/spin awareness
Aircraft V-Speeds
Checklist use
Collision avoidance
Obtaining weather
Operation of systems - Engine oil
Operation of systems - Flight controls
Operation of systems - Fuel

Stage 1, Phase 2

SCENARIO 4: PROGRESS CHECK REVIEW

Operation of systems - Ignition
Operation of systems - Powerplant
Positive exchange of flight controls
Safety procedures and practices
Standard operating procedures

Proficiency Checklist
Single-pilot resource management (SRM)
Operation of systems
Checklist use
Passenger Briefing
Positive exchange of flight controls
Radio communications
Runway incursion avoidance
Flight deck management
Crosswind taxi
Normal and crosswind takeoff and climb
Use of trim
Collision avoidance
Turn coordination
Stall/spin awareness
Maneuvering during slow flight – Clean or Landing Configuration
Stall – Power off clean or landing configuration straight ahead
Crabbing
Sideslip
Normal and crosswind approach and landing
After landing, parking and securing

Stage 1, Phase 2

SCENARIO 4: PROGRESS CHECK (GROUND)

Objectives

To check that your progress in the course is sufficient to move to the next phase of training

Purpose/pressures (real or simulated):

This is your first flight with another instructor to demonstrate that you are progressing through the course at the desired level of learning. Many feelings, including stress and anxiety, are common during this experience.

Risks (real or simulated):

Problems that can occur while flying slowly near the ground, appropriately correcting for the wind, traffic, hazards and communication in the traffic pattern, and the natural feelings that arise with having your performance evaluated

Completion Standard

See the Progress Check Lesson Sheets:
Oral

Required Study

For this Progress Check, you will be scheduled for a 2-hour oral block and a 2-hour flight block. They may or may not be booked for the same day. In the oral, you will be evaluated primarily on aerodynamics, stalls, spins, and aircraft systems. You will also need to be familiar with company policies, limitations, and safety protocols. Part of the oral will be the preflight inspection of the airplane. The check instructor will accompany you to the airplane and observe the preflight. You'll be asked what you're looking for and why. During the flight, the check instructor will evaluate your taxi technique, ATC communication, and aircraft handling skills.

You will need to bring the following items to the Progress Check:

- A copy of the POH for the Airplane you are flying.
- Pilots Handbook of Aeronautical Knowledge.
- A Jacksonville Sectional/electronic map
- Your Flight Training Professional's SOPs and Operations Manual
- Other reference books as appropriate.

All these items can be electronic on an iPad, Tablet, or Laptop.
If electronic, the maps must be on a device that you can access while in flight.

Stage 1, Phase 2

SCENARIO 4: PROGRESS CHECK (GROUND)

Oral

Operation of systems - Powerplant
Operation of systems - Fuel
Operation of systems - Ignition
Operation of systems - Engine oil
Operation of systems - Flight controls
Aerodynamics - Four forces
Aerodynamics - Production of lift
Aerodynamics - Stalls
Stall/spin awareness
Recite standard operating procedures
Aircraft V-Speeds
Obtaining weather
Positive exchange of flight controls
Collision avoidance
Safety procedures and practices
Standard operating procedures
Weather minimums (flight school)
Minimum altitude limitations (flight school)
Location of practice areas (flight school)
Airman Certification Standards (ACS
Checklist use
Preflight inspection

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Stage 1, Phase 2

SCENARIO 4: PROGRESS CHECK (FLIGHT)

Objectives

To check that your progress in the course is sufficient to move to the next phase of training

Where to go:

One of Flight Training Professionals Practice Areas:

1. Northwest practice area
2. East practice area
3. West practice area

How to get there:

Pilotage - use of charts and familiar landmarks

Planned deviations:

None

Planned malfunctions:

None

Purpose/pressures (real or simulated):

This is your first flight with another instructor to demonstrate that you are progressing through the course at the desired level of learning. Many feelings, including stress and anxiety, are common during this experience.

Risks (real or simulated):

Problems that can occur while flying slowly near the ground, appropriately correcting for the wind, traffic, hazards and communication in the traffic pattern, and the natural feelings that arise with having your performance evaluated

Completion Standard

See the Progress Check Lesson Sheet:
Flight

Stage 1, Phase 2

SCENARIO 4: PROGRESS CHECK (FLIGHT)

Required Study

For this Progress Check, you will be scheduled for a 2 hour oral block and 2 hour flight block. They may or may not be booked for the same day. In the oral you will be quizzed mostly on aerodynamics, stalls, spins and aircraft systems. You will also need to be familiar with company policies, limitations, and safety protocol. Part of the Oral will be the preflight of the airplane. I will follow you to the airplane and observe the preflight. While I follow you I will occasionally ask you what you are looking for and why. During the flight we will look at your taxi technique, ATC communication skills, and aircraft handling skills.
You will need to bring the following items to the Progress Check:

- A copy of the POH for the Airplane you are flying.
- Pilots Handbook of Aeronautical Knowledge.
- A Jacksonville Sectional/electronic map
- Your Flight Training Professionals SOPs and Operations Manual
- Other reference books as appropriate.

All of these items can be electronic on an iPad, Tablet or Laptop. If electronic, the maps must be on a device that you can access while in flight.

Flight

Single-pilot resource management (SRM)
Preflight inspection
Operation of systems
Checklist use
Passenger Briefing
Positive exchange of flight controls
Radio communications
Runway incursion avoidance
Flight deck management
Crosswind taxi
Normal/crosswind takeoff and climb

Stage 1, Phase 2

SCENARIO 4: PROGRESS CHECK (FLIGHT)

Use of trim
Collision avoidance
Turn coordination
Stall/spin awareness
Maneuvering during slow flight – Clean or Landing Configuration
Stall – Power off clean or landing configuration straight ahead
Crabbing
Sideslip
Normal/crosswind approach and landing
After landing, parking and securing

Stage 1, Phase 2

PHASE 2 PROFICIENCY STANDARDS

SRM

Single-pilot resource management - *Utilizes all resources available to ensure the successful completion of the flight*

Aeronautical decision making - *Uses a systematic approach to consistently determine the best course of action for the circumstances*

Preflight procedures

Preflight inspection - *Can perform a safe preflight inspection without instructor assistance*

Checklist usage - *Uses checklist for preflight and all phases of flight*

Operation of systems - *Effectively operates the systems in the airplane*

Radio communications - *Makes most basic radio calls with minimal assistance*

Positive exchange of flight controls - *Uses the 3-part verification system to confirm who has official control of the airplane*

Runway incursion avoidance - *Uses best procedures for operational planning and maintaining situational awareness during taxi*

Crosswind taxi - *Applies appropriate aileron and elevator deflections*

In-flight

Normal/crosswind takeoff and climb - *Follows Flight Training Professional's standard operating procedures, maintains takeoff power and VY (+10/-5 knots), applies rudder correction for yaw and aileron correction for wind, and can perform an unassisted takeoff*

Stage 1, Phase 2

PHASE 2 PROFICIENCY STANDARDS

Use of trim - *Sets trim after setting pitch and power*

Collision avoidance - Lifts wing and looks before turning, maintains a visual scan and awareness for other traffic

Aileron/Rudder coordination exercise - *Uses decisive rudder and aileron inputs to maintain the nose at one spot on the horizon while banking back and forth*

Turn coordination - *Uses appropriate rudder pressures entering, in, and exiting a turn*

Basic instrument maneuvers (IR) - *Practices Flight Training Professional's pitch and power table, maintains altitude (+/- 200 feet), heading (+/- 20°), and airspeed (+/- 10 knots), bank (+/- 10°)*

Maneuvering during slow flight - Follows Flight Training Professional's standard operating procedures, *maintains altitude (+/- 250 feet), heading (+/- 20°), airspeed (+10/-5 knots), and bank (+/- 10°)*

Power-off stall (landing configuration) - *Follows Flight Training Professional's standard operating procedures, recovers using proper pitch and power inputs, maintains directional control, recovers within 400 feet*

Power-on stall (takeoff configuration) - *Follows Flight Training Professional's standard operating procedures, uses rudder to control roll at high angles of attack, and promptly recovers with use of pitch and power*

Steep turns - *Follows Flight Training Professional's standard operating procedures, maintains altitude (+/- 200 feet), heading (+/- 20°), airspeed (+10/-10 knots), and bank (+/- 10°)*

Stage 1, Phase 2

PHASE 2 PROFICIENCY STANDARDS

Forward slip - *Power to idle, applies ailerons into the wind and full opposite rudder, levels off at the desired altitude*

Ground reference maneuver - *Follows Flight Training Professional's standard operating procedures, maintains proper wind correction techniques, altitude (+/- 200 feet), and airspeed (+/- 10 knots)*

Descent at approach airspeed in landing configuration - *Maintains airspeed (+10/-5 knots)*

Crabbing - *Uses crab angle into wind to maintain a ground track*

Sideslip - *Uses a sideslip into the wind to maintain a ground track (ailerons into the wind, opposite rudder)*

Traffic pattern entry and departure procedures - *Correctly enters and exits the traffic pattern at the traffic pattern altitude, altitude (+/- 150 feet)*

Normal/crosswind approach and landing - *Follows Flight Training Professional's standard operating procedures, uses appropriate pitch and power settings, applies decisive wind correction as needed, maintains airspeed (+10/-5 knots), lands with instructor assistance*

Postflight procedures

After landing, parking and securing - *Completes appropriate checklists, obtains and briefs taxi route, utilizes runway incursion avoidance procedures, taxis the airplane safely back to parking and properly secures it*

Postflight inspection - *Completes a thorough postflight inspection, and notes/reports any discrepancies as appropriate*

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Stage 1, Phase 3

PHASE 3: TAKEOFFS AND LANDINGS

PHASE 3

During this phase you will develop the skills and confidence necessary to:

- Compute takeoff and landing data
- Practice and perform safe landings with minimal instructor assistance
- Compensate for wind drift without instructor assistance
- Perform more effective and efficient radio communications
- Decide when it is necessary to reject a landing attempt and go around for another try

Flight Scenarios

Takeoffs and Landings
Crosswind Takeoffs and Landings
Emergency Operations and Landing Practice

Flight scenarios will be repeated as necessary to reach the desired proficiency

Stage 1, Phase 3

SCENARIO 1: TAKEOFFS AND LANDINGS

Objectives

Build skill in performing takeoffs, landings and traffic pattern operations

Where to go:

An airport within 30 minutes flight time that is free from obstructions and dense traffic:

1. Kissimmee Gateway (KISM)
2. Leesburg International (KLEE)
3. Orlando Apopka (X04)
4. Space Coast Regional (KTIX)

How to get there:

Pilotage - use of charts and familiar landmarks

Possible deviations:

Upon arrival at the airport, the winds are reporting stronger than they were forecasted.

Possible malfunctions:

None

Purpose/pressures (real or simulated):

Due to several scheduling conflicts and weather cancellations, you haven't been able to fly for over three weeks. The trouble is the winds are 10 knots gusting to 15 knots 30° from the runway centerline.

Risks (real or simulated):

Problems that can occur while flying slowly near the ground, traffic, hazards, and communication, learning how to land, failing to apply appropriate wind corrections, gusting wind conditions, flaring too high or low, failure to make the prompt decision to reject an attempted landing and go around, failure to maintain a safe speed and/or retract flaps to the takeoff setting when going around

Completion Standard

- See each individual task's completion standards

Stage 1, Phase 3

SCENARIO 1: TAKEOFFS AND LANDINGS

Required Study

CESSNAFLIGHTTRAINING.COM

- PHASE 3; 3.1.1 Basic Weather Theory
  - What Makes Weather
  - The Atmosphere
  - Wind
  - Moisture
- PHASE 3; 3.1.2 Weather Patterns
  - Stable and Unstable Air
  - Air Masses and Fronts
- PHASE 3; 3.1.3 Weather Hazards
  - Fog
  - Thunderstorms
  - Wind Shear and Microbursts
  - Turbulence
  - Frost and Ice
- PHASE 3; 3.1.4 Basic Sources of Weather
  - Information
  - Telephone Weather Briefings
  - Online Weather Resources
- PHASE 3; 3.2.1 Predicting Performance
  - Factors Affecting Performance
  - More Factors Affecting Performance
  - Performance Speeds and Runway Conditions
  - The Pilot's Operating Handbook (POH)
  - Using Performance Charts
- PHASE 3; 3.2.2 Airplane Loading
  - Airplane Weight and Balance
  - Methods of Weight and Balance Control

Stage 1, Phase 3

SCENARIO 1: TAKEOFFS AND LANDINGS

- PHASE 3; 3.3.1 Faulty Approaches and Balked Landings
  - Final Approach
  - Roundout
  - Touchdown
  - Correcting for Crosswinds
- FLIGHT PREVIEWS – Takeoff and Landings
  - Go-Around/Rejected Landing
  - Faulty Approaches and Balked Landings
  - Forward Slip to a Landing

Takeoff and Landing Data
- Review the form

Cessna C172S NAV II AND NAV III Maneuver Standard Operating Procedures
Review and "chair fly" each procedure
- Page 3 – Normal Takeoff and Climb
- Page 4 – Crosswind Takeoff and Climb
- Page 40 to 41 – Normal Approach to a Landing
- Page 49 – Go-Around Procedure

Cessna C172S NAV III Flows and Amplified Checklist Procedures
- Page 3-1 to 3-48 – Flows and Amplified Checklist Procedures (Review and "chair fly" procedures as appropriate)

Ground Training Checklist
Situational awareness
Weight and balance
Performance charts
Traffic patterns

Stage 1, Phase 3

SCENARIO 1: TAKEOFFS AND LANDINGS

Go-around/rejected landings

Proficiency Checklist

Single-pilot resource management (SRM)
Risk management
Situational awareness
Preflight inspection
Weight and balance
Performance charts
Checklist use
Radio communications
Normal and crosswind takeoff and climb
Collision avoidance
Traffic patterns
Crabbing
Sideslip
Go-around/rejected landings
Normal/crosswind approach and landing
After landing, parking and securing

Stage 1, Phase 3

SCENARIO 2: CROSSWIND TAKEOFFS AND LANDINGS

Objectives

Practice your wind correction procedures for crosswind takeoffs and landings

Where to go:

An airport within 30 minutes flight time that has a crosswind runway available

1. Kissimmee Gateway (KISM)
2. Leesburg International (KLEE)
3. Orlando Apopka (X04)
4. Space Coast Regional (KTIX)

How to get there:

Pilotage

Possible deviations:

During your weather briefing, there is an AIRMET "Tango" valid for your route of flight.

Possible malfunctions:

None

Purpose/pressures (real or simulated):

Your extended family is coming into town and would like to be there for your first solo flight. You need to practice nontowered airport operations at Orlando Apopka (X04) before you can complete the pre-solo progress check. Your family will only be in town for a few days. The problem is the winds at the airport are 12 knots and 60° from the runway centerline, and the runway is 60 feet wide.

Risks (real or simulated):

Problems that can occur while flying slowly near the ground, appropriately correcting for the wind, traffic hazards and communication in the airport traffic pattern, stronger crosswind conditions combined with entry-level pilot skills and a narrow runway

Completion Standard

- See each individual task's completion standards

Stage 1, Phase 3

SCENARIO 2: CROSSWIND TAKEOFFS AND LANDINGS

Required Study

CESSNAFLIGHTTRAINING.COM

- PHASE 3; 3.4.1 VFR Aeronautical Charts
  - Locating Your Position Using Latitude and Longitude
  - Airport Symbols
  - Obstructions and Visual Checkpoints
  - VFR Chart Types
- PHASE 3; 3.4.2 FAA Publications
  - Chart Supplement
  - Notices to Airmen (NOTAMS)
  - FAA Reference Materials
- PHASE 3; 3.4.3 Hazards
  - Wake Turbulence Avoidance
  - Wind Shear Awareness and Recovery procedures
- PHASE 3; 3.3.1 Faulty Approaches and Balked Landings
  - Final Approach
  - Roundout
  - Touchdown
  - Correcting for Crosswinds
- FLIGHT PREVIEWS – Takeoff and Landings
  - Go-Around/Rejected Landing
  - Faulty Approaches and Balked Landings
  - Forward Slip to a Landing

Cessna C172S NAV II AND NAV III Maneuver Standard Operating Procedures
Review and “chair fly” each procedure

- Page 3 – Normal Takeoff and Climb
- Page 4 – Crosswind Takeoff and Climb
- Page 40 to 41 – Normal Approach to a Landing

Stage 1, Phase 3

SCENARIO 2: CROSSWIND TAKEOFFS AND LANDINGS

Cessna C172S NAV III Flows and Amplified Checklist Procedures

- Page 3-1 to 3-48 – Flows and Amplified Checklist Procedures (Review and "chair fly" procedures as appropriate)

C172S NAVIII Skyhawk SP NAV III Avionics Option-GFC 700 AFCS Pilots Information Manual

- Page 4 – 44 – Review Normal Landing
- Page 4 – 44 – Review Balked Landing
- Page 5 – 14 – Review the Crosswind Component Table
- Page 5 – 15 and 5 – 24 – Review the Takeoff/Landing Distance Tables
- Page 6-8 to 6-16 – Review the manufacturer's weight and balance guidance

Additional Reading:

- Airplane Flying Handbook
  - Chapter 8, Pages 9-1 to 9-20 and 9-30 to 9-38, Pages 6-1 to 6-10

- Aeronautical Information Manual
  - AIM Chapter 7, Section 1 (AIM 7-1-1 to 7-1-31), Section 4 (7-4-1 to 7-4-10)

- Pilot's Handbook of Aeronautical Knowledge
  - Pages 11-1 to 11-27, Pages 12-1 to 12-17, Pages 13-1 to 13-9, Pages 16-1 to 16-4

Proficiency Checklist

Single-pilot resource management (SRM)
Risk management
Preflight inspection
Performance charts
Weight and balance
Checklist use
Radio communications

Stage 1, Phase 3

SCENARIO 2: CROSSWIND TAKEOFFS AND LANDINGS

Collision avoidance
Traffic patterns
Crabbing
Sideslip
Forward slip
Go-around/rejected landing
Normal/crosswind approach and landing
After landing, parking and securing

Stage 1, Phase 3

SCENARIO 3: EMERGENCY OPERATIONS AND LANDING PRACTICE

Objectives

Improve your wind correction techniques for crosswind takeoffs and landings, and learn techniques for coping with systems and equipment malfunctions, and engine failures both in cruise and immediately after takeoff

Where to go:

One of Flight Training Professionals Practice Areas:

1. Northwest practice area
2. Southeast practice area
3. West practice area

How to get there:

Pilotage - use of charts and familiar landmarks

Possible deviations:

The airport you plan to practice takeoffs and landings at has a yellow “X” placed at each end of the runway

Possible malfunctions:

Flap-motor failure

Purpose/pressures (real or simulated):

Your training flight today is the only day this week that the weather will be acceptable for flight. During the preflight inspection, you set the flap control lever to full but the flaps only extend partially. You then set the flap control level to 0° and then back to full. The flaps moved to the correct setting after doing this.

Risks (real or simulated):

Problems that can occur while flying slowly near the ground, appropriately correcting for the wind, traffic, hazards, and communication in the airport traffic pattern, undependable flap-motor, simulating engine failure at high pitch angles with low airspeed

Completion Standard

- See each individual task's completion standards
- Complete the Phase 3 Proficiency Quiz
- Correct any deficiencies on the quiz with your instructor

Stage 1, Phase 3

SCENARIO 3: EMERGENCY OPERATIONS AND LANDING PRACTICE

Required Study

CESSNAFLIGHTTRAINING.COM

- PHASE 3; 3.4.4 Emergencies
  - Emergencies in Flight
  - Basic Engine Failure Procedures
  - Emergency Approach and Landing
  - Engine Failure During and After Takeoff
  - Fires
  - Emergency Equipment and Survival Gear
- FLIGHT PREVIEWS – Takeoffs and Landings
  - Emergency Approach and Landing
  - G1000 Annunciations and Alerts
  - G1000 Display Failure & Reversionary Mode
  - G1000 Electrical Failure

Cessna C172S NAV II AND NAV III Maneuver Standard Operating Procedures
Review and "chair fly" each procedure

- Page 51 – Engine Failure "ABCDE"
- Page 52 – Emergency Descent
- Page 53 – No Flap Approach and Landing

Cessna C172S NAV III Flows and Amplified Checklist Procedures

- Page 4-1 to 4-10 – Flows and Amplified Checklist Procedures - (Review and "chair fly" procedures)

C172S NAVIII Skyhawk SP NAV III Avionics Option-GFC 700 AFCS Pilots Information Manual

- Page 3-25 to 3-39 – Read the Amplified Emergency procedures
- Page 3-6 to 3-24 – Review Emergency procedures (Bold items to be memorized)

Stage 1, Phase 3

SCENARIO 3: EMERGENCY OPERATIONS AND LANDING PRACTICE

Private Pilot - Airplane Airman Certification Standards

- Page 64 – Emergency Descent – Review: Skills Section
- Page 65 – Emergency Approach and Landing – Review: All Sections
- Page 66 – Systems and Equipment Malfunctions – Review: Knowledge/Skills
- Page 67 – Emergency Equipment and Survival Gear – Review: All Sections

Additional Reading:

Airplane Flying Handbook

- Page 6-14, Chapter 18

Aeronautical Information Manual

- AIM Chapter 6-1-1 to 6-4-3

Ground Training Checklist

Weight and balance
Performance charts
Traffic patterns
Go-around/rejected landings
System and equipment malfunctions
Simulated engine failure (at altitude)
Simulated engine failure in a VY climb (at least 3,000’ AGL)
Simulated engine failure in a VX climb (at least 3,000’ AGL)
Emergency descent

Proficiency Checklist

Single-pilot resource management (SRM)
Risk management
Preflight inspection
Weight and balance

Stage 1, Phase 3

SCENARIO 3: EMERGENCY OPERATIONS AND LANDING PRACTICE

Checklist use
Radio communications
Normal/crosswind takeoff and climb
Collision avoidance
Maneuvering during slow flight
Stall
System and equipment malfunctions
Simulated engine failure (at altitude)
Simulated engine failure in a VY climb attitude (at least 3,000 feet AGL)
Simulated engine failure in a VX climb attitude (at least 3,000 feet AGL)
Emergency descent
Traffic pattern
Go-around/rejected landing
No flap approach and landing
Normal/crosswind approach and landing
After landing, parking and securing

Stage 1, Phase 3

PHASE 3 PROFICIENCY QUIZ

1. According to 14 CFR 91.103, what named, minimum preflight items must be performed before any flight?

_____

_____

2. During weight and balance calculations, where would you locate the airplane's basic empty weight?

_____

_____

3. After calculating the weight and balance, you find the center of gravity is outside the manufacturer's envelope. What do you do?

_____

_____

_____

_____

4. How often is a METAR released? List some information we can gain from a METAR. State some limitations of a METAR.

_____

_____

_____

_____

5. According to Flight Training Professionals Operations Manual, what is the maximum crosswind component for a VFR dual flight with company instructor? What is the crosswind limit for a VFR student solo flight?

_____

_____

Stage 1, Phase 3

PHASE 3 PROFICIENCY QUIZ

6. Explain why, in your own words, the third step in the Flight Training Professionals' Go Around Procedure is important to perform as stated.

_____
_____
_____
_____

7. According to the Flight Training Professionals' standard operating procedure for Normal Approach to a Landing, what should be done on short final? Why is this important?

_____
_____
_____
_____

8. List the items that must be memorized for both an engine failure in flight and electrical fire emergency. Why must these items be contributed to memory?

_____
_____
_____
_____

9. According to the Flight Training Professionals' standard operating procedure for an engine failure, what is the lowest altitude attention should be divided to completing checklists?

_____

10. In your own words, describe why the emergency items included in the Flight Training Professionals' departure briefing are important to review before takeoff. What potentially disastrous situation can this mental briefing help to avoid?

_____
_____
_____
_____

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Stage 1, Phase 3

PHASE 3 PROFICIENCY STANDARDS

SRM

Single-pilot resource management - *Utilizes all resources available to ensure the successful completion of the flight*

Risk management - *Is able to recognize risks and uses good judgment to reduce associated risks*

Situational awareness - *Maintains an accurate perception and understanding of surrounding factors and flight conditions*

Preflight procedures

Preflight inspection - *Performs a safe preflight inspection without instructor assistance*

Weight and balance - *Performs proper weight and balance calculations*

Performance charts - *Utilizes performance charts to determine takeoff and landing distance and crosswind components*

Checklist use - *Uses checklist for preflight and all phases of flight*

Radio communications - *Can effectively communicate with minimal assistance, understands pilot/controller terminology*

In-flight

Normal/crosswind takeoff and climb - *Follows Flight Training Professional's standard operating procedures, maintains VY (+10/-5 knots), applies rudder correction for yaw, and utilizes aileron correction for wind*

Collision avoidance - *Lifts wing and looks before turning, maintains a visual scan and awareness for other traffic*

Stage 1, Phase 3

PHASE 3 PROFICIENCY STANDARDS

Maneuvering during slow flight - *Follows Flight Training Professional's standard operating procedures, maintains altitude (+/- 150 feet), heading (+/- 15°), airspeed (+10/-0 knots), and bank (+/- 10°)*

Stall - *Follows Flight Training Professional's standard operating procedures, uses rudder to control roll at high angles of attack, and promptly recovers with use of pitch and power*

System and equipment malfunctions - *Uses appropriate checklists and manages risk*

Simulated engine failure (at altitude) - *Follows Flight Training Professional's standard operating procedures, has emergency items memorized, performs and then confirms with the checklist, maintains best glide airspeed +10/-5 knots*

Simulated engine failure in a VY climb attitude (at least 3,000 feet AGL) - *Follows Flight Training Professional's standard operating procedures, promptly pitches for best glide airspeed and maintains +10/-5 knots, uses checklist as appropriate*

Simulated engine failure in a VX climb attitude (at least 3,000 feet AGL) - *Follows Flight Training Professional's standard operating procedures, promptly pitches for best glide airspeed and maintains +10/-5 knots, uses checklist as appropriate*

Emergency descent - *Follows Flight Training Professional's standard operating procedures, and establishes airspeed and configuration as appropriate not to exceed VNE, VNO, VA or VFE*

Traffic patterns - *Follows Flight Training Professional's standard operating procedures, knows traffic pattern altitude, maintains orientation with runway in use, uses appropriate power and flap setting, altitude +/- 150 feet, and airspeed +/- 10 knots*

Crabbing - *Corrects for wind drift using the crab method*

Stage 1, Phase 3

PHASE 3 PROFICIENCY STANDARDS

Sideslip - *Corrects for wind drift using a sideslip (also known as the wing-low method)*

Forward slip - *Uses idle power, uses full rudder deflection, maintains ground track, airspeed +/- 10 knots*

Go-around/rejected landing - *Makes the timely decision to go around, follows Flight Training Professional's standard operating procedures, applies full power, pitches for a safe airspeed and retracts flaps to a takeoff setting, informs tower as appropriate*

Normal/crosswind approach and landing - F*ollows Flight Training Professional's standard operating procedures, uses a stabilized approach (+10/-5 knots) by 300' AGL, touches down safely with instructor assistance*

Postflight procedures

After landing, parking and securing - *Completes appropriate checklists, obtains and briefs taxi route, utilizes runway incursion avoidance procedures, taxis the airplane safely back to parking and properly secures it*

Postflight inspection - *Completes a thorough postflight inspection, and notes/reports any discrepancies as appropriate*

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Stage 1, Phase 4

PHASE 4 - PREPARING FOR SOLO FLIGHT

PHASE 4

During this phase you will further develop your previously learned skills to:

- Consistently perform safe takeoffs and landings without instructor assistance
- Recognize and correctly apply emergency memory items and checklists as appropriate
- Be able to operate the airplane safely for solo operations
- Pass the Pre-Solo Written Knowledge Test

Flight Scenarios

Using Your Flight Display / Instruments to Control the Airplane
Handling the Unexpected
Getting Ready for Solo Flight

Flight scenarios will be repeated as necessary to reach the desired proficiency

Stage 1, Phase 4

SCENARIO 1: USING YOUR FLIGHT DISPLAY/ INSTRUMENTS TO CONTROL THE AIRPLANE

Objectives

BEGIN WORK ON PRE-SOLO KNOWLEDGE TEST

Build the skills to handle situations such as lowering visibility or pilot disorientation and use GPS as an aid for situational awareness (if installed), practice ground reference maneuvers and safely handling system and equipment malfunctions

Where to go:

One of Flight Training Professionals Practice Areas and a suitable airport:

1. Northwest practice area
2. West practice area

and

1. Executive (KORL)
2. Kissimmee Gateway (KISM)
3. Leesburg International (KLEE)
4. Orlando Apopka (X04)
5. Space Coast Regional (KTIX)

How to get there:

Pilotage, use of charts and familiar landmarks and GPS

Possible deviations:

None

Possible malfunctions:

Flight display/instrument failure, radio failure, alternator failure

Purpose/pressures (real or simulated):

You and your instructor are running late after getting lunch at another airport due to a refueling delay. You have to get back to make a meeting on time. The weather is marginal VFR and on the previous flight the radio quality was poor at times. The ceiling is at 2,000 feet above ground level.

Risks (real or simulated):

Encountering marginal weather with decreasing visibility, pilot disorientation, failure to communicate with ATC, flying near the ground

Stage 1, Phase 4

SCENARIO 1: USING YOUR FLIGHT DISPLAY/ INSTRUMENTS TO CONTROL THE AIRPLANE

Completion Standard

- See each individual task's completion standards

Required Study

CESSNAFLIGHTTRAINING.COM

- PHASE 4; 4.1.1 Airspace
  - Basics of the Airspace System
  - Class G Airspace
  - Class E Airspace
  - Class D Airspace
  - Class C Airspace
  - Class B Airspace
  - Class A Airspace
- PHASE 4; 4.4.1 Advanced Navigation
  - Global Positioning System (GPS)
  - Getting There With GPS
- FLIGHT PREVIEWS – Preparing for Solo Flight – Direct-to and Nearest Airport Functions
- PHASE 4; 4.4.3 Recovering from Unusual Attitudes
  - Using Emergency Instrument Skills
- FLIGHT PREVIEWS – Improving Control – Basic Instrument Maneuvers
- FLIGHT PREVIEWS – Preparing for Solo Flight – Recovery from Unusual Attitudes

Pitch and Power Table

- Review the pitch and power settings for all configurations

Cessna C172S NAV II AND NAV III Maneuver Standard Operating Procedures

Review and “chair fly” each procedure

- Page 51 – Engine Failure “ABCDE”
- Page 52 – Emergency Descent
- Page 53 – No Flap Approach and Landing

Stage 1, Phase 4

SCENARIO 1: USING YOUR FLIGHT DISPLAY/ INSTRUMENTS TO CONTROL THE AIRPLANE

Cessna C172S NAV III Flows and Amplified Checklist Procedures

- Page 4-11 to 4-22 – Flows and Amplified Checklist Procedures (Review and "chair fly" procedures)

C172S NAVIII Skyhawk SP NAV III Avionics Option-GFC 700 AFCS Pilots Information Manual
Page 3-29 – Read the Emergency Operation in Clouds

Private Pilot - Airplane Airman Certification Standards
Page 58 – Straight and Level Flight – Review: Skills Section
Page 59 – Constant Airspeed Climbs – Review: Skills Section
Page 60 – Constant Airspeed Descents – Review: Skills Section

Additional Reading:
Airplane Flying Handbook

- Pages 5-1 to 5-8 and 5-26 to 5-27

Aeronautical Information Manual

- AIM 3-1-1 to 3-3-3, 6-2-1, 7-6-1

Instrument Flying Handbook

- Pages 7-26 to 7-28

Pilot's Handbook of Aeronautical Knowledge

- Pages 15-1 to 15-3, Pages 16-30 to 16-33, Pages 17-6 to 17-9

Ground Training Checklist
Airspace
VFR weather minimums
Minimum safe altitudes
Careless and/or reckless operation

Stage 1, Phase 4

SCENARIO 1: USING YOUR FLIGHT DISPLAY/ INSTRUMENTS TO CONTROL THE AIRPLANE

Emergency procedures
Controlled flight into terrain awareness
180° turn (IR)
GPS direct-to/nearest airport functions (VR-IR)
*Emergency communications and ATC resources
Recovery from unusual flight attitudes (IR)

Proficiency Checklist
Single-pilot resource management (SRM)
Controlled flight into terrain awareness
Preflight inspection
Weight and balance
Performance charts
Emergency equipment and survival gear
Checklist use
Positive exchange of flight controls
Radio communications
Crosswind taxi
Use of trim
Collision avoidance
Basic instrument maneuvers (IR)
Straight-and-level flight (IR)
180° turn (IR)
GPS direct-to/nearest airport functions (VR-IR)
Emergency communications and ATC resources
System and equipment malfunctions
Failed radio communications and ATC light signals
Ground Reference Maneuvers
Traffic patterns
Normal/crosswind approach and landing
After landing, parking and securing

Stage 1, Phase 4

SCENARIO 2: HANDLING THE UNEXPECTED

Objectives

Gain proficiency in handling unexpected and emergency situations

Where to go:

One of Flight Training Professionals Practice Areas and a suitable airport:

1. Northwest practice area
2. West practice area

and

1. Executive (KORL)
2. Kissimmee Gateway (KISM)
3. Leesburg International (KLEE)
4. Orlando Apopka (X04)

How to get there:

Pilotage, use of charts and familiar landmarks and GPS

Possible deviations:

The visibility along your route has lowered to 4 statute miles. You are scheduled to land at your home airport 15 minutes prior to sunset.

Possible malfunctions:

Engine failure, radio failure, position lights have been noted as “inoperative”

Purpose/pressures (real or simulated):

You are flying on your first solo cross country. You’ve encountered a headwind on the way there and are running behind schedule. You have a dinner to attend tonight to celebrate your sibling's college graduation; you were hoping to check the weather before your return flight. If you takeoff immediately upon your arrival at your destination airport you will get back 15 minutes before sunset.

Risks (real or simulated):

Problems that can occur while encountering unexpected situations, improper pilot response to emergency situations, potential for runway incursions at an unfamiliar airport, controlled flight into terrain, flying near sunset without night proficiency

Stage 1, Phase 4

SCENARIO 2: HANDLING THE UNEXPECTED

Completion Standard

- See each individual task's completion standards

Required Study

CESSNAFLIGHTTRAINING.COM

PHASE 3; 3.4.3 Hazards

- Wake Turbulence Avoidance
- Wind Shear Awareness and Recovery procedures

PHASE 4; 4.1.2 Other Airspace

- Special Use Airspace
- Other Airspace Areas
- Temporary Flight Restrictions

PHASE 4; 4.1.3 Airspace Rules

- Speed Limits
- Weather Minimums

Pitch and Power Table

- Review the pitch and power settings for all configurations

Cessna C172S NAV II AND NAV III Maneuver Standard Operating Procedures
Review and “chair fly” each procedure

- Page 51 – Engine Failure “ABCDE”
- Page 52 – Emergency Descent
- Page 53 – No Flap Approach and Landing

Cessna C172S NAV III Flows and Amplified Checklist Procedures

- Page 4-23 to 4-32 – Flows and Amplified Checklist Procedures (Review and “chair fly” procedures)

Stage 1, Phase 4

SCENARIO 2: HANDLING THE UNEXPECTED

Private Pilot - Airplane Airman Certification Standards

- Page 10 – National Airspace System – Review: All Sections
- Any Task in Takeoffs, Landings, and Go-Arounds – Review: Risk Management (Starting on Page 25 – Wake Turbulence is listed on All tasks)
- Page 24 – Traffic Patterns – Review: Knowledge Section (Windshear Awareness)

Additional Reading:

Airplane Flying Handbook

- Chapter 18

Aeronautical Information Manual

- AIM 3-4-1 to 3-5-9

Pilot's Handbook of Aeronautical Knowledge

- Pages 5-8 to 5-9

Ground Training Checklist

Airspace
VFR Weather Minimums
Emergency procedures
Emergency communications and ATC resources
Wind shear awareness and recovery procedures
Wake turbulence avoidance
Emergency approach and landing (simulated)
Engine failure during takeoff roll (simulated)

Proficiency Checklist

Single-pilot resource management (SRM)
Controlled flight into terrain awareness

Stage 1, Phase 4

SCENARIO 2: HANDLING THE UNEXPECTED

Task management
Risk management
Preflight inspection
Weight and balance
Performance charts
Checklist use
Positive exchange of flight controls
Crosswind taxi
Normal/crosswind takeoff and climb
Use of trim
Collision avoidance
Maneuvering during slow flight
Spin awareness and recovery procedures
Power-off stall (landing configuration)
Power-on stall (takeoff /climb configuration)
Emergency communications and ATC resources
Emergency approach and landing (simulated)
Engine failure during takeoff roll (simulated)
System and equipment malfunctions
Emergency descent
Failed radio communications and ATC light signals
Traffic patterns
Go-around/rejected landing
Normal/crosswind approach and landing
After landing, parking and securing

Stage 1, Phase 4

SCENARIO 3: GETTING READY FOR SOLO FLIGHT

Objectives

Recover from unusual flight attitudes and polish your skills for the progress check before your first solo flight

Where to go:

One of Flight Training Professionals Practice Areas:

1. Northwest practice area
2. Southeast practice area
3. West practice area

How to get there:

Pilotage - use of charts and familiar landmarks, GPS

Possible deviations:

You encounter haze and lowering cloud layers, there is light mist on the windshield

Possible malfunctions:

Engine failure, flight display/instrument failure, radio failure, alternator failure

Purpose/pressures (real or simulated):

The weather at your destination is reporting marginal VFR; you plan to fly yourself to an important regional airline interview that you've been trying to get for months. You have the option of driving, but want to impress the interviewers by flying in.

Risks (real or simulated):

Marginal weather; flying slowly near the ground; failure to appropriately correct for the wind, traffic and collision hazards; the potential for runway incursions; communication in the airport traffic pattern; pilot disorientation

Completion Standard

- See each individual task's completion standards
- Complete the Phase 4 Proficiency Quiz
- Correct any deficiencies on the quiz with your instructor

Stage 1, Phase 4

SCENARIO 3: GETTING READY FOR SOLO FLIGHT

Required Study

CESSNAFLIGHTTRAINING.COM

- PHASE 4; 4.4.3 Recovering from Unusual Attitudes
  - Using Emergency Instrument Skills
- PHASE 4; 4.4.2 Lost Procedures
  - Climb/Call/Get Help
  - Using Radios to Find Your Location
- PHASE 4; 4.3.1 Primary Flight Displays
  - AHRS and Air Data Computer
  - Attitude Direction Indicator
  - Horizontal Situation Indicator
  - Engine and System Indicators
  - Map Display
  - Annunciations and Messages
- PHASE 4; 4.3.2 Multifunction Displays
  - Engine and System Indicators
  - Map Display
- PHASE 4; 4.3.3 Gyro-Based Instruments
  - Basic Gyroscopic Principles
  - Gyro-Based Instruments at Work
- PHASE 4; 4.3.4 Basic Flight Instruments
  - Pitot-Static Instruments
  - Pitot-Static System Errors
  - Altimeter Errors
- PHASE 4; 4.3.5 Magnetic Compass
  - Magnetic Compass Principles
  - Compass Errors
  - Using the Magnetic Compass

Stage 1, Phase 4

SCENARIO 3: GETTING READY FOR SOLO FLIGHT

Pitch and Power Table

- Review the pitch and power settings for all configurations

Cessna C172S NAV II AND NAV III Maneuver Standard Operating Procedures
Review and "chair fly" each procedure

- Page 51 – Engine Failure "ABCDE"
- Page 52 – Emergency Descent
- Page 53 – No Flap Approach and Landing

Cessna C172S NAV III Flows and Amplified Checklist Procedures

- Page 4-23 to 4-32 – Flows and Amplified Checklist Procedures (Review and "chair fly" procedures)
- Page 5-1 to 5-12 – Flows and Amplified Checklist Procedures (Review and "chair fly" procedures)

C172S NAVIII Skyhawk SP NAV III Avionics Option-GFC 700 AFCS Pilots Information Manual

- Page 2-12 to 2-17 – Read the Kinds of Operations Equipment List
- Page 1 to 11 and 14 to 17 – Read the System Overview of the G1000

Private Pilot - Airplane Airman Certification Standards

- Page 5 – Airworthiness Requirements – Review: Knowledge and Skills sections
- Page 12 – Operation of Systems – Review: Skills section
- Page 62 – Recovery from Unusual Flight Attitudes – Review: Skills section

Additional Reading:
Airplane Flying Handbook

- Chapter 18

Stage 1, Phase 4

SCENARIO 3: GETTING READY FOR SOLO FLIGHT

Aeronautical Information Manual

- AIM Chapter 8, Section 1 (AIM 8-1-1 to 8-1-6)

Instrument Flying Handbook

- Pages 5-1 to 5-34

Pilot's Handbook of Aeronautical Knowledge

- Chapter 9

Stage 1, Phase 4

PRE-SOLO BRIEFING AND PRE-SOLO KNOWLEDGE TEST

Objectives

To ensure you have sufficient knowledge to proceed to Phase 5 and operate solo

Completion Standard

- Complete the Pre-Solo knowledge test with a passing score
- Correct any deficiencies on the Pre-Solo knowledge test with your instructor
- Complete the Expanded Pre-Solo Briefing

Required Study

Pre-Solo Knowledge Test

- Complete the entire written test (refer to Appendix B for example)

Pre-Solo Briefing

Flight Training Professional's safety practices and procedures
Airworthiness
Preflight preparation
Preflight inspection
Airplane performance and limitations
Fueling
Fuel reserves
VFR weather minimums
VFR cruising altitudes
Minimum safe altitudes
Careless and/or reckless operation
Radio communications
Right-of-way rules
Failed radio communications and ATC light signals
Emergency procedures
Collision avoidance

Stage 1, Phase 4

PRE-SOLO BRIEFING AND PRE-SOLO KNOWLEDGE TEST

Practice area locations
Traffic pattern
Solo flight restrictions
Required certificate and logbook endorsements
Controlled flight into terrain awareness
180° turn (IR)
Emergency communications and ATC resources
GPS direct-to/nearest airport functions (VR-IR)
Wind shear awareness and recovery procedures
Wake turbulence avoidance
Emergency approach and landing (simulated)
Engine failure during takeoff roll (simulated)
Recovery from unusual attitudes (IR)

Stage 1, Phase 4

PHASE 4 PROFICIENCY QUIZ

1. What would constitute two-way radio communications with the air traffic controllers at Orlando Executive Airport? This is required prior to what?

_____

_____

_____

_____

2. What are the VFR weather minimums required to depart, arrive, or operate within the class D airspace at the Orlando Executive airport?

_____

_____

3. Why is a transponder with altitude encoding required throughout operations at the Orlando Executive airport, to and from both practice areas, and within the practice areas themselves?

_____

_____

4. During operation in the practice areas, descending through what two altitudes would move the airplane from class E airspace to class G airspace? What would be the change in operational requirements? Why do these differences exist?

_____

_____

_____

_____

5. Explain what to do to if during a preflight inspection of the airplane, the flap position indicator is inoperative.

_____

_____

_____

_____

Stage 1, Phase 4

PHASE 4 PROFICIENCY QUIZ

6. What type of turn should be used during instrument referenced aircraft control? How is this established?

_____
_____
_____
_____

7. If departing after a large, arriving aircraft which touches down one-thousand feet down the runway, what should be done to ensure a safe takeoff?

_____
_____
_____
_____

8. Why is windshear dangerous? Why is this especially true while flying at low altitude?

_____
_____
_____
_____

9. If during a solo flight in the practice area, you observe a layer of clouds beginning to develop below your current altitude, are you legally able to fly above them?

_____

10. In the event of an emergency, what frequency(s) would be used to contact ATC for assistance?

_____
_____

Stage 1, Phase 4

PHASE 4 PROFICIENCY STANDARDS

SRM

Single-pilot resource management (SRM) - *Utilizes all resources available to ensure the successful completion of the flight*

Controlled flight into terrain awareness - *Demonstrates awareness of relation to obstacles and terrain*

Task management - *Prioritizes and selects the most appropriate tasks*

Risk management - *Maintains situational awareness, problem recognition and good judgment to reduce associated risks*

Preflight procedures

Preflight inspection - *Performs a safe preflight inspection without instructor assistance*

Weight and balance - *Performs a proper weight and balance calculation*

Performance charts - *Utilizes performance charts to determine takeoff and landing distance and crosswind components*

Checklist use - *Uses checklist for preflight and all phases of flight*

Emergency equipment and survival gear - *Carries sufficient equipment and gear for the environmental conditions*

Positive exchange of flight controls - *Uses a 3-point verification system to confirm control of the airplane*

Stage 1, Phase 4

PHASE 4 PROFICIENCY STANDARDS

Crosswind taxi - *Uses proper crosswind corrections while taxiing*

In-flight

Normal/crosswind takeoff and climb - *Follows Flight Training Professional's standard operating procedures, applies smooth, unassisted takeoff, airspeed VY+/-5 knots*

Use of trim - *Uses trim as appropriate, applies after setting desired pitch and power*

Collision avoidance - *Maintains situational awareness in relation to traffic in the area, clears blinds spots before turns*

Maneuvering during slow flight - *Follows Flight Training Professional's standard operating procedures, maintains altitude (+/- 150 feet), heading (+/- 10°), airspeed (+10/-0 knots), bank (+/- 10°)*

Spin awareness and recovery procedures - *Knows spin recovery procedures and can recite in flight*

Power-off stall (landing configuration) - *Follows Flight Training Professional's standard operating procedures, establishes a stabilized descent at approach airspeed in the landing configuration, simulates stall at desired altitude, heading (+/- 10°), does not lose more than 400 feet during stall recovery*

Power-on stall (takeoff/climb configuration) - *Follows Flight Training Professional's standard operating procedures, recognizes and recovers promptly by simultaneously reducing angle of attack and increasing power as appropriate*

Steep turns - *Follows Flight Training Professional's standard operating procedures, maintains altitude (+/- 150 feet), heading (+/- 15°), airspeed (+/- 10 knots), bank (+/- 10°)*

Stage 1, Phase 4

PHASE 4 PROFICIENCY STANDARDS

Basic instrument maneuvers (IR) - *Follows Flight Training Professional's pitch and power table, maintains altitude (+/- 200 feet), heading (+/- 15°), airspeed (+/- 10 knots)*

180° turn (IR) - *Elects to reverse course during an real/simulated inadvertent instrument meteorological encounter, maintains altitude (+/- 200 feet), heading (+/- 15°), airspeed (+/- 10 knots)*

Recovery from unusual flight attitudes (IR) - *Follows proper recovery procedures, uses coordinated control inputs to return to stabilized flight*

GPS direct-to /nearest airport functions (VR-IR) - *Can operate the GPS without assistance*

Emergency communications and ATC resources - *Can utilize the radio for emergency communications and ATC resources*

Emergency approach and landing (simulated) - *Follows Flight Training Professional's standard operating procedures, establishes best glide airspeed +10/-5 knots, picks the best landing site, completes and verifies the appropriate checklist*

Emergency descent - *Follows Flight Training Professional's standard operating procedures, airspeed and configuration as appropriate not to exceed VNE, VNO, VA or VFE*

Engine failure during takeoff roll (simulated) - *Follows proper memory items, closes the throttle to idle, applies maximum aerodynamic breaking, communicates as appropriate*

System and equipment malfunctions - *Recognizes, analyzes and uses the appropriate memory items and checklist*

Stage 1, Phase 4

PHASE 4 PROFICIENCY STANDARDS

Failed radio communications and ATC light signals - *Determines proper course of action, follows proper loss of communications procedures, interprets ATC light signals, and complies appropriately*

Turns around a point - *Follows Flight Training Professional's standard operating procedures, maintains altitude (+/- 150 feet), airspeed (+/- 10 knots)*

S-turns - *Follows Flight Training Professional's standard operating procedures, maintains altitude (+/- 150 feet), airspeed (+/- 10 knots)*

*R*ectangular course - *Follows Flight Training Professional's standard operating procedures, maintains altitude (+/- 150 feet), airspeed (+/- 10 knots)*

Traffic patterns - *Follows Flight Training Professional's standard operating procedures, maintains altitude (+/- 150 feet), airspeed (+/- 10 knots)*

Forward slip to a landing - *Maintains ground track, maintains crosswind correction and directional control throughout*

Go around/rejected landing - *Makes a timely decision to discontinue the approach to landing, follows Flight Training Professional's standard operating procedures, applies takeoff power immediately and transitions to climb pitch attitude for VY and maintains VY +10/-5 knots*

Normal/crosswind approach and landing - *Follows Flight Training Professional's standard operating procedures, consistently and safely controls the airplane using proper wind correction techniques, safety is never in question*

Stage 1, Phase 4

PHASE 4 PROFICIENCY STANDARDS

Postflight procedures

After landing, parking and securing - *Completes appropriate checklists, obtains and briefs taxi route, utilizes runway incursion avoidance procedures, taxis the airplane safely back to parking and properly secures it*

Postflight inspection - C*ompletes a thorough postflight inspection, and notes/reports any discrepancies as appropriate*

Stage 1, Phase 5

PHASE 5 - SOLO FLIGHT

PHASE 5

Phase Objective:

- Demonstrate that you can safely operate the airplane for your first solo
- Fly your first solo flights

Flight Scenarios

Phase 5 Progress Stage 1 Check
Your First Solo Flight
Your Second Solo Flight

Flight scenarios will be repeated as necessary to reach the desired proficiency

Stage 1, Phase 5

SCENARIO 1: PROGRESS CHECK (GROUND)

Objectives

Demonstrate to a designated instructor that you can safely fly the airplane solo

Completion Standard

See the completion standards listed in the Progress Check Lesson Sheets
Oral

Required Study

Phase 5 Scenario 1 Pre-Solo Progress Check
The pre-solo progress check is broken into two parts, an oral portion and a flight portion. During the oral portion you will be asked questions on various subjects including basic aerodynamics, aircraft systems, rules and regulations for the student pilot and airspace. You will be required to do a weight and balance calculation as well as take-off and landing distance calculations during the oral. Please be sure to bring with you all reference material that you may need. At a minimum bring the following:

- Pilot Operating Handbook
- Pilots Handbook of Aeronautical Knowledge
- Current FARs
- Current Jacksonville Sectional/electronic map
- Flight Training Professionals SOPs & Operations Manual

All of these references can be electronic if that is what you choose to use.
The flight portion will include the maneuvers you have learned as well as emergency procedures and instrument flight under a view-limiting device. Then you return to KORL for 3 landings. All Practice Area decisions and altitudes will be yours as you show us how you intend to act as PIC.

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- PHASE 5; 5.1.1 Solo Flight
    - Solo Flight

Stage 1, Phase 5

SCENARIO 1: PROGRESS CHECK (GROUND)

Oral

Operation of systems - Powerplant - Fuel - Ignition -Engine Oil
Operation of systems - Electrical
Operation of systems - Brakes
Aerodynamics - Drag
Aerodynamics - Stalls
Standard operating procedures
Aircraft V-Speeds
Obtaining weather
Regulations applicable to student pilot (Part 61, Part 91)
Student pilot limitations
Appropriate logbook and certificate endorsements
Certificates and documents
Airworthiness requirements
Safety procedures and practices
Airspace
Weight and balance
Performance and limitations
Wind shear awareness and recovery procedures
Wake turbulence avoidance

Stage 1, Phase 5

SCENARIO 1: PROGRESS CHECK (FLIGHT)

Objectives

Demonstrate to a designated instructor that you can safely fly the airplane solo

Where to go:

One of Flight Training Professionals Practice Areas:

1. Northwest practice area
2. Southeast practice area
3. West practice area

Additionally, the airport chosen by your instructor for your solo flight.

How to get there:

Pilotage, use of charts and familiar landmarks, GPS

Possible deviations:

None

Possible malfunctions:

Engine failure, flight display/instrument failure, radio failure, alternator failure

Purpose/pressures (real or simulated):

You are to demonstrate the skills listed below to the designated instructor to confirm that you are safe to operate solo

Risks (real or simulated):

The natural feelings that may arise from being evaluated or flying with an unfamiliar instructor and being responsible for all aspects of the flight

Completion Standard

See the completion standards listed in the Progress Check Lesson Sheets

Flight

Stage 1, Phase 5

SCENARIO 1: PROGRESS CHECK (FLIGHT)

Required Study

Phase 5 Scenario 1 Pre-Solo Progress Check

The pre-solo progress check is broken into two parts, an oral portion and a flight portion. During the oral portion you will be asked questions on various subjects including basic aerodynamics, aircraft systems, rules and regulations for the student pilot and airspace. You will be required to do a weight and balance calculation as well as take-off and landing distance calculations during the oral. Please be sure to bring with you all reference material that you may need. At a minimum bring the following:

- Pilot Operating Handbook
- Pilots Handbook of Aeronautical Knowledge
- Current FARs
- Current Jacksonville Sectional/electronic map
- Flight Training Professionals SOPs & Operations Manual

All of these references can be electronic if that is what you choose to use.

The flight portion will include the maneuvers you have learned as well as emergency procedures and instrument flight under a view-limiting device. Then you return to KORL for 3 landings. All Practice Area decisions and altitudes will be yours as you show us how you intend to act as Pilot in Command.

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PHASE 5; 5.1.1 Solo Flight

- Solo Flight

Flight

Single-pilot resource management (SRM)

Task management

Risk management

Situational awareness

Preflight inspection

Stage 1, Phase 5

SCENARIO 1: PROGRESS CHECK (FLIGHT)

Weight and balance
Performance charts
Checklist use
Passenger Briefing
Radio communications
Runway incursion avoidance
Crosswind taxi
Normal/crosswind takeoff and climb
Use of trim
Collision avoidance
Turn coordination
Maneuvering during slow flight
Power Off Stall - Landing Configuration with a turn
Power On Stall - Zero Flaps - Straight
Spin awareness and recovery procedures
Basic instrument maneuvers (IR)
GPS direct to/nearest airport functions (IR) (if installed)
180° turn (IR)
Emergency operations
Ground reference maneuver
Traffic patterns
Go-around/rejected landing
Normal/crosswind approach and landing
After landing, parking and securing

Stage 1, Phase 5

SCENARIO 2: YOUR FIRST SOLO FLIGHT

Objectives
To complete three consistently safe landings with your instructor and then complete three landings (to a full stop) as pilot in command during your first solo flight in the traffic pattern
Where to go:
The airport chosen by your instructor for your solo flight
How to get there:
Pilotage, GPS
Possible deviations:
None
Possible malfunctions:
None
Purpose/pressures (real or simulated):
You have family members in from out of town to watch your first solo flight. The wind is 12 knots at a 20° angle to the runway.
Risks (real or simulated):
Problems that can occur while flying slowly near the ground; appropriately correcting for the wind, traffic; runway incursions; communication in the airport traffic pattern; and the natural feelings that may arise during your first solo flight

Ground Training Checklist
Pre-solo briefing

Proficiency Checklist
Single-pilot resource management (SRM)
Preflight inspection
Appropriate logbook and certificate endorsements
Weight and balance
Performance charts
Checklist use

Stage 1, Phase 5

SCENARIO 2: YOUR FIRST SOLO FLIGHT

Radio communications
Crosswind taxi
Use of trim
Collision avoidance
Traffic patterns
Go-around/rejected landing (if necessary)
Solo takeoffs and landings (to a full stop)
After landing, parking and securing
Runway incursion avoidance
Normal approach and landing (to a full-stop)

Stage 1, Phase 5

SCENARIO 3: YOUR SECOND SOLO FLIGHT

Objectives

This second supervised solo flight will increase confidence and ability in the traffic pattern operation. The scenario begins with additional dual instruction including departure procedures to the local practice area and traffic pattern entry. Complete three solo landings to a full stop.

Where to go:

Practice area first, then the airport chosen by your instructor for your second solo flight in the traffic pattern

How to get there:

Pilotage, GPS

Possible deviations:

None

Possible malfunctions:

None

Purpose/pressures (real or simulated):

You are conducting your second solo flight. The wind is 12 knots at a 40° angle to the runway

Risks (real or simulated):

Problems that can occur while flying slowly near the ground; appropriately correcting for the wind, traffic; runway incursions; communication in the airport traffic pattern; and the natural feelings that may arise during your first solo flight

Required Study

- Review the associated airspace, terrain/obstacle, and landmarks with departing KORL (Executive Airport) to the practice area locations as well as returning to KORL (Executive Airport).

Ground Training Checklist

Pre-solo briefing

Stage 1, Phase 5

SCENARIO 3: YOUR SECOND SOLO FLIGHT

Proficiency Checklist

Single-pilot resource management (SRM)
Preflight inspection
Appropriate logbook and certificate endorsements
Weight and balance
Performance charts
Checklist use
Radio communications
Crosswind taxi
Use of trim
Collision avoidance
Traffic patterns
Go-around/rejected landing (if necessary)
Solo takeoffs and landings (to a full stop)
After landing, parking and securing
Runway incursion avoidance
Normal approach and landing (to a full-stop)

Stage 1, Phase 5

PHASE 5 PROFICIENCY STANDARDS

Preflight procedures

Operation of systems - Powerplant-Fuel-Ignition-Engine Oil - Can explain this airplane system as it relates to engine failure

Operation of systems - Electrical - Can explain this airplane system and how to respond to abnormal/emergency situations

Operation of systems - Brakes - Can explain this airplane system and can explain how to respond to abnormal or emergency situations.

Aerodynamics - Drag - Can explain different types of drag, how they are produced, and how they affect operations at various areas of the aircraft's performance envelope

Aerodynamics - Stalls - Can explain the terms and definitions of various components of an airfoil, how a stall occurs, common occurrences for stalls, and explains stall recovery procedures

Stall/spin awareness - Can explain how a spin occurs, where spins are more likely to occur, and knows spin recovery procedures

Standard Operating Procedures - Possesses the current standard operating procedures revision and can recite and “chair fly” standard operating procedures applicable to the Phase 5 progress check

Aircraft V-speeds - Knows and can explain the use and limitations of applicable V-speeds for the airplane

Obtaining weather - Obtains, reads, and explains applicable METAR(s) and TAF(s), can make inference about risks and decisions related to the weather observations and forecasts

Stage 1, Phase 5

PHASE 5 PROFICIENCY STANDARDS

Preflight procedures

Operation of systems - Powerplant-Fuel-Ignition-Engine Oil - E*xplain this airplane system as it relates to engine failure*

Operation of systems - Electrical - E*xplain this airplane system and how to respond to abnormal/emergency situations*

Operation of systems - Brakes - E*xplain this airplane system and can explain how to respond to abnormal or emergency situations.*

Aerodynamics - Drag - Explain different types of drag, how they are produced, and how they affect operations at various areas of the aircraft's performance envelope

Aerodynamics - Stalls - E*xplain the terms and definitions of various components of an airfoil, how a stall occurs, common occurrences for stalls, and explains stall recovery procedures*

Stall/spin awareness - E*xplain how a spin occurs, where spins are more likely to occur, and knows spin recovery procedures*

Standard Operating Procedures - *Possesses the current standard operating procedures revision and can recite and "chair fly" standard operating procedures applicable to the Phase 5 progress check*

Aircraft V-speeds - *Knows and can explain the use and limitations of applicable V-speeds for the airplane*

Obtaining weather - *Obtains, reads, and explains applicable METAR(s) and TAF(s), can make inference about risks and decisions related to the weather observations and forecasts*

Stage 1, Phase 5

PHASE 5 PROFICIENCY STANDARDS

Regulations applicable to student pilots (Part 61 & Part 91) - E*xplain limitations outlined in 14 CFR 61.89*

Appropriate logbook and certificate endorsements - P*rovide a basic description of what endorsements are needed prior to solo flight*

Certificates and documents - *Explains certificate and document requirements for the pilot and the airplane*

Airworthiness requirements - L*ist and explain all the required inspections for the airplane, can explain what needs to be done if they find a item on the airplane that is inoperative*

Safety Procedures and Practices - L*ocate and explain Flight Training Professional's weather minimums, can locate and explain the boundaries of practice areas*

Airspace - E*xplain the airspace around their primary training airport, can explain the airspace in the practice area*

Weight and balance - *Calculates weight and center of gravity for takeoff and landing*

Performance and limitations - C*omputes takeoff and landing performance and crosswind component*

Wind shear awareness and recovery procedures - *Explains what wind shear is, why it can be hazardous, where and what situations can produce wind shear, how to avoid wind shear, and how to recover from a wind shear encounter*

Wake turbulence avoidance - *Explains how an airplane produces wake turbulence and the procedures used to avoid it*

Stage 2

STAGE 2: SOLO AND CROSS-COUNTRY FLYING

STAGE 2

Stage 2 consists of four phases

- Getting Ready for Cross-Country Flying
- Flying Cross-Country
- Flying at Night
- Advancing Your Skills

Stage Objective:

- Learn the techniques to takeoff or land on a short or soft runway
- Enhance your ability to respond with proper decision making when managing inadvertent instrument meteorological conditions and control the attitude of the airplane by instrument reference only
- Learn how to plan, conduct and safely fly cross-country trips using pilotage, dead reckoning, GPS, and radio navigation
- Learn the differences, joys, and challenges of flying at night
- Take your first solo cross-country flight

Each phase contains multiple Flight Scenarios that can be repeated as needed or omitted if all items in the Phase Proficiency Checklist are completed to standard.

Stage 2, Phase 6

PHASE 6 - GETTING READY FOR CROSS-COUNTRY FLYING

PHASE 6

Phase Objective

- Learn short-field and soft-field takeoff and landing procedures
- Complete your first solo flight beyond the pattern
- Further your ability to recognize wind shear and wake turbulence hazards and how to avoid them
- Enhance your ability to respond with proper decision making when managing inadvertent instrument meteorological conditions, control the attitude of the airplane by instrument reference only, and to recover from unusual attitudes

Flight Scenarios

Using Short- or Soft-Field Techniques
Using Electronic Navigation / Instrument Flight
Solo Flight Beyond the Pattern
Solo Practice

Flight scenarios will be repeated as necessary to reach the desired proficiency

Stage 2, Phase 6

SCENARIO 1: USING SHORT- OR SOFT-FIELD TECHNIQUES

Objectives

Learn short-field and soft-field takeoff and climb and approach and landing techniques

Where to go:

1. Osborn (02FA)
2. Umatilla (X23)

How to get there:

Pilotage, use of navigation charts and familiar landmarks, GPS

Planned deviations:

None

Planned malfunctions:

None

Purpose/pressures (real or simulated):

Your friend is having a fly-in that will be attended by many well known aviators at their private field. This fly-in only happens once every few years and you really don't want to miss it. The field is a grass strip and is surrounded by trees.

Risks (real or simulated):

Problems that can occur while flying slowly near the ground; appropriately correcting for the wind, landing in a confined area

Completion Standard

- See each individual task's completion standards

Required Study

CESSNAFLIGHTTRAINING.COM

- PHASE 6; 6.1.1 Using Short or Soft Runways
  - Short-Field Takeoff and Landing
  - Soft-Field Takeoff and Landing
- FLIGHT PREVIEWS – Getting Ready For Cross-Country Flying
  - Soft-Field Takeoff and Climb
  - Soft-Field Approach and Landing

Stage 2, Phase 6

SCENARIO 1: USING SHORT- OR SOFT-FIELD TECHNIQUES

- Short Field Takeoff and Climb
- Short Field Approach and Landing

Cessna C172S NAV II AND NAV III Maneuver Standard Operating Procedures
Review and "chair fly" each procedure

- Page 5 – Review Short-Field Takeoff and Climb
- Pages 6 to 7 – Review Soft-Field Takeoff and Climb
- Page 42 to 43 – Review Short-Field Approach and Landing
- Page 44 to 45 – Review Soft-Field Approach and Landing

C172S NAVIII Skyhawk SP NAV III Avionics Option-GFC 700 AFCS Pilots Information Manual

- Page 4-18 – Review Short Field Takeoff
- Page 4-21 – Review Short Field Landing
- Page 4-32 – Review Wing Flap Settings
- Page 4-43 – Review Short Field Landing
- Page 5-15 – Review Speed at 50 Feet for the Short Field Takeoff
- Page 5-24 – Review Speed at 50 Feet for the Short Field Landing

Private Pilot - Airplane Airman Certification Standards

- Page 29 to 30 - Soft-Field Takeoff and Climb – Review: Knowledge and Skills Section
- Page 31 to 32 – Soft-Field Approach and Landing – Review: Knowledge and Skills Section
- Page 33 to 34 – Short-Field Takeoff and Maximum Performance Climb – Review: Knowledge and Skills Section
- Page 35 to 36 – Short-Field Approach and Landing – Review: Knowledge and Skills Section

Additional Reading:

Airplane Flying Handbook

- Pages 6-10 to 6-14, Pages 9-20 to 9-24

Stage 2, Phase 6

SCENARIO 1: USING SHORT- OR SOFT-FIELD TECHNIQUES

Pilot's Handbook of Aeronautical Knowledge

- Pages 17-1 to 17-22

Ground Training Checklist

Short-field takeoff and climb
Short-field approach and landing
Soft-field takeoff and climb
Soft-field approach and landing

Proficiency Checklist

Single-pilot resource management (SRM)
Short-field takeoff and climb
Soft-field takeoff and climb
Short-field approach and landing
Soft-field landing approach and landing
Risk management
Aeronautical decision making

Stage 2, Phase 6

SCENARIO 2: USING ELECTRONIC NAVIGATION / INSTRUMENT FLIGHT

Objectives

Advance your skills using electronic navigation and flying by instrument reference only, and practice lost procedures

Where to go:

Melbourne VOR, KTIX

How to get there:

Pilotage, use of navigation charts and familiar landmarks, VOR, GPS

Planned deviations:

Lowering visibility along the route decreasing to 5 miles

Planned malfunctions:

None

Purpose/pressures (real or simulated):

You are on your first solo cross-country flight after having to cancel the last two weeks due to multiple weather problems. You are already more than halfway to your destination and more than 1.5 hours into the flight.

Risks (real or simulated):

Problems that can occur when encountering marginal weather, pilot disorientation, pressures to continue a flight in marginal weather

Completion Standard

Refer to each each tasks completion standards

Required Study

CESSNAFLIGHTTRAINING.COM

- FLIGHT PREVIEWS – Getting Ready for Cross-Country Flying
  - Radio Navigation Systems: VOR and ADF
  - Country Flying – Lost Procedures

Cessna C172S NAV II AND NAV III Maneuver Standard Operating Procedures
Review and “chair fly” each procedure

- Page 57 – Lost Procedures

Stage 2, Phase 6

SCENARIO 2: USING ELECTRONIC NAVIGATION / INSTRUMENT FLIGHT

- Page 67 – VOR Orientation Procedures
- Page 68 – VOR Direct NAV Procedures
- Pages 69 to 70 – VOR Intercepting Procedures

Private Pilot - Airplane Airman Certification Standards

- Page 51 - Navigation Systems and Radar Services – Review: Knowledge and Skills Sections
- Page 53 – Lost Procedures – Review: Knowledge and Skills Sections

Ground Training Checklist

Maneuvering during slow flight (IR)
Stall with a bank (not to exceed 20° of bank)
Lost procedures
Single-pilot resource management (SRM)
Navigation systems/facilities, and radar services (IR)

Proficiency Checklist

Situational awareness
Controlled flight into terrain awareness
Maneuvering during slow flight (IR)
Stall with a bank (not to exceed 20°)
Roll control during high angles of attack
Spin awareness and recovery procedures
Recovery from unusual attitudes (VR-IR)
Basic instrument maneuvers (IR)
Navigation systems/facilities, and radar services (IR)
GPS direct-to/nearest airport function (IR)
Lost procedures

Stage 2, Phase 6

SCENARIO 3: SOLO FLIGHT BEYOND THE PATTERN

Objectives

Complete your first solo flight outside the local traffic pattern while gaining proficiency and confidence in solo operations

Where to go:

One of Flight Training Professionals Practice Areas:

1. Northwest practice area
2. East practice area
3. West practice area

How to get there:

Pilotage, use of charts and familiar landmarks, GPS

Planned deviations:

None

Planned malfunctions:

None

Purpose/pressures (real or simulated):

You will be flying to the practice area and performing maneuvers for the first time solo.

Risks (real or simulated):

Appropriately correcting for the wind, entering and exiting the airport traffic pattern during solo flight, spotting traffic and hazards while performing maneuvers solo, distractions while flying solo, and the excitement and natural feelings that come with operating solo for the first time beyond the traffic pattern

Required Study

CESSNAFLIGHTTRAINING.COM

PHASE 6; 6.2.1 Printed Reports and Forecasts

- Aviation Routine Weather Reports (METARs)
- Terminal Aerodrome Forecasts (TAFs)
- Area Forecasts (FA)
- Winds and Temperatures Aloft Forecasts
- Radar Weather Reports
- In-flight Aviation Weather Advisories

Stage 2, Phase 6

SCENARIO 3: SOLO FLIGHT BEYOND THE PATTERN

- PHASE 6; 6.2.2 Graphic Weather Products
  - Surface Analysis Chart
  - Weather Depiction Chart
  - Low-Level Significant Weather Prog Chart
  - Weather Radar Information
  - Convective Outlook Chart
- PHASE 6; 6.2.3 More Sources of Weather
  - Information
  - Supplemental and In-Flight Weather Services
  - Cockpit Weather Displays

Cessna C172S NAV II AND NAV III Maneuver Standard Operating Procedures
Review and "chair fly" each procedure

- Pages 9 to 10 – Clearing Turns
- Page 11 – Position Report
- Page 12 – Review Slow Flight – Clean Configuration
- Page 13 – Review Slow Flight – Landing Configuration
- Pages 27 to 29 – Review Steep Turns
- Page 35 – Review Turns Around a Point
- Page 36– Review S-Turns
- Page 11 to 12 – Review Rectangular Pattern

Private Pilot - Airplane Airman Certification Standards

- Page 54 - Maneuvering During Slow Flight – Review: Risk Management Section

Additional Reading:
Aeronautical Information Manual

- AIM 7-1-5 to 7-1-31

Stage 2, Phase 6

SCENARIO 3: SOLO FLIGHT BEYOND THE PATTERN

Pilot's Handbook of Aeronautical Knowledge

- Chapter 12 and 13

Proficiency Checklist

Single-pilot resource management (SRM)
Appropriate logbook and certificate endorsements
Steep turns
Turns around a point
S-turns

Stage 2, Phase 6

SCENARIO 4: SOLO PRACTICE

Objectives

Improve your confidence and skills for solo flight by performing ground reference maneuvers and steep turns in the local area.

Where to go:

One of Flight Training Professionals Practice Areas:

1. Northwest practice area
2. East practice area
3. West practice area

How to get there:

Pilotage, GPS

Planned deviations:

None

Planned malfunctions:

None

Purpose/pressures (real or simulated):

You will be practicing your assigned maneuvers with the purpose of improving your proficiency closer towards the standards established in the Airman Certification Standards. You will want to be careful to continue to practice proper collision avoidance procedures while much of your focus is dedicated on the maneuver.

Risks (real or simulated):

Spotting traffic while performing solo maneuvers, communication in the airport traffic pattern, collision hazards while operating at low altitudes

Completion Standard

- See each individual task's completion standards
- Complete the Phase 6 Proficiency Quiz
- Correct any deficiencies on the quiz with your instructor

Stage 2, Phase 6

SCENARIO 4: SOLO PRACTICE

Proficiency Checklist

Single-pilot resource management (SRM)
Appropriate logbook and certificate endorsements
Steep turns
Rectangular course
Turns around a point
S-turns

Stage 2, Phase 6

PHASE 6 PROFICIENCY QUIZ

1. You are planning to go to the practice area to review ground reference maneuvers. What weather product could you use to get a forecast on what direction and speed the winds are at 1000 feet AGL?

_____

2. What uses does a surface analysis chart have?

_____

_____

_____

_____

3. According to Flight Training Professionals standard operating procedures what is done to maintain the nose wheel clear of the runway while not over rotating to an excessively high pitch attitude during a soft-field approach and landing?

_____

_____

_____

_____

4. According to Flight Training Professional's standard operating procedures what is done after touch down during a short field approach to landing?

_____

_____

_____

_____

5. According to Flight Training Professional's standard operating procedures what is done to delay the transfer of weight from the wings to the wheels as long as possible for a soft field approach to landing?

_____

_____

_____

_____

Stage 2, Phase 6

PHASE 6 PROFICIENCY QUIZ

6. If you are concerned you are lost during a flight, what procedures should be used?

_____

_____

_____

_____

7. Explain the steps on how to tune the Lakeland VOR and identify your location in relation to the VOR?

_____

_____

_____

_____

8. Explain how to locate the appropriate ATC frequency to request information/assistance while flying near KINF?

_____

_____

_____

_____

Stage 2, Phase 6

PHASE 6 PROFICIENCY STANDARDS

SRM

Single-pilot resource management - *Utilizes all resources available to ensure the successful completion of the flight*

Situational awareness - *Maintains an accurate perception and understanding of surrounding factors and flight conditions*

Controlled flight into terrain awareness - *Demonstrates awareness of relation to obstacles and terrain through all phases of flight*

Preflight procedures

Appropriate logbook and certificate endorsements - *Receives appropriate logbook and certificate endorsements as required*

In-flight

Short-field takeoff and climb - *Follows Flight Training Professional's standard operating procedures, pitch attitude: VX (+10/-5 knots) then VY (+10/-5 knots)*

Soft-field takeoff and climb - *Follows Flight Training Professional's standard operating procedures, maintains takeoff power, VX or VY as appropriate (+10/-5 knots)*

Maneuvering during slow flight (VR-IR) - *Maintains altitude (+/- 150 feet), heading (+/- 15°), airspeed (+10/-0 knots), bank (+/- 10°)*

Stall with a bank (not to exceed 20°) - *Follows Flight Training Professional's standard operating procedures,, recognizes and recovers promptly by simultaneously reducing angle of attack and increasing power as appropriate*

Spin awareness and recovery procedures - *Knows procedures for avoidance and recovery from unintentional spins*

Stage 2, Phase 6

PHASE 6 PROFICIENCY STANDARDS

Lost procedures - *Follows Flight Training Professional's standard operating procedures, can safely and accurately determine position using all available resources without furthering the intensity of the problem or violating airspace*

Steep turns - *Follows Flight Training Professional's standard operating procedures, maintains altitude (+/- 150 feet), heading (+/- 15°), airspeed (+/- 10 knots), bank (+/- 5°)*

Rectangular course - *Follows Flight Training Professional's standard operating procedures, maintains altitude (+/- 150 feet), airspeed (+/- 10 knots)*

Turns around a point - *Follows Flight Training Professional's standard operating procedures, maintains altitude (+/- 150 feet), airspeed (+/- 10 knots)*

S-turns - *Follows Flight Training Professional's standard operating procedures, maintains altitude (+/- 150 feet), airspeed (+/- 10 knots)*

Short-field approach and landing - Follows Flight Training Professional's standard operating procedures, stabilized approach (+10/-5 knots), touches down within 400 feet, uses maximum aerodynamic breaking

Soft-field approach and landing - *Follows Flight Training Professional's standard operating procedures, maintains approach speed of 1.3 Vso (+/- 10 knots), touches down and keeps the weight off of the nosewheel*

Stage 2, Phase 7

PHASE 7 - FLYING CROSS-COUNTRY

PHASE 7

Phase Objective:

- Safely plan and conduct cross-country flights
- Demonstrate the ability to locate needed radio frequencies as well as in-flight weather resources and radar resources for your route
- Demonstrate the ability to perform a safe cross-country flight without instructor assistance
- Demonstrate the decision making involved and ability to divert from the original flight plan to an alternate airport
- Fly your first solo cross-country flight
- Complete the Cessna Flight Training System Knowledge Test

Flight Scenarios

Going Cross-Country
Polishing Your Cross-Country Skills
Flying Cross-Country at Night
Phase 7 *Progress Stage 2 Check*
Your First Solo Cross-Country

Flight scenarios will be repeated as necessary to reach the desired proficiency

Stage 2, Phase 7

SCENARIO 1: GOING CROSS-COUNTRY

Objectives

Learn cross-country techniques while experiencing a flight to an unfamiliar destination outside of your local area

Where to go:

1. KOCF, Ocala International - Jim Taylor Field
2. X59, Valkaria

How to get there:

Pilotage, dead reckoning, GPS or VOR navigation

Planned deviations:

None

Planned malfunctions:

None

Purpose/pressures (real or simulated):

You have had to cancel your solo "long" cross-country four times now due to weather and scheduling issues. Your solo endorsement expires in a few days and your primary instructor is out of town on holiday for the next 2 weeks. If you don't make the cross country today, you will have to wait at least until your instructor returns.

Risks (real or simulated):

Being able to locate an unfamiliar airport. Problems that can occur while flying out of your local environment to unfamiliar airports in unfamiliar terrain; changing weather across your route, military operations areas (MOA), restricted areas, temporary flight restrictions (TFRs), notices to airmen (NOTAMs)

Completion Standard

Refer to each task's completion standards

Required Study

CESSNAFLIGHTTRAINING.COM

- PHASE 7; 7.1.1 Sources of Flight Information
    - Chart Supplement
    - Sectional and/or Terminal Area Chart

Stage 2, Phase 6

SCENARIO 1: GOING CROSS-COUNTRY

    - Flight Service Station
    - Notices to Airmen (NOTAMS)
- PHASE 7; 7.1.2 Planning and Organizing Your Cross-Country Flight
    - Selecting Your Route
    - Organizing Your Cross-Country Information
    - Survival Gear
- PHASE 7; 7.1.3 Cockpit Resource Management
    - Using Cockpit Resources
    - Using Other Resources
- PHASE 7; 7.1.1 Flight Computer
    - Mechanical Flight Computer
    - Electronic Flight Computer
    - Time-Speed-Distance Problems
    - Fuel Problems
    - Wind Problems
    - Navigation Plotter
    - E6B Functions on GPS/Multifunction Displays
- PHASE 7; 7.1.2 Navigating Using Checkpoints on the Ground
    - Pilotage
    - Dead Reckoning
    - Basic Compass Navigation
- PHASE 7; 7.1.3 Keeping Track of Your Location
    - Navigation Log
    - FAA Flight Plan
    - VFR Flight Following
- PHASE 8; 8.2.1 VHF Omni-directional Range (VOR)
    - Understanding the VOR
    - Using VOR Radials
    - Testing VOR Accuracy

Stage 2, Phase 7

SCENARIO 1: GOING CROSS-COUNTRY

- FLIGHT PREVIEWS – Flying Cross-Country – Cross Country Navigation

C172S NAVIII Skyhawk SP NAV III Avionics Option-GFC 700 AFCS Pilots Information Manual
- Page 5-6 to 5-8 – Review cruise performance and fuel requirements examples
- Page 5-19 to 5-23 – Review Climb, Cruise, Endurance, and Range Tables

Flight Training Professional's Cross Country Flight Planning Guide
- Review

Private Pilot - Airplane Airman Certification Standards
- Page 11 – Performance and Limitations – Review: All sections
- Page 50 – Pilotage and Dead Reckoning – Review: All sections
- Page 51 – Navigation Systems and Radar Services – Review: All sections

Additional Reading:
Aeronautical Information Manual
- AIM 5-1-4, 7-1-5, 7-1-6, 7-1-12 to 7-1-31

Pilot's Handbook of Aeronautical Knowledge
- Pages 14-24 to 14-26, Chapter 16

Ground Training Checklist
Route planning
Flight publications and currency (A/FD, sectional and terminal area charts, NOTAMs)
Obtaining weather information
Cross-country flight planning and performance
Weight and balance
Emergency equipment and survival gear
Navigation log
Flight deck management

Stage 2, Phase 7

SCENARIO 1: GOING CROSS-COUNTRY

Power settings and mixture control
ICAO flight plan
Opening ICAO flight plans
In-flight advisories
Airspace
Pilotage and dead reckoning
Locating ATC frequencies
Radio frequencies and procedures
Navigation systems
Using the federal airway system (as applicable)
In-flight weather resources (Flight Service, ATIS, AWOS/ASOS, Unicom)
Traffic patterns
Airport operations
Runway incursion avoidance
Alternate plans of action
Closing flight plans\

Proficiency Checklist
Single-pilot resource management (SRM)
Task management
Situational awareness
Automation management
Aeronautical decision making
Controlled flight into terrain awareness
Route selection
Flight publications and currency (A/FD, sectional and terminal area charts, NOTAMs)
Obtaining a weather briefing
Cross-country flight planning and performance
Emergency equipment and survival gear

Stage 2, Phase 7

SCENARIO 1: GOING CROSS-COUNTRY

Weight and balance
Runway incursion avoidance
Cross-country navigation log
Flight deck management
Power settings and mixture control
Opening ICAO flight plans
VFR flight following
Pilotage
Dead reckoning
Navigation systems
Using the federal airway system (as applicable)
In-flight weather resources (Flight Service, ATIS, AWOS/ASOS, Unicom)
Closing flight plans

Stage 2, Phase 7

SCENARIO 2: POLISHING YOUR CROSS-COUNTRY SKILLS

Objectives

Demonstrate the ability to handle unexpected situations that may arise during a cross-country flight.

Where to go:

1. KORL - KOBE - KLAL - KORL
2. KORL - KBKV - KGNV - KORL

How to get there:

Pilotage, dead reckoning, GPS or VOR navigation

Planned deviations:

Diversion to an alternate airport (to completion)

Planned malfunctions:

Engine failure, alternator failure, radio failure, carburetor icing, flight display/instrument failure, pilot disorientation

Purpose/pressures (real or simulated):

You are preparing for the Private Pilot practical test. You have three weeks until you leave town for almost a month. You really need to get this done, but you still need to finish your solo cross-country time and you cant find convenient time to study.

Risks (real or simulated):

Problems that can occur while flying out of your local environment to unfamiliar airports in unfamiliar terrain; changing weather across your route, military operations areas (MOA), restricted areas, temporary flight restrictions (TFRs), notices to airmen (NOTAMs)

Completion Standard

- See each individual task's completion standards

Required Study

CESSNAFLIGHTTRAINING.COM

- FLIGHT PREVIEWS – Flying Cross-Country – Navigation Systems
  - G1000: Cross-Country Navigation
  - G1000: Fuel Management
  - Diversion

Stage 2, Phase 7

SCENARIO 2: POLISHING YOUR CROSS-COUNTRY SKILLS

Cessna C172S NAV III Flows and Amplified Checklist Procedures
Review and "chair fly" each procedure

- Pages 55 to 56 – Diversion
- Pages 57 – Lost Procedures

Private Pilot - Airplane Airman Certification Standards

- Page 52 – Diversion – Review: All sections
- Page 53 – Lost Procedures – Review: All sections

Additional Reading:
Pilot's Handbook of Aeronautical Knowledge

- Chapter 16, **emphasize 16-34**

Ground Training Checklist
Diversion to an alternate
Lost procedures
Alternate plans of action
Required logbook and certificate endorsements
Preflight preparation
Obtaining weather information
Route planning
Airplane performance and limitations
Navigation log
ICAO flight plan
Radio frequencies and procedures
Airspace
Airport operations
In-flight advisories
Basic VFR weather minimums
Emergency operations

Stage 2, Phase 7

SCENARIO 2: POLISHING YOUR CROSS-COUNTRY SKILLS

Locating ATC frequencies
Traffic patterns
Runway incursion avoidance

Proficiency Checklist

Risk management
Controlled flight into terrain awareness
Automation management
Route selection
Flight publications and currency (A/FD, sectional and terminal area charts, NOTAMs)
Obtaining a weather briefing
Cross-country flight planning and performance
Emergency equipment and survival gear
Weight and balance
Cross-country navigation log
Flight deck management
Power settings and mixture control
Opening ICAO flight plans
VFR flight following
Pilotage
Dead reckoning
Navigation systems
Using the federal airway system (as applicable)
Diversion to an alternate (done to a completion at least once this phase)
Lost procedures
Emergency operations
System and equipment malfunctions
Emergency communications and ATC resources
In-flight weather resources (Flight Service, ATIS, AWOS/ASOS, Unicom)
Closing flight plans

Stage 2, Phase 7

SCENARIO 3: FLYING CROSS-COUNTRY AT NIGHT

Objectives

Learn the skills necessary to fly cross-country at night. Introduction to night operations.

Where to go:

1. KORL - KFIN
2. KORL - KVDF

How to get there:

Pilotage, dead reckoning, GPS or VOR navigation

Planned deviations:

None

Planned malfunctions:

Pilot disorientation

Purpose/pressures (real or simulated):

You want to take your friends out for an evening flight to have dinner at a restaurant at the beach. The forecast includes a call for scattered clouds at 1600 feet AGL and a broken layer at 3,400 feet AGL. There is barely any moonlight.

Risks (real or simulated):

Problems that can occur while flying cross country at night such as night illusions, pilot disorientation and accidental flight into a cloud on a moonless night

Completion Standard

- See each individual task's completion standards
- Complete the Phase 7 Proficiency Quiz
- Correct any deficiencies on the quiz with your instructor

Required Study

CESSNAFLIGHTTRAINING.COM

- PHASE 8; 8.1.1 Vision in Flight
  - Night Vision
  - Visual Illusions
  - Spatial Disorientation

Stage 2, Phase 7

SCENARIO 3: FLYING CROSS-COUNTRY AT NIGHT

- PHASE 8; 8.1.2 Night Operations
  - Sunset, Civil Twilight and Night
  - Preparation for Night Flying
  - Airplane and Airport Lighting
- PHASE 8; 8.1.3 Flying Cross-Country at Night
  - Preparation and Equipment
  - Route and Altitude Selection
  - Using the G1000 at Night
- FLIGHT PREVIEWS – Flying at Night
  - Flying at Night (Preflight)
  - Flying at Night (Inflight)
  - G1000: Use at Night

C172S NAVIII Skyhawk SP NAV III Avionics Option-GFC 700 AFCS Pilots Information Manual
- Page 2-12 to 2-17 – Review the Kinds of Operations Limitations for Night VFR
- Page 4-4 – Review the note at the bottom of the page on night flights
- Page 4-30 – Review alternator check recommendations on night flights

Private Pilot - Airplane Airman Certification Standards
- Page 5 – Airworthiness Requirements – Review: Knowledge Section Part 4
- Page 10 – National Airspace System – Review: Risk Management Section Part 2
- Page 19 – Taxiing – Review: Knowledge Section Part 10
- Page 75 – Night Preparation – Review: Knowledge Section

Additional Reading:
Airplane Flying Handbook
- Chapter 11

Stage 2, Phase 7

SCENARIO 3: FLYING CROSS-COUNTRY AT NIGHT

Aeronautical Information Manual

- AIM 8-1-5, 8-1-6

Pilot's Handbook of Aeronautical Knowledge

- Pages 17-22 to 17-27

Ground Training Checklist

Night preparation and planning
Required aircraft equipment
Night illusions
Route selection at night
Airport navigation and lighting

Proficiency Checklist

Night preparation and planning
Night preflight procedures and pilot equipment
Airport navigation and lighting
Required aircraft equipment
Single-pilot resource management
Controlled flight into terrain awareness
Route selection Flight publications and currency
Obtaining a weather briefing
Cross-country flight planning and performance
Cross-country navigation log
Flight deck management
Power settings and mixture control
Opening ICAO flight plans
VFR flight following
In-flight weather resources
Pilotage and dead reckoning

Stage 2, Phase 7

SCENARIO 3: FLYING CROSS-COUNTRY AT NIGHT

Navigation systems
Lost procedures
Emergency equipment and survival gear
Emergency communications and ATC resources
Recovery from unusual attitudes
Night takeoffs and full-stop landings
Closing flight plans

Stage 2, Phase 7

PRE-SOLO CROSS COUNTRY BRIEFING (GROUND)

Objectives

To ensure sufficient knowledge for the Phase 7 progress check. - This briefing is a final review of what you need to know for your cross country operations. This is the time to discuss any questions you have with your instructor

Completion Standard

- See each individual task's completion standards

Pre Solo Cross-Country Briefing

Appropriate logbook and certificate endorsements
Preflight preparation
Obtaining a weather briefing
Obtaining weather information
Route planning
Airplane performance and limitations
Cross-country navigation log
ICAO flight plan
Radio frequencies and procedures
National airspace system
Airport operations
Alternate plans of action
In-flight weather resources
Basic VFR weather minimums
Emergency operations
Locating ATC frequencies
Diversion to an alternate
Lost procedures
Traffic pattern entry and departure procedures
Traffic patterns
Runway incursion avoidance
Closing flight plans

Stage 2, Phase 7

SCENARIO 4: PROGRESS CHECK (GROUND)

Objectives

To demonstrate that you can safely act as pilot in command on a solo cross-country flight

Where to go:

You will plan a one-way cross country to KVDF

How to get there:

Pilotage and dead reckoning

Note: Do not plan to use GPS or Radar Advisories

Planned deviations:

Diversion to an alternate (partial or to full completion)

Planned malfunctions:

Engine failure, alternator failure, radio failure, carburetor icing, flight display/instrument failure, pilot disorientation

Purposes/pressures (real or simulated):

Any problems/scenarios that the check pilot presents you with; the perceived pressure and natural feelings that may arise with being evaluated

Risks (real or simulated):

Problems that can occur while flying out of your local environment to unfamiliar airports in unfamiliar terrain; system and equipment malfunctions

Completion Standard

See the completion standards listed in the Progress Check Lesson Sheets:

Oral

Required Study

You need to have the plan complete and ready to fly at the time that the oral is scheduled to begin. Use the starting time of the oral for the departure time.

The weather brief must be for the day of the oral. Whether you are using Fore Flight or Lockheed/Martin (1800WxBrief.com), you must have the weather briefing that you used to create the plan with you in either printed or electronic format. The weather information needs to be in the raw/coded format. No plain language weather reports. You will be tested on your ability to decode the reports.

Stage 2, Phase 7

SCENARIO 4: PROGRESS CHECK (GROUND)

For the weight and balance, use your assigned instructor's weight.
Refer to the online lesson plan for most recent check instructor weights.

The W&B calculations need to be done manually on the backside of the Nav-Log, as well as sent to dispatch@ftpros.com with your TOLD/Pre-flight Risk Assessment. Your ICAO flight plan on the navigation log must also be complete, and ensure you have all the required information filled out on the navigation log.

Be sure to bring with you the following resources:

- Pilot Operating Handbook (Paper or Electronic)
- Current Copy of the FAR and AIM (Paper or Electronic)
- Current Airport Facility Directory (Paper or Electronic)
- Current Jacksonville Sectional (Paper or Electronic)
- Pilots Handbook of Aeronautical Knowledge (Paper or Electronic)
- Airplane Flying Handbook (Paper or Electronic)
- Plotter
- E6B Flight Computer (Electronic or App)

Oral

Preflight preparation
Review assigned cross-country flight planning
Route planning
Obtaining weather information
Weather Theory
Flight publications and currency
Navigation log
Cross-country flight planning and performance
Airplane performance and limitations
Weight and balance
ICAO flight plan

Stage 2, Phase 7

SCENARIO 4: PROGRESS CHECK (GROUND)

Airspace
Radio frequencies and procedures
Locating ATC frequencies
VFR weather minimums
Traffic patterns
Airport operations
Runway incursion avoidance
Lost procedures
Required logbook and certificate endorsements
In-flight advisories
Alternate plans of action
System and equipment malfunctions
Emergency operations
Emergency equipment and survival gear

Stage 2, Phase 7

SCENARIO 4: PROGRESS CHECK (FLIGHT)

Objectives

To demonstrate that you can safely act as pilot in command on a solo cross-country flight

Where to go:

You will plan a one-way cross country to KVDF

How to get there:

Pilotage and dead reckoning

Note: Do not plan to use GPS or Radar Advisories

Planned deviations:

Diversion to an alternate (partial or to full completion)

Planned malfunctions:

Engine failure, alternator failure, radio failure, carburetor icing, flight display/instrument failure, pilot disorientation

Purposes/pressures (real or simulated):

Any problems/scenarios that the check pilot presents you with; the perceived pressure and natural feelings that may arise with being evaluated

Risks (real or simulated):

Problems that can occur while flying out of your local environment to unfamiliar airports in unfamiliar terrain; system and equipment malfunctions

Completion Standard

See the completion standards listed in the Progress Check Lesson Sheets:
Flight

Required Study

You need to have the plan complete and ready to fly at the time that the oral is scheduled to begin. Use the starting time of the oral for the departure time.

The weather brief must be for the day of the oral. Whether you are using Fore Flight or Lockheed/Martin (1800WxBrief.com), you must have the weather briefing that you used to create the plan with you in either printed or electronic format. The weather information needs to be in the raw/coded format. No plain language weather reports. You will be tested on your ability to decode the reports.

Stage 2, Phase 7

SCENARIO 4 : PROGRESS CHECK (FLIGHT)

For the weight and balance, use your assigned instructor's weight.
R*efer to the online lesson plan for most recent check instructor weights.*

The W&B calculations need to be done manually on the backside of the Nav-Log, as well as sent to dispatch@ftpros.com with your TOLD/Pre-flight Risk Assessment. Your ICAO flight plan on the navigation log must also be complete, and ensure you have all the required information filled out on the navigation log.

Be sure to bring with you the following resources:

- Pilot Operating Handbook (Paper or Electronic)
- Current Copy of the FAR and AIM (Paper or Electronic)
- Current Airport Facility Directory (Paper or Electronic)
- Current Jacksonville Sectional (Paper or Electronic)
- Pilots Handbook of Aeronautical Knowledge (Paper or Electronic)
- Airplane Flying Handbook (Paper or Electronic)
- Plotter
- E6B Flight Computer (Electronic or App)

Flight
Single-pilot resource management (SRM)
Task management
Risk management
Situational awareness
Aeronautical decision making
Route selection
Flight publications and currency (A/FD, sectional and terminal area charts, NOTAMs)
Obtaining a weather briefing
Cross-country flight planning and performance
Emergency equipment and survival gear

Stage 2, Phase 7

SCENARIO 4: PROGRESS CHECK (FLIGHT)

Weight and balance
Runway incursion avoidance
Normal and crosswind takeoff and climb
Cross-country navigation log
Flight deck management
Power settings and mixture control
Opening ICAO flight plans
VFR flight following
Pilotage
Dead reckoning
Navigation systems and radar services
Using the federal airway system (as applicable)
Diversion to an alternate
Lost procedures
Emergency Operations
System and equipment malfunctions
Emergency communications and ATC resources
In-flight weather resources
Normal/crosswind approach and landing
Closing flight plans

Stage 2, Phase 7

SCENARIO 5: YOUR FIRST SOLO CROSS-COUNTRY

Objectives

Fly your first solo day VFR cross-country flight

Where to go:

1. KORL - KOCF
2. KORL - X59

How to get there:

Pilotage, dead reckoning, GPS or VOR navigation

- Program flight plan into the G1000 FMS
- Load flight plan on iPad
- File/Open/Close ICAO flight plan on Foreflight
- Utilize flight following

Planned deviations:

None

Planned malfunctions:

None

Purpose/pressures (real or simulated):

Complete the necessary pre-flight planning for your assigned route, navigate safely and efficiently to your destination and return to your home airport as close as possible to your ETA.

Risks (real or simulated):

Problems that can occur while flying out of your local environment to unfamiliar airports in unfamiliar terrain; changing weather across your route, military operations areas (MOA), restricted areas, temporary flight restrictions (TFRs), notice to airmen (NOTAMs)

Required Study

- Ensure all 10 Phases of CESSNAFLIGHTTRAINING.COM have been initially covered

Ground Training Checklist

Required logbook and certificate endorsements

Stage 2, Phase 7

SCENARIO 5: YOUR FIRST SOLO CROSS-COUNTRY

Route planning
Preflight preparation
Obtaining weather information
Airplane performance and limitations
Navigation log
ICAO flight plan
Radio frequencies and procedures
Airspace
Airport operations
Alternate plans of action
In-flight advisories
Basic VFR weather minimums
Emergency operations
Locating ATC frequencies
Lost procedures
Traffic patterns
Runway incursion avoidance

Proficiency Checklist

Single-pilot resource management (SRM)
Appropriate logbook and certificate endorsements
Route selection
Obtaining a weather briefing
Cross-country flight planning and performance
Weight and balance
Cross-country navigation log
Flight deck management
Power settings and mixture control
Opening ICAO flight plans

Stage 2, Phase 7

SCENARIO 5: YOUR FIRST SOLO CROSS-COUNTRY

VFR flight following
Pilotage
Dead reckoning
Navigation systems
Using the federal airway system (as applicable)
In-flight weather resources
Closing flight plans

Stage 2, Phase 7

PHASE 7 PROFICIENCY QUIZ

1. During preparation for a solo, cross-country flight, what endorsement(s) must you have?

_____

_____

2. Why are only some sources of weather acceptable for a standard weather briefing?

_____

_____

_____

3. What considerations are there when choosing a route of flight? What about cruising altitude?

_____

_____

_____

_____

4. When flying in a C172S with a G1000 avionics suite, under normal operations when navigating by pilotage and dead reckoning, should the magnetic heading or compass heading be used? Why?

_____

_____

_____

_____

5. Explain how to determine which cruise performance column based off temperature is used? What will this change if this is not chosen correctly?

_____

_____

_____

_____

Stage 2, Phase 7

PHASE 7 PROFICIENCY QUIZ

6. You are flying with a friend on a route with unfamiliar airports, airspace, and facilities. Your friend elects to attempt to obtain VFR radar advisories and neglect to file a VFR flight plan. What issues could arise with this situation in relationship to emergency situations?

_____

_____

_____

_____

7. Explain differences between military operations areas and restricted airspace. What kind of operations are possibly occurring in each?

_____

_____

_____

_____

8. The weather on a planned flight is unlimited visibility and clear skies for the entire flight. Are you legally required to plan an alternative? Why or why not?

_____

_____

_____

_____

9. What Flight Training Professional's checklist should be used to ensure no item is missed during a cross-country?

_____

_____

10. According to the diversion checklist, how is the new heading and groundspeed computed during a diversion?

_____

_____

Stage 2, Phase 7

PHASE 7 PROFICIENCY STANDARDS

SRM

Single-pilot resource management - *Utilizes all resources available to ensure the successful completion of the flight*

Preflight procedures

Route selection - *Selects safe routing considering airspace, obstructions, and hazardous weather*

Flight publications and currency - *Utilizes current flight publications such as Sectional and/or TAC charts, Chart Supplement, NOTAMS and other time-sensitive navigation tools*

Obtaining a weather briefing - *Obtains an appropriate weather briefing from an FAA approved source*

Cross-country flight planning and performance - *Utilizes performance charts and completes planning for route*

Emergency equipment and survival gear - *Identifies appropriate emergency equipment that should be on board*

Weight and balance - *Performs correct weight and balance calculations*

In-flight

Cross-country navigation log - *Completes and utilizes a navigation log*

Flight deck management - *flight deck is organized and resources are accessible to pilot*

Power settings and mixture control - *Sets appropriate power settings and utilizes correct procedures for leaning mixture*

Opening flight plans - *Familiar with the different options to activate a flight plan, opens ICAO flight plan*

Stage 2, Phase 7

PHASE 7 PROFICIENCY STANDARDS

VFR flight following - *Utilizes VFR radar services as available*

Pilotage - *Locates landmarks as appropriate while maintaining altitude (+/- 200 feet), headings (+/- 15°)*

Dead reckoning - *Determines position with selected checkpoints within 3 minutes of planning while maintaining altitude (+/- 200 feet), headings (+/- 15°) including magnetic compass use*

Navigation systems and radar services - *Determines orientation with use of a VOR radio aid, properly track the desired radial as appropriate, maintains altitude (+/- 200 feet), headings (+/- 15°)*

Using the federal airway system - Properly utilize the federal airway system as applicable

Diversion to an alternate - Follow's Flight Training Professional's standard operating procedures, maintains altitude (+/- 200 feet), headings (+/- 20°)

Lost procedures - Follow's Flight Training Professional's standard operating procedures, confirms position

Emergency operations - Follows manufacturer-recommended procedures, promptly uses checklist to confirm any memory items

System and equipment malfunctions - Recognizes and responds to the malfunction using sound decision-making skills and follows recommended procedures

Emergency communications and ATC resources - Demonstrates the ability to contact ATC resources for in-flight emergency assistance and radar services

Stage 2, Phase 7

PHASE 7 PROFICIENCY STANDARDS

In-flight weather resources - *Utilizes weather resources in-flight for the most current weather information*

Postflight procedures

Closing flight plans - Can utilize available resources to closes ICAO flight plan

Stage 2, Phase 8

PHASE 8 - FLYING AT NIGHT

PHASE 8

Phase Objective:

- Learn the additional planning necessary to fly at night
- Increase your night flying proficiency
- Complete the FAA night flying requirements

Each phase contains multiple Flight Scenarios that can be repeated as needed or omitted if all items in the Phase Proficiency Checklist are completed to standard.

Flight Scenarios

Flying at Night

Flight scenarios will be repeated as necessary to reach the desired proficiency

Stage 2, Phase 8

SCENARIO 1: FLYING AT NIGHT

Objectives

Learn more about the fundamentals of night operations

Where to go:

A prominent night-lit landmark:

1. Universal Studios

How to get there:

Pilotage, GPS

Planned deviations:

None

Planned malfunctions:

Landing light failure, alternator failure

Purpose/pressures (real or simulated):

- To continue the experience of flying and landing at night
- To continue to practice situational awareness and orientation during traffic pattern entry procedures at night

Risks (real or simulated):

Problems that can occur while flying at night such as visual illusions and pilot disorientation, unfamiliarity with night operations and visual cues

Completion Standard

- See each individual task's completion standards
- Complete the Phase 8 Proficiency Quiz
- Correct any deficiencies on the quiz with your instructor

Required Study

CESSNAFLIGHTTRAINING.COM

PHASE 8; 8.1.2 Night Operations

- Night Emergencies

Stage 2, Phase 8

SCENARIO 1: FLYING AT NIGHT

Ground Training Checklist

Night preparation and planning
Required aircraft equipment
Night illusions
Route selection at night
Airport navigation and lighting

Proficiency Checklist

Single-pilot resource management
Controlled flight into terrain awareness
Night preflight procedures and pilot equipment
Emergency equipment and survival gear
Landing with and without a landing light
Night takeoffs and full-stop landings

Stage 2, Phase 8

PHASE 8 PROFICIENCY QUIZ

1. Explain things you need to do, considering human physiology, during night flight preparation?

_____

_____

_____

_____

2. While carrying out a preflight inspection of the airplane for a night flight, the magnetic compass light is inoperative. Is the airplane airworthy?

_____

_____

3. Name some illusions we are more susceptible to while flying at night? How can we mitigate the risk of these illusions?

_____

_____

_____

_____

4. Upon arrival within approximately fifteen miles of the destination airport, what are a few ways we can locate the airport at night?

_____

_____

5. Why do you think there are legal differences between day and night currency for the purposes of carrying passengers?

_____

_____

Stage 2, Phase 8

PHASE 8 PROFICIENCY QUIZ

6. When can night time begin to be logged? How does this differ from when navigation lights must be operated?

_____

_____

_____

_____

7. While planning a night flight to Punta Gorda, what is latest time you could plan to arrive with the tower open? What happens to the associated airspace if the tower is closed?

_____

_____

8. How might you adjust your route when flying at night? What about cruising altitude?

_____

_____

_____

_____

9. Why is supplemental oxygen recommended at a lower altitude during night operations?

_____

_____

_____

_____

10. Why are risks like loss of situational awareness and controlled flight into terrain generally more prevalent at night? What can be done to manage these risks?

_____

_____

_____

_____

Stage 2, Phase 8

PHASE 8 PROFICIENCY STANDARDS

SRM

Single-pilot resource management - *Utilizes all resources available to ensure the successful completion of the flight*

Controlled flight into terrain awareness - *Demonstrates awareness of relation to obstacles and terrain through all phases of flight*

Preflight procedures

Night preflight procedures and pilot equipment - *Utilizes recommended procedures and equipment*

Landing with and without a landing light - *Can safely use visual cues and lighting to land in the event of a landing light failure*

Night takeoffs and full-stop landings - *Completes the FAA requirement of 10 full-stop night landings*

Stage 2, Phase 9

PHASE 9 - ADVANCING YOUR SKILLS

PHASE 9

Phase Objective:

- Polish your emergency instrument skills
- Complete your FAA cross-country requirements
- Practice maneuvers assigned by your instructor as needed on a solo flight

Each phase contains multiple Flight Scenarios that can be repeated as needed or omitted if all items in the Phase Proficiency Checklist are completed to standard.

Flight Scenarios

Polishing Emergency Instrument Skills
Additional Solo Cross Country and/or Your Skills and the Private Pilot ACS
Long Solo Cross-Country
More Solo Practice

Flight scenarios will be repeated as necessary to reach the desired proficiency

Stage 2, Phase 9

SCENARIO 1: POLISHING EMERGENCY INSTRUMENT SKILLS

Objectives

Practice the instrument skills necessary to recover safely from inadvertent flight into areas of marginal weather and reduced visibility, increase the efficiency of simulated short- and soft-field operations and practice decision-making skills for emergency operations.

Where to go:

One of Flight Training Professional's Practice Areas:

1. Northwest practice area
2. Southeast practice area
3. West practice area

How to get there:

Pilotage, GPS

Planned deviations:

None

Planned malfunctions:

Pilot disorientation

Purpose/pressures (real or simulated):

When you experience unexpected lowering visibility, you are 5 nm from your airport, which is reporting marginal VFR, and 20 nm from a neighboring airport reporting 6 miles visibility

Risks (real or simulated):

Low ceilings and visibility, marginal VFR, recency of experience in short- and soft-field landings

Completion Standard

- See each individual task's completion standards

Required Study

CESSNAFLIGHTTRAINING.COM

- FLIGHT PREVIEWS – Preparing for Solo Flight – Recovery From Unusual Attitudes
- FLIGHT PREVIEWS – Flying Cross-Country – Navigation Systems

Stage 2, Phase 9

SCENARIO 1: POLISHING EMERGENCY INSTRUMENT SKILLS

Cessna C172S NAV III Flows and Amplified Checklist Procedures
Review and "chair fly" procedures

- Page 4-1 to 4-32 – Flows and Amplified Checklist Procedures
- Page 5-1 to 5-12 – Flows and Amplified Checklist Procedures

C172S NAVIII Skyhawk SP NAV III Avionics Option-GFC 700 AFCS Pilots Information Manual

- Page 3-6 to 3-24 – Review Emergency procedures (Bold items to be memorized)
- Page 3-25 to 3-28 – Read the Amplified Emergency procedures
- 3-29 to 3-31 – Emergency Operation in Clouds

Cessna C172S NAV II AND NAV III Maneuver Standard Operating Procedures
Review and "chair fly" procedures

- Page 5 – Review Short-Field Takeoff and Climb
- Pages 6 to 7 – Review Soft-Field Takeoff and Climb
- Page 42 to 43 – Review Short-Field Approach and Landing
- Page 44 to 45 – Review Soft-Field Approach and Landing

Additional Reading:
Airplane Flying Handbook

- Chapter 18

Pilot's Handbook of Aeronautical Knowledge

- Chapter 9

Ground Training Checklist
Cross-country flight planning and performance

Stage 2, Phase 9

SCENARIO 1: POLISHING EMERGENCY INSTRUMENT SKILLS

Proficiency Checklist

Single-pilot resource management
Situational awareness
Controlled flight into terrain awareness
Automation management
Basic instrument maneuvers (IR)
180° turn (IR)
GPS orientation and tracking (IR) (if equipped)
VOR orientation and tracking (IR) (if equipped)
Recovery from unusual attitudes (IR)
Emergency operations
Short-field takeoff and maximum performance climb
Short-field approach and landing
Soft-field takeoff and climb
Soft-field approach and landing

Stage 2, Phase 9

SCENARIO 2: ADDITIONAL SOLO CROSS COUNTRY AND/OR YOUR SKILLS AND THE PRIVATE PILOT ACS

Objectives

To practice maneuvers and tasks in preparation for the final phase of training

Where to go:

One of Flight Training Professional's Practice Areas:

1. Northwest practice area
2. Southeast practice area
3. West practice area

and/or

Cross-country route as assigned

How to get there:

Pilotage, dead reckoning, GPS or VOR navigation

Planned deviations:

None

Planned malfunctions:

None

Purpose/pressures (real or simulated):

To conduct a flight that evaluates performance takeoff and landings and maneuvers without instructor assistance you will be tasked with performing during your final phase of training

Risks (real or simulated):

Traffic, maneuvering at slow speeds close to the ground while practicing takeoffs and landings

Completion Standard

- See each individual task's completion standards

Ground Training Checklist

Cross-country flight planning and performance

Stage 2, Phase 9

SCENARIO 2: ADDITIONAL SOLO CROSS COUNTRY AND/OR YOUR SKILLS AND THE PRIVATE PILOT ACS

Proficiency Checklist

Task management
Aeronautical decision making
Appropriate logbook and certificate endorsements
Route selection
Flight publications and currency
Obtaining a weather briefing
Cross-country flight planning and performance
Cross-country navigation log
*Flight deck management
Power settings and mixture control
Opening ICAO flight plans
Pilotage and dead reckoning
VFR flight following
In-flight weather resources
Navigation aids and radar services

Stage 2, Phase 9

SCENARIO 3: LONG SOLO CROSS-COUNTRY

Objectives

Complete the solo cross-country flight requirements for your private pilot certificate.

Where to go:

A cross-country flight of at least 150 nm total distance and the landings must be full-stop at each of the three different airports.

1. KORL - KBKV - KGNV - KORL
2. KORL - KOBE - KLAL - KORL
3. Additional routes can be approved through the Chief Flight Instructor

How to get there:

Pilotage, dead reckoning, GPS or VOR navigation

Planned deviations:

None

Planned malfunctions:

None

Purpose/pressures (real or simulated):

To complete a full-stop landing at three different airports while navigating safely and efficiently to and returning as close as possible to your estimated time of arrival (ETA)

Risks (real or simulated):

Problems that can occur while flying a longer solo cross-country flight, such as being unfamiliar with the airspace and changing weather

Completion Standard

- See each individual task's completion standards

Required Study

CESSNAFLIGHTTRAINING

PHASE 9; 9.1.1 The Long Cross-Country Flight

- Before You Go
- Keeping Track of Your Progress

Stage 2, Phase 9

SCENARIO 3: LONG SOLO CROSS-COUNTRY

Ground Training Checklist
Cross-country flight planning and performance

Proficiency Checklist
Risk management
Aeronautical decision making
Appropriate logbook and certificate endorsements
Route selection
Flight publications and currency
Obtaining a weather briefing
Cross-country flight planning and performance
Cross-country navigation log
Flight deck management
Power settings and mixture control
Opening ICAO flight plans
VFR flight following
In-flight weather resources
Pilotage and dead reckoning
Navigation aids and radar services
Closing flight plans

Stage 2, Phase 9

SCENARIO 4: MORE SOLO PRACTICE

Objectives

Practice maneuvers in preparation for the final phase of training

Where to go:

One of Flight Training Professionals Practice Areas:

1. Northwest practice area
2. Southeast practice area
3. West practice area

How to get there:

Pilotage, GPS and VOR

Planned deviations:

None

Planned malfunctions:

None

Purpose / pressures (real or simulated):

Practicing performance takeoff and landings without instructor assistance, knowing when to go around or discontinue an unsafe approach or landing attempt, safely complete the flight

Risks (real or simulated):

Traffic, maneuvering at low speeds close to the ground while practicing takeoffs and landings, practicing maneuvers without an instructor

Completion Standard

- See each individual task's completion standards
- Complete the Phase 9 Proficiency Quiz
- Correct any deficiencies on the quiz with your instructor

Required Study

Maneuvers and tasks assigned by your instructor

Stage 2, Phase 9

SCENARIO 4: MORE SOLO PRACTICE

Ground Training Checklist
Cross-country flight planning and performance

Proficiency Checklist
Risk management
Situational awareness
Controlled flight into terrain awareness
Steep turns
Maneuvers assigned by your instructor
Ground reference maneuvers
Short-field takeoff and maximum performance climb
Short-field approach and landing
Soft-field takeoff and climb
Soft-field approach and landing

Stage 2, Phase 9

SCENARIO 4: MORE SOLO PRACTICE

Objectives

Practice maneuvers in preparation for the final phase of training

Where to go:

One of Flight Training Professionals Practice Areas:

1. Northwest practice area
2. Southeast practice area
3. West practice area

How to get there:

Pilotage, GPS and VOR

Planned deviations:

None

Planned malfunctions:

None

Purpose / pressures (real or simulated):

Practicing performance takeoff and landings without instructor assistance, knowing when to go around or discontinue an unsafe approach or landing attempt, safely complete the flight

Risks (real or simulated):

Traffic, maneuvering at low speeds close to the ground while practicing takeoffs and landings, practicing maneuvers without an instructor

Completion Standard

- See each individual task's completion standards
- Complete the Phase 9 Proficiency Quiz
- Correct any deficiencies on the quiz with your instructor

Required Study

Maneuvers and tasks assigned by your instructor

Stage 2, Phase 9

SCENARIO 4: MORE SOLO PRACTICE

Ground Training Checklist
Cross-country flight planning and performance

Proficiency Checklist
Risk management
Situational awareness
Controlled flight into terrain awareness
Steep turns
Maneuvers assigned by your instructor
Ground reference maneuvers
Short-field takeoff and maximum performance climb
Short-field approach and landing
Soft-field takeoff and climb
Soft-field approach and landing

Stage 2, Phase 9

PHASE 9 PROFICIENCY QUIZ

1. After bending down to reach a pencil that has fallen, you look up to realize you have flown into a cloud and the airspeed is rapidly rising while the attitude indicator shows a steep bank to left. What is the appropriate recovery procedure for this unusual attitude?

_____

_____

2. Why is a bank used to begin an emergency descent? Why is the airplane then rolled level once the desired airspeed is approached?

_____

_____

_____

_____

3. When executing a soft-field takeoff and climb during a crosswind from the right, what combined aileron and rudder inputs will be required to maintain directional control during the temporary level-off in ground effect?

_____

_____

4. When executing a short-field approach to landing, in order to clear a fifty foot obstacle, what approximate distance past that obstacle must be your touchdown point? What distance would your aim point be to this touchdown point?

_____

_____

_____

_____

Stage 2, Phase 9

PHASE 9 PROFICIENCY QUIZ

5. Pick one of the sub-elements referred to in the skills section for Area of Operations IX, Task C in the Airman Certification Standards and describe the appropriate action.

_____

_____

_____

_____

6. What tolerance for deviation from best glide airspeed does the Airman Certification Standards allow for during an Emergency Approach and Landing?

_____

_____

7. What tolerance for deviation from best rate of climb does the Airman Certification Standards allow for after clearing the obstacle during a Short-Field Takeoff and Maximum Performance Climb?.

_____

_____

8. Explain, in your own words, what the Airman Certification Standards require for skills 9 and 10 of a Soft-Field Approach and Landing..

_____

_____

_____

_____

_____

_____

_____

_____

Stage 2, Phase 9

PHASE 9 PROFICIENCY STANDARDS

SRM

Single-pilot resource management - *Utilizes all resources available to ensure the successful completion of the flight*

Task management - *Prioritizes and selects the most appropriate tasks*

Risk management - *Maintains situational awareness, problem recognition and good judgment to reduce associated risks*

Situational awareness - *Maintains an accurate perception and understanding of location, surrounding factors and conditions*

Aeronautical decision making - *Uses a systematic approach to consistently determine the best course of action for the circumstances*

Controlled flight into terrain awareness - *Demonstrates awareness of relation to obstacles and terrain through all phases of flight*

Automation management - *Demonstrates ability to understand and operate installed equipment such as GPS and/or autopilot if installed*

Preflight procedures

Appropriate logbook and certificate endorsements - *Obtains appropriate instructor endorsements*

Route selection - *Selects safe routing free of obstructions and hazardous weather*

Flight publications and currency - *Utilizes current flight publications such as sectional and/or terminal area charts, Chart Supplement, NOTAMs and other time-sensitive navigation tools*

Stage 2, Phase 9

PHASE 9 PROFICIENCY STANDARDS

Obtaining a weather briefing - *Obtains an appropriate weather briefing from an FAA approved source*

Cross-country flight planning and performance - *Utilizes performance charts and completes planning for route*

In-flight

Cross-country navigation log - *Completes and utilizes a navigation log*

Flight deck management - *Flight deck is organized and resources are accessible to pilot*

Power settings and mixture control - *Sets appropriate power settings and utilizes correct procedures for leaning mixture*

Opening flight plans - *Opens ICAO flight plan*

VFR flight following - *Utilizes VFR radar services as available*

In-flight weather resources - *Utilizes all available weather resources to make informed decisions*

Basic instrument maneuvers (IR) - *Utilizes Flight Training Professional's pitch and power table, maintains altitude (+/- 200 feet), heading (+/- 20°), airspeed (+/- 10 knots)*

180° turn (IR) - *Maintains altitude (+/- 200 feet), heading (+/- 20°), airspeed (+/- 10 knots)*

GPS orientation and tracking - *Maintains altitude (+/- 200 feet), heading (+/- 10°), airspeed (+/- 10 knots)*

VOR orientation and tracking - *Maintains altitude (+/- 200 feet), heading (+/- 10°), airspeed (+/- 10 knots)*

Stage 2, Phase 9

PHASE 9 PROFICIENCY STANDARDS

Pilotage and dead reckoning - *Follows Flight Training Professional's standard operating procedures, maintains altitude (+/- 150 feet), headings (+/- 15°)*

Navigation aids and radar services - *Follows Flight Training Professional's standard operating procedures, maintains altitude (+/- 150 feet), headings (+/- 15°)*

Recovery from unusual attitudes (IR) - *Recovers promptly to a stabilized level flight attitude using coordinated control application in the correct sequence*

Emergency operations - *Follows Flight Training Professional's standard operating procedures, follows the manufacturer-recommended procedures while maintaining control of the airplane*

Steep turns - *Follows Flight Training Professional's standard operating procedures, maintains altitude (+/- 150 feet), heading (+/- 15°), airspeed (+/- 15 knots), bank (+/-8 °)*

Short-field takeoff and maximum performance climb - *Follows Flight Training Professional's standard operating procedures, pitch attitude: VX (+10/-5 knots) then VY (+10/-5 knots)*

Short-field approach and landing - *Follows Flight Training Professional's standard operating procedures, stabilized approach (+10/-5 knots), touches down at or within 250 feet*

Soft-field takeoff and climb - *Follows Flight Training Professional's standard operating procedures, maintains takeoff power, VX or VY as appropriate (+10/-5 knots)*

Soft-field approach and landing - *Follows Flight Training Professional's standard operating procedures, recommended airspeed or 1.3 Vso (+/- 10 knots)*

Postflight procedures

Closing flight plans - *Closes FAA flight plan*

Stage 3

STAGE 3 - PREPARING FOR YOUR PRACTICAL TEST

STAGE 3

Stage 3 consists of one Phase

- Final Preparation for Your Practical Test

Stage Objective

- Prepare for the FAA Practical Test
- Learn about the practical test and how to come prepared
- Learn about your responsibilities as a newly licensed pilot
- Complete your final Progress Check

The single phase contains multiple Flight Scenarios that can be repeated as needed or omitted if all items in the Phase Proficiency Checklist are completed to standard.

Stage 3, Phase 10

PHASE 10 - FINAL PREPARATION FOR YOUR PRACTICAL TEST

PHASE 10

Phase Objective:

- Prepare for your practical test by identifying any weak areas and improving your performance in that area
- Be able to perform to airman certification standards in all areas of operation
- Complete a practical test briefing
- Complete mock FAA Practical Tests with your instructor
- Pass your final progress check

Flight Scenarios

Mock FAA Practical Test
Final Progress Check

Flight scenarios will be repeated as necessary to reach the desired proficiency

Stage 3, Phase 10

SCENARIO 1: MOCK FAA PRACTICAL TEST (GROUND, AIRPLANE)

Objectives

You will fly with a designated instructor to ensure you are ready for the practical test

Where to go:

As assigned by your cross-country scenario and then one of Flight Training Professionals, Practice Areas:

1. Northwest practice area
2. Southeast practice area
3. West practice area

How to get there:

Pilotage, navigation aids and radar services, dead reckoning

Planned deviations:

As assigned by instructor

Planned malfunctions:

As assigned by instructor

Purpose/pressures (real or simulated):

As assigned by instructor

Risks (real or simulated):

As assigned by instructor

Completion Standard

Private Pilot - Airplane Airman Certification Standards

Required Study

CESSNAFLIGHTTRAINING

- PHASE 10; 10.1.1 Coming Prepared to Your Checkride
  - FAA Form 8710
  - Airplane Logbooks
  - Items to Bring
  - Airman Certification Standards
- PHASE 10; 10.1.2 The Oral Exam
  - Helpful Hints

Stage 3, Phase 10

SCENARIO 1: MOCK FAA PRACTICAL TEST (GROUND, AIRPLANE)

- PHASE 10; 10.1.3 The Flight Exam
  - You are the PIC

Private Pilot - Airplane Airman Certification Standards

- Complete a review of all applicable sections of the ACS.
- A8 to A11 – Practical Test Roles, Responsibilities, and Outcomes
- A-17 to A-18 – Aeronautical Decision Making, Risk Management, CRM and SRM
- A19 – Equipment Requirements and Limitations

Ground Training Checklist
Preparation for the practical test

Single-pilot resource management
Single-pilot resource management
Task management
Risk management
situational awareness
Aeronautical decision making
Controlled flight into terrain awareness
Automation management

Preflight preparation
Pilot qualifications
Airworthiness requirements
Weather information
Cross-country flight planning
National airspace system
Performance and limitations
Operation of systems

Stage 3, Phase 10

SCENARIO 1: MOCK FAA PRACTICAL TEST (GROUND, AIRPLANE)

Aeromedical factors
Principles of flight

Preflight procedures
Preflight inspection
Flight deck management
Engine starting
Taxiing
Before takeoff check
Airport operations
Runway incursion avoidance
Radio communications
ATC light signals
Traffic patterns
Runway & taxiway signs, markings and lighting

Takeoffs, landings, and go-around/rejected landings
Normal and crosswind takeoff and climb
Normal and crosswind approach and landing
Soft-field takeoff and climb
Soft-field approach and landing
Short-field takeoff and climb
Short-field approach and landing
Forward slip to a landing
Go-around/rejected landing

Performance maneuvers
Steep turns

Stage 3, Phase 10

SCENARIO 1: MOCK FAA PRACTICAL TEST (GROUND, AIRPLANE)

Ground reference maneuver
Rectangular course
S-turns
Turns around a point

Navigation
Pilotage and dead reckoning
Navigation systems and radar services
Diversion
Lost procedures

Slow flight and stalls
Maneuvering during slow flight
Power-off stalls
Power-on stalls
Spin awareness

Basic instrument maneuvers
Straight-and-level flight (IR)
Constant airspeed climbs (IR)
Constant airspeed descents (IR)
Turns to headings (IR)
Recovery from unusual flight attitudes (IR)
Radio communications, navigation systems/facilities, and radar services (IR)

Emergency operations
Emergency descent
Emergency approach and landing (simulated)

Stage 3, Phase 10

SCENARIO 1: MOCK FAA PRACTICAL TEST (GROUND, AIRPLANE)

Aeromedical factors
Principles of flight

Preflight procedures
Preflight inspection
Flight deck management
Engine starting
Taxiing
Before takeoff check
Airport operations
Runway incursion avoidance
Radio communications
ATC light signals
Traffic patterns
Runway & taxiway signs, markings and lighting

Takeoffs, landings, and go-around/rejected landings
Normal and crosswind takeoff and climb
Normal and crosswind approach and landing
Soft-field takeoff and climb
Soft-field approach and landing
Short-field takeoff and climb
Short-field approach and landing
Forward slip to a landing
Go-around/rejected landing

Performance maneuvers
Steep turns

Stage 3, Phase 10

SCENARIO 1: MOCK FAA PRACTICAL TEST (GROUND, AIRPLANE)

Systems and equipment malfunctions
Emergency equipment and survival gear

Night operation
Night preparation

Postflight procedures
After landing, parking and securing

Stage 3, Phase 10

SCENARIO 2: FINAL PROGRESS CHECK (GROUND)

Objectives

You will complete a ground session with a designated check instructor to ensure you are ready for the practical test

For this Progress Check we will need 4 hours for the Oral and 3 block hours for the flight. They might not be on the same day.

Where to go:

You will plan a one-way cross country to KTLH, and then one of Flight Training Professionals, Practice Areas:

1. Northwest practice area
2. Southeast practice area
3. West practice area

How to get there:

Pilotage, navigation aids and radar services, dead reckoning

Planned deviations:

As assigned by instructor

Planned malfunctions:

As assigned by instructor

Purpose/pressures (real or simulated):

As assigned by instructor

Risks (real or simulated):

As assigned by instructor

Completion Standard

Refer to the Private Pilot - Airplane Airman Certification Standards

Progress Check Lesson Sheets

Oral

Required Study

You need to have the plan complete and ready to fly at the time that the oral is scheduled to begin. Use the starting time of the oral for the departure time.

Stage 3, Phase 10

SCENARIO 2: FINAL PROGRESS CHECK (GROUND)

The weather brief must be for the day of the oral. Whether you are using Fore Flight or Lockheed-Martin (1800WxBrief.com), you must have the weather briefing that you used to create the plan with you in either printed or electronic format. The weather information needs to be in the coded format. No plain text weather reports. We need to test you on your ability to decode the reports.

For the weight and balance, use your assigned instructor's weight as listed below. We have a passenger in the rear seat that weighs 165 lbs and 50 lbs in the baggage area. The W&B calculations need to be done manually on the backside of the Nav Log.
Be sure to bring with you the following resources:

- Pilot Operating Handbook (Paper or Electronic)
- Current Copy of the FAR and AIM (Paper or Electronic)
- Current Airport Facility Directory (Paper or Electronic)
- Current Jacksonville Sectional (Paper or Electronic)
- Pilots Handbook of Aeronautical Knowledge (Paper or Electronic)
- Airplane Flying Handbook (Paper or Electronic)
- Plotter
- E6B Flight Computer (Electronic or App)

The oral exam will cover all areas straight out of the ACS and will include a selection of scenario based questions. The flight will begin with your x/c departure, then the maneuvers in the practice area.
Check Instructor weights:

- Keith - 210
- Evan - 175
- Maggie - 125
- Ed - 205

Stage 3, Phase 10

SCENARIO 2: FINAL PROGRESS CHECK (GROUND)

CESSNAFLIGHTTRAINING

- PHASE 10; 10.2.1 Your Responsibilities as PIC
  - Staying Current
  - Broadening Your Horizons
  - Transitions to Unfamiliar Airplanes
- PHASE 10; 10.2.2 Passengers
  - Flying Safely and Risk Management
  - Coping With Passenger Anxiety or Illness

Single-pilot resource management

*ask management
Risk management
Situational awareness
Aeronautical decision making
Controlled flight into terrain awareness
Automation management

Preflight preparation

Pilot qualifications
Airworthiness requirements
Weather information
Cross-country flight planning
National airspace system
Performance and limitations
Stall/spin awareness
Recite standard operating procedures
Operation of systems
Human factors
Preflight assessment
Night preparation

Stage 3, Phase 10

SCENARIO 2: FINAL PROGRESS CHECK (FLIGHT)

Objectives

You will complete a ground session with a designated check instructor to ensure you are ready for the practical test

For this Progress Check we will need 4 hours for the Oral and 3 block hours for the flight. They might not be on the same day.

Where to go:

You will plan a one-way cross country to KTLH, and then one of Flight Training Professionals, Practice Areas:

- Northwest practice area
- Southeast practice area
- West practice area

How to get there:

Pilotage, navigation aids and radar services, dead reckoning

Planned deviations:

As assigned by instructor

Planned malfunctions:

As assigned by instructor

Purpose/pressures (real or simulated):

As assigned by instructor

Risks (real or simulated):

As assigned by instructor

Completion Standard

Refer to the Private Pilot - Airplane Airman Certification Standards

Progress Check Lesson Sheets

Flight

Required Study

You need to have the plan complete and ready to fly at the time that the oral is scheduled to begin. Use the starting time of the oral for the departure time.

Stage 3, Phase 10

SCENARIO 2: FINAL PROGRESS CHECK (GROUND)

The weather brief must be for the day of the oral. Whether you are using Fore Flight or Lockheed-Martin (1800WxBrief.com), you must have the weather briefing that you used to create the plan with you in either printed or electronic format. The weather information needs to be in the coded format. No plain text weather reports. We need to test you on your ability to decode the reports.

For the weight and balance, use your assigned instructor's weight as listed below. We have a passenger in the rear seat that weighs 165 lbs and 50 lbs in the baggage area. The W&B calculations need to be done manually on the backside of the Nav Log.
Be sure to bring with you the following resources:

- Pilot Operating Handbook (Paper or Electronic)
- Current Copy of the FAR and AIM (Paper or Electronic)
- Current Airport Facility Directory (Paper or Electronic)
- Current Jacksonville Sectional (Paper or Electronic)
- Pilots Handbook of Aeronautical Knowledge (Paper or Electronic)
- Airplane Flying Handbook (Paper or Electronic)
- Plotter
- E6B Flight Computer (Electronic or App)

The oral exam will cover all areas straight out of the ACS and will include a selection of scenario based questions. The flight will begin with your x/c departure, then the maneuvers in the practice area.
Check Instructor weights:

- Keith - 210
- Evan - 175
- Maggie - 125
- Ed - 205

Stage 3, Phase 10

SCENARIO 2: FINAL PROGRESS CHECK (FLIGHT)

Single-pilot resource management
Task management
Risk management
Situational awareness
Aeronautical decision making
Controlled flight into terrain awareness
Automation management

Preflight preparation
Pilot qualifications
Airworthiness requirements
Weather information
Cross-country flight planning
National airspace system
Performance and limitations
Stall/spin awareness
Recite standard operating procedures
Operation of systems
Human factors
Preflight assessment
Night preparation

Preflight procedures
Preflight assessment
Route selection
Flight publications and currency
Obtaining a weather briefing
Cross-country flight planning and performance

Stage 3, Phase 10

SCENARIO 2: FINAL PROGRESS CHECK (GROUND)

Emergency equipment and survival gear
Weight and balance
Preflight inspection
Flight deck management
Checklist use
Passenger Briefing
Engine starting
PIC Briefing
Runway incursion avoidance
Taxiing
Crosswind taxi
Positive exchange of flight controls
Before takeoff check

Airport operations
Radio communications
Runway & taxiway signs, markings and lighting
ATC light signals
Traffic patterns

Takeoffs, landings, and go-around/rejected landings
Normal and crosswind takeoff and climb
Normal and crosswind approach and landing
Soft-field takeoff and climb
Soft-field approach and landing
Short-field takeoff and climb
Short-field approach and landing
Forward slip to a landing
Go-around/rejected landing

Stage 3, Phase 10

SCENARIO 2: FINAL PROGRESS CHECK (FLIGHT)

Performance maneuvers
Steep turns

Ground reference maneuvers
Rectangular course
S-turns
Turns around a point

Navigation
Cross-country navigation log
Flight deck management
Power settings and mixture control
Opening ICAO flight plans
VFR flight following
Pilotage and dead reckoning
Navigation systems and radar services
In-flight weather resources
Diversion
Lost procedures

Slow flight and stalls
Maneuvering during slow flight
Power-off stalls
Power-on stalls
Spin awareness

Basic instrument maneuvers
Straight-and-level flight (IR)
180° turn (IR)

Stage 3, Phase 10

SCENARIO 2: FINAL PROGRESS CHECK (GROUND)

Constant airspeed climbs (IR)
Constant airspeed descents (IR)
Turns to a heading (IR) +
Recovery from unusual attitudes (IR)
Radio communications, navigation systems/facilities, and radar services (IR)
GPS direct to/nearest airport functions (IR) (if installed)

Emergency operations
Emergency descent
Emergency approach and landing (simulated)
Systems and equipment malfunctions
Emergency communications and ATC resources
Emergency equipment and survival gear

Night operation
Night preparation

Postflight procedures
After landing, parking and securing

Appendix A

COURSE TRAINING REQUIREMENTS

Ground training requirements

The client must successfully complete

- All web-based knowledge instruction and flight previews
- All Ground Training Checklists
- All Progress Checks
- All Instructor Briefings
- Pre-Solo written exam
- Cessna Flight Training System Knowledge Test

Flight training requirements

Prior to completing the training course

- The applicable minimum hourly requirements must be met

Requirements for graduation

To obtain a graduation certificate for the Private Pilot Course, the client must

- Be at least 17 years of age
- Be able to read, speak, write and understand English
- Complete all ground training requirements
- Complete all flight training requirements
- Hold a valid and current FAA Medical and Student Pilot Certificate
- Complete the FAA Private Pilot-Airplane Knowledge Test ·

Minimum flight time requirements

The course is designed to meet the minimum hour requirements of 14 CFR Part 61 Subparts C, E and J

The minimum FAA hour requirements

- Vary depending upon your course of enrollment
- Are to be thought of minimums only o FAA statistics indicate that the typical private pilot candidate has approximately 75 hours at the time of the practical test.

Appendix A

COURSE GUIDE TRAINING MINIMUMS

PRIVATE PILOT COURSE GUIDE - STAGE 1

Phase	Scenario	Dual/Solo	Airplane/Sim.	Est. Total Time	Est. Dual Time	Est. Solo Time	Est. Grnd. Time	Flight Trng. Inst.	Aviation Training Device
1	1	Dual	Sim	0.8			2.5		0.8
1	1	Dual	Airplane	1.4	1.4				
1	2	Dual	Sim	0.8			1.0		0.8
1	2	Dual	Airplane	1.4	1.4				
1	3	Dual	Sim	0.8			1.0		0.8
1	3	Dual	Airplane	1.4	1.4				
2	1	Dual	Sim	0.8			1.5		0.8
2	1	Dual	Airplane	1.4	1.4				
2	2	Dual	Sim	0.8			1.5		0.8
2	2	Dual	Airplane	1.4	1.4				
2	3	Dual	Sim	0.8			1.0		0.8
2	3	Dual	Airplane	1.4	1.4			0.3	
2	4	Dual	Airplane	1.2	1.2		1.5		
2	4	Prog. Check	Airplane	1.2	1.2		1.5		
3	1	Dual	Sim	0.8			1.5		0.8
3	1	Dual	Airplane	1.4	1.4				
3	2	Dual	Sim	0.8			0.5		0.8
3	2	Dual	Airplane	1.4	1.4				
3	3	Dual	Sim	0.8			1.5		0.8
3	3	Dual	Airplane	1.5	1.5				
4	1	Dual	Sim	0.8			0.5		0.8
4	2	Dual	Sim	0.8			1.0		0.8
4	2	Dual	Airplane	1.4	1.4				
4	3	Dual	Airplane	1.5	1.5			0.3	
Pre Solo Briefing							2.0		
5	1	Prog. Check	Airplane	1.5	1.5		1.5	0.1	
5	2	Dual/Solo	Airplane	1.0	0.5	0.5			
5	3	Dual/Solo	Airplane	1.0	0.5	0.5			
Stage 1 Total				30.3	20.5	1.0	20.0	0.7	8.8
Total				30.3	20.5	1.0	20.0	0.7	8.8

Appendix A

COURSE GUIDE TRAINING MINIMUMS

PRIVATE PILOT COURSE GUIDE - STAGE 2

Phase	Scenario	Dual/Solo	Airplane/ Sim.	Est. Total Time	Est. Dual Time	Est. Solo Time	Est. Grnd. Time	Flight Trng. Inst.	Aviation Training Device
6	1sa	Dual	Sim	0.8			0.5		0.8
6	1a	Dual	Airplane	1.3	1.3				
6	1b	Dual	Airplane	1.5	1.5				
6	2sa	Dual	Sim	1.0			1.5		1.0
6	2sb	Dual	Sim	1.0					1.0
6	2	Dual	Airplane	1.5	1.5			0.5	
6	3	Solo	Airplane	1.0		1.0			
6	4	Solo	Airplane	1.0		1.0			
7	1s	Dual	Sim	2.0			6.0		2.0
7	1	Dual	Airplane	2.0	2.0				
7	2s	Dual	Sim	0.8			0.5		0.8
7	2	Dual	Airplane	3.0	3.0				
8	2	Dual Night X/C	Airplane	2.0	2.0		0.5		
Solo Cross-Country Briefing							2.0		
7	3	Prog. Check	Airplane	1.5	1.5		1.5		
7	4	Solo X/C	Airplane	2.0		2.0			
8	1	Dual Night	Airplane	1.5	1.5		0.5		
9	1	Dual	Airplane	1.4	1.4			0.8	
9	2	Dual	Airplane	1.4	1.4			0.2	
9	3	Solo X/C	Airplane	3.0		3.0			
9	4	Solo	Airplane	2.0		2.0			
Stage 2 Total				31.7	17.1	9.0	13.0	1.5	5.6
Total				62.0	37.6	10.0	33.0	2.2	14.4

PRIVATE PILOT COURSE GUIDE - STAGE 3

Phase	Scenario	Dual/Solo	Airplane/ Sim.	Est. Total Time	Est. Dual Time	Est. Solo Time	Est. Grnd. Time	Flight Trng. Inst.	Aviation Training Device
10	1a	Dual	Airplane	1.5	1.5		1	0.3	
10	1b	Dual	Airplane	1.5	1.5		1	0.3	
10	1c	Dual	Airplane	1.5	1.5		1		
10	1d	Dual	Airplane	1.5	1.5		1		
Practical Test Briefing							2		
10	2	Prog. Check	Airplane	2	2		2.5	0.2	
Stage 3				8	8	0	8.5	0.8	0
Total				70	45.6	10.0	41.5	3.0	14.4

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PRE-SOLO WRITTEN TEST QUESTIONS EXAMPLE

FLIGHT TRAINING	PAGE:	1
PROFESSIONALS PRE-SOLO	REVISION:	1
KNOWLEDGE TEST	DATE:	05/18/2021

Pre-Solo Written Exam

Name _____ Date _____

Aircraft Make and Model _____

Purpose: In accordance with FAR 61.87 (b), all student pilots must demonstrate satisfactory knowledge, which includes completion of a pre-solo written examination given and graded by the instructor who endorses the student pilot's certificate for solo flight.

Instructions: There are three parts to this exam. Using a **pencil**, fill in the blanks to each question as completely and accurately as possible.

GOOD LUCK!

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PRE-SOLO WRITTEN TEST QUESTIONS EXAMPLE

FLIGHT TRAINING
PROFESSIONALS PRE-SOLO
KNOWLEDGE TEST

PAGE: 2
REVISION: 1
DATE: 05/18/2021

Part 1: Aircraft Systems and Emergencies

1. What are the appropriate definitions & speeds for aircraft to be used?

VSO
Definition:_____
Speed:_____

VNO
Definition:_____
Speed:_____

VR
Definition:_____
Speed:_____

VA
Definition:_____
Speed:_____

VFE
Definition:_____
Speed:_____

VY
Definition:_____
Speed:_____

VS1
Definition:_____
Speed:_____

VNE
Definition:_____
Speed:_____

VX
Definition:_____
Speed:_____

Best Glide Speed _____
Flap Operation Range_____
Normal Operation Range_____
Caution Range_____
What is the significance of operations in the Caution Range? _____

2. Supply the applicable information.

Maximum Takeoff Weight_____
Maximum Landing Weight_____
Maximum Fuel Capacity_____
Maximum Usable Fuel _____
Maximum/ Minimum Oil _____
Maximum Engine HP & RPM _____

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PRE-SOLO WRITTEN TEST QUESTIONS EXAMPLE

FLIGHT TRAINING	PAGE:	3
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3. Briefly describe the electrical system and its components:

4. Briefly describe the make, model, & Descriptive Data of the engine in the aircraft:

5. Briefly describe the fuel system and its components:

6. Briefly describe the brake system and its components:

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PRE-SOLO WRITTEN TEST QUESTIONS EXAMPLE

FLIGHT TRAINING	PAGE:	4
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KNOWLEDGE TEST	DATE:	05/18/2021

7. In detail, describe the appropriate action taken for Engine Failure During:

   A) Takeoff:

   B) Cruise Flight:

8. In detail, describe the appropriate action taken for Engine Fire On Ground:

9. In detail, describe the appropriate action taken for Engine Fire in Flight:

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PRE-SOLO WRITTEN TEST QUESTIONS EXAMPLE

FLIGHT TRAINING	PAGE:	5
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10. List some things a pilot can do to troubleshoot a suspected communication system failure:

_____
_____
_____

11. How would a pilot be expected to proceed into a non-towered airport with a communications failure?

_____
_____
_____
_____
_____
_____
_____

12. How would a pilot be expected to proceed into a towered airport with a communications failure, if prior radio contact had not been established?

_____
_____
_____
_____
_____
_____
_____

13. What do the following light gun signals mean?

Ground

Flashing Green _____
Steady Green _____
Flashing Red _____
Steady Red _____
Alternating Red/ Green _____
White _____

AIR

Flashing Green _____
Steady Green _____
Flashing Red _____
Steady Red _____
Alternating Red/ Green _____
White _____

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PRE-SOLO WRITTEN TEST QUESTIONS EXAMPLE

FLIGHT TRAINING	PAGE:	6
PROFESSIONALS PRE-SOLO	REVISION:	1
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PART 2: FAA REGULATIONS (FAR PART 61 AND PART 91)

1. What inspection is required for any operation of any aircraft within the U.S.?
   Regulation Part #:_____
2. Who is responsible and the final authority to the operation of the aircraft?
   Regulation Part #:_____
3. What documents and endorsements are you required to carry at all times in order to fly solo?
4. A student pilot must hold at least what class medical?
   Regulation Part #:_____
5. How long is a student pilot's solo endorsement valid?
6. What are the required documents that must be on board an aircraft to fly?

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PRE-SOLO WRITTEN TEST QUESTIONS EXAMPLE

FLIGHT TRAINING	PAGE:	7
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7. What are the VFR daytime fuel requirements?
   Regulation Part #:_____
   _____
   _____
   _____

8. What are the Flight Training Professionals company minimum fuel requirements? Approximately how much fuel per hour does your aircraft burn?_____
   _____
   _____

9. What are the privileges and limitations of a student pilot?
   Regulation Part #:_____
   _____
   _____
   _____
   _____
   _____
   _____
   _____
   _____

10. What is the altitude requirements imposed on all aircraft flying over congested & other than congested areas?
    Regulation Part #:_____
    _____
    _____
    _____

11. When are aircraft position lights (navigation lights) required to be on?
    Regulation Part #:_____
    _____
    _____
    _____

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PRE-SOLO WRITTEN TEST QUESTIONS EXAMPLE

FLIGHT TRAINING	PAGE:	8
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12. In what direction should a pilot alter course when overtaking another aircraft, and which aircraft has the right of way?
Regulation Part #:_____

13. List the different categories of aircraft in order of which maintain precedence according to aircraft right-of-way rules:
Regulation Part #:_____

14. Are seatbelts and shoulder harnesses required? If so, by whom & when?
Regulation Part #:_____

15. What is the preflight action prescribed in Part 91 for all VFR flights, including those away from the vicinity of an airport?
Regulation Part #:_____

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PRE-SOLO WRITTEN TEST QUESTIONS EXAMPLE

FLIGHT TRAINING	PAGE:	9
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16. What are the regulations imposed by FAR Part 91 concerning alcohol and flying?
Regulation Part #:_____

17. What are the time and altitude recommendations concerning scuba diving and flying?
AIM section #:_____

18. What are the recommendations for oxygen in a non-pressurized aircraft during day and night, as suggested in the AIM?
AIM section #:_____

19. What oxygen regulations imposed for crew and passengers as stated in FAR Part 91?
Regulation Part #:_____

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PRE-SOLO WRITTEN TEST QUESTIONS EXAMPLE

FLIGHT TRAINING	PAGE:	10
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20. If no altimeter setting is available, what should the altimeter be set to for a local flight?
Regulation Part #:_____

PART 3: AIRSPACE AND AIRPORTS:

1. Give the airspace, visibility, and cloud requirements for the following airports: ORL, SFB, MCO, and DED:
ORL:
SFB:
MCO:
DED:

2. Where is Class E airspace and what are the visibility and cloud requirements?

3. What is the airspace that lies above ORL's Class D airspace?

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PRE-SOLO WRITTEN TEST QUESTIONS EXAMPLE

FLIGHT TRAINING	PAGE:	11
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4. What are the equipment and communication requirements for entering a Class B, C, or D airport?
   B:_____
   _____
   _____
   C:_____
   _____
   _____
   D:_____
   _____
   _____

5. What must the controller say before a pilot may enter Class B airspace?
   _____
   _____
   _____

6. Draw a picture of the runways at ORL, using an arrow, show the standard or non-standard traffic patterns used in accordance with your Airport Facility Directory at ORL.

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PRE-SOLO WRITTEN TEST QUESTIONS EXAMPLE

FLIGHT TRAINING	PAGE:	12
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7. Briefly describe how you would enter the traffic pattern for Runway 15 Orlando Apopka Airport (X04) if your aircraft was positioned 5 miles North East of the airport.

_____
_____
_____
_____
_____
_____
_____
_____
_____

8. List the following radio frequencies at ORL:
   - ATIS _____
   - GROUND CONTROL _____
   - TOWER _____
   - ORLANDO APPROACH _____
   - EMERGENCY _____

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PRE-SOLO WRITTEN TEST QUESTIONS EXAMPLE

FLIGHT TRAINING	PAGE:	13
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KISM Pre-Solo Appendix

1. What is the class of airspace and vertical dimension of KISM?
   _____

2. List out the appropriate frequencies for KISM
   ATIS:_____
   Tower:_____
   Ground:_____

3. Draw a picture of the runways at KISM and include the runway lengths & widths, and use arrows to show the standard and/or non-standard traffic pattern directions.

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PRE-SOLO WRITTEN TEST QUESTIONS EXAMPLE

FLIGHT TRAINING	PAGE:	14
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4. What taxi clearance can you expect from Signature Flight Support to Runway 33, if your aircraft is positioned right next to the control tower?

5. What taxi clearance can you expect from Signature Flight Support to Runway 6, if your aircraft is positioned right next to the control tower?

6. What taxi clearance can you expect from Signature Flight Support to Runway 15, if your aircraft is positioned right next to the control tower?

7. What is the elevation and traffic pattern altitude of KISM?