Gold Seal

PRIVATE PILOT SYLLABUS

Flight Training

GroundSchool.com

Gold Seal

Private Pilot Syllabus
Flight Training

Airplane Single-Engine Land

First Edition

Meets Part 61 and 141 Flight Training Requirements
14 CFR 141, Appendix B - Private Pilot Certification Course

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Contents

Record of Revisions

Revision Procedures - Revisions will be made to the syllabus when Gold Seal Ground School determines that an amendment, an addition, or a deletion is necessary for clarity, currency, comprehensiveness, or compliance with FAA directives. These revisions will be denoted with a major numerical change (e.g. 1.0 to 2.0). Revisions to this commercially produced syllabus will be sent to AFS-810 for a revised acceptance letter.

All revised pages will include the revision number in the bottom right margin. The date of the revision will be recorded in the revision record, which serves as a chronological reference. The revision table will include a revision number, effective date, affected pages, and a brief description of the revision.

A written explanation or other guidance will accompany each revision submitted to the FAA for approval and subsequently disseminated back to the TCO holder. TCO holders utilizing this syllabus as part of an FAA approved training course must submit a request to their Flight Standards District Office (FSDO) and receive approval prior to using any revised material.

Minor updates or editorial changes (e.g. grammatical or supplemental amendments to the course) will be noted on the affected page with a minor numerical change (e.g. 1.0 to 1.1). These changes will not require FAA approval; however, Gold Seal will provide a description of these changes to TCO holders.

Revision Number	Effective Date	Affected Pages(s)	Description
1.0 (Original)	1 Jul 2024		

Welcome to the Gold Seal Private Pilot Training Course

Welcome aboard the Gold Seal Private Pilot Flight Training Course! We are thrilled to have you join us on this remarkable journey towards achieving your dream of becoming a Private Pilot. This stage of your training marks the application of your knowledge and the furthering of your adventure in aviation. We are here to support you every step of the way as you bring your aspirations to life.

This course is designed to accommodate training conducted under either Part 61 or Part 141 of the Federal Aviation Administration (FAA) regulations. Whether you are pursuing a structured, school-based program or a more flexible, self-paced approach, our syllabus is adaptable to meet your needs.

We recognize that the path to becoming a pilot is both thrilling and challenging. The instructors and staff at your flight school will be your primary means of support, providing the guidance and expertise you need as you progress through your training. Additionally, if you are utilizing the Gold Seal Ground School, our dedicated team of instructors and support staff are also available to assist you in navigating your journey. Our goal is to ensure that you have all the resources and support necessary for your success.

With your determination and our combined expertise, success is within your grasp. We are excited to be a part of your aviation journey. Strap in and get ready, the sky is the limit, and your dream of flying is about to take flight!

Course Objective

The objective of this Gold Seal Private Pilot Flight Training Syllabus is to equip learners with the comprehensive aeronautical experience essential for obtaining the **FAA Private Pilot Certificate in the Airplane Category with a Single-Engine Land class rating**. Our structured training approach meets the flight experience requirements while emphasizing the practical application of these skills in real-world flying scenarios. The course is thoughtfully designed to not only meet the total aeronautical experience training hours required but also to foster real-world piloting skills. By the end of this course, learners will be prepared to excel on their FAA practical test and, more importantly, to become proficient, knowledgeable, confident, and safe pilots in the aviation community.

Requirements to Become a Private Pilot

Embarking on the path to becoming a private pilot is an exciting and rewarding journey. To achieve this goal, there are specific requirements that you must meet, as outlined by the FAA. These requirements ensure that you possess the necessary knowledge, skills, and physical ability to safely operate an aircraft:

- **Age Requirement:** You must be at least 17 years of age to obtain a Private Pilot Certificate.
- **Language Proficiency:** You must be able to read, speak, and understand the English language. This proficiency is vital for effective communication and understanding of aviation regulations and procedures.
- **Flight Time Requirements:** Meet the flight time requirements specified under either Part 61 or Part 141. These requirements detail the minimum hours of flight training and experience you must have.
- **Medical Certificate:** Possess at least a third class medical certificate issued by an Aviation Medical Examiner (AME), or operate under BasicMed guidelines (required before flying solo).

- **Student Pilot Certificate:** Obtain a Student Pilot Certificate before embarking on solo flights as part of your training.
- **FAA Airman Knowledge Exam:** Successfully pass the FAA Airman Knowledge Exam for Private Pilot-Airplane (PAR) with a score of 70% or better.
- **CFI Endorsements:** Receive the necessary endorsements from your Certificated Flight Instructor (CFI). These endorsements confirm that you have met the training requirements and are prepared for the practical tests. The Gold Seal Ground School provides the endorsement attesting that your ground training has been completed.
- **Practical Test:** Pass a practical test, which includes both an oral examination and a flight evaluation. This test assesses your ability to apply your knowledge and demonstrate your flying skills.

Meeting these requirements is a significant accomplishment and brings you one step closer to the freedom and responsibility of being a Private Pilot. As you progress through your training, remember that each requirement is designed to build your competence and confidence in the flight deck, ensuring you are ready to take on the skies.

Enrollment Prerequisites

Ground Training Prerequisites: Enrolling in the Gold Seal Private Pilot Ground School Training is an exciting first step on your path to becoming a pilot. While there are no strict prerequisites to begin this ground training, it is required that you are able to read, speak, and understand the English language. This competency is crucial as it forms the basis of all the learning materials, communication during training, and interaction with aviation resources such as Air Traffic Control and Flight Service.

Flight Training Prerequisites: This syllabus covers flight training for the Private Pilot certificate. As you prepare for the practical aspect of becoming a pilot, there are a few key prerequisites for enrolling in a Private Pilot flight training certification course. Your flight school may have additional enrollment requirements.

1. **Citizenship Verification:** Before commencing flight training, you must verify your citizenship with your flight school or Certificated Flight Instructor (CFI), who will provide a citizenship verification endorsement. Non-USA citizens will need to undergo a security threat assessment through the Flight Training Security Program. This process is a standard security measure in aviation training required by the Transportation Security Administration (TSA). Your CFI or flight school can provide you with a list of documents accepted by the TSA for this purpose.

2. **Age Requirements and Certifications:**
   - **For Solo Flight Training:** Learners must be at least 16 years old to embark on the solo flight phase of your training (flying without a CFI). Additionally, the learner must hold a FAA Student, Sport, or Recreational Pilot Certificate.
   - **Medical Examination:** Prior to solo flight, learners are required to pass a third-class medical exam conducted by an Aviation Medical Examiner (AME) or operate under BasicMed. This exam will provide the necessary medical certificate, confirming your fitness for solo flight.
   - **Overall Age Considerations:** There's no minimum age to begin flight training, and there's no maximum age for learning to fly. However, to fly solo, learners must be at least 16 years old, and to obtain your Private Pilot Certificate, learners must be at least 17 years old.

How to Complete the Course: A Guide to Success in Flight Training

This syllabus is designed to guide you through your journey to becoming a Private Pilot. Our syllabus is structured into three stages, each containing multiple lessons that build progressively from basic to advanced flight skills. These lessons ensure a solid foundation and a gradual build-up of expertise, preparing you for every aspect of flying. The stages are as follows:

Stage 1 - Basic Flight Skills and Pre-Solo Preparation: Stage 1 is designed to provide you with a foundation of good flying habits. This stage ends with your first solo flight. During this stage, you will become proficient in the knowledge, procedures, and maneuvers required for solo flight. Lessons cover essential skills such as aircraft control, takeoff and landing procedures, and basic maneuvers. Prior to your first solo flight, you will complete a presolo knowledge test.

Stage 2 - Performance Skills and Cross-Country Flying: Stage 2 focuses on enhancing your flight skills and preparing you for cross-country navigation. This stage covers more advanced maneuvers, performance flying, and night flying. You will gain confidence in planning and executing cross-country flights, understanding navigation aids, and managing in-flight challenges. By the end of this stage, you will have completed significant solo flying, including solo cross-country flights.

Stage 3 - Review and Checkride Preparation: Stage 3 is dedicated to refining your skills and preparing you for the FAA practical test. This stage involves comprehensive reviews of all previously learned skills, advanced flight maneuvers, and emergency procedures. The focus is on ensuring you meet the standards required for the practical test, building your confidence, and honing your decision-making abilities. This stage culminates in a final preparation for your checkride, ensuring you are fully ready for the FAA evaluation.

Lesson Format: Each flight lesson typically includes the following components:

- **Preflight Briefing:** Each flight lesson begins with a preflight briefing by your instructor, who will first assess your preparation and readiness for the upcoming lesson. This session addresses any questions from the previous lesson and outlines the objectives, specific maneuvers, expected actions, and completion standards for the flight. Additionally, the briefing covers key knowledge areas, risk management considerations, and essential skills, all aligned with the FAA Airman Certification Standards (ACS). This detailed briefing ensures you are well-prepared and confident before taking to the skies.

- **Flight Portion:** During this segment, you will engage in practical flight training, executing the maneuvers discussed in the preflight briefing. Your instructor may incorporate maneuvers from previous lessons into the flight, allowing you to demonstrate and reinforce these skills within the context of the current lesson before introducing new techniques. This continuous practice ensures a solid grasp of essential skills while building proficiency. The length of each lesson can vary depending on the specific content and objectives, providing the necessary time to effectively cover all required maneuvers and activities.

- **Postflight Debrief:** After each flight lesson, your instructor will conduct a comprehensive postflight debrief. This is designed to review your performance during the flight, highlighting strengths and identifying areas for improvement. The instructor will provide detailed feedback on how to correct any issues observed and reinforce the successful aspects of your performance.

During the debrief you should also conduct a self-assessment where you reflect on your own performance and ask questions. Additionally, your instructor will preview the objectives and maneuvers for the next lesson, ensuring you are well-prepared for future training.

Learner Preparation: To ensure you get the most out of each flight lesson, it is essential to arrive prepared and ready to learn. Dedicating time to review recommended or required lesson resources and completing any assignments from your flight instructor or flight school will greatly enhance your learning experience. Proper preparation allows you to maximize the benefits of your time in the air, making each flight session more productive and enjoyable. By arriving well-prepared, you can focus on honing your skills and advancing steadily towards your goal of becoming a proficient and confident pilot.

Concurrent or Sequential Training Design: This flight syllabus is designed to accommodate flight training either concurrently with ground training or after the completion of ground training. For optimal learning, it is highly recommended that learners complete most, if not all, of their ground training before beginning flight training. Having a solid foundation in the concepts and theories covered in ground school enhances understanding and application during practical flight training. This approach ensures that learners are well-prepared and can make the most of their flight training experience, leading to more effective and efficient skill development.

Description of the Checks and Tests to Measure Learner Accomplishments

Stage Checks: Throughout the course, you will undergo stage checks designed to evaluate your progress and ensure you have acquired the necessary knowledge and skills for each phase of training. These evaluations are conducted at the end of each stage: Basic Flight Skills and Pre-Solo Preparation, Performance Skills and Cross-Country Flying, and Review and Checkride Preparation. During these checks, a qualified instructor will assess your proficiency in the maneuvers and procedures specific to that stage, as well as your overall readiness to proceed to the next stage. The stage checks must be administered by a qualified check instructor in accordance with 14 CFR 141.37, ensuring that you meet the FAA standards.

End-of-Course Test: The final assessment in the syllabus is the End-of-Course Test. This comprehensive evaluation ensures you are fully prepared for the FAA practical test. A qualified instructor will conduct a thorough review of your skills, including all required maneuvers and procedures. The test aims to confirm that you have met the proficiency standards necessary to operate safely and competently as a private pilot. This test must be administered by a qualified check instructor, as specified in 14 CFR 141.37.

Graduation Requirements

To graduate from the Private Pilot Flight Training Course, learners must fulfill specific requirements that vary slightly depending on whether they are training under part 141 or part 61 regulations.

Part 141 Learners:

- **Aeronautical Knowledge (Ground Training):** Complete at least 35 hours of aeronautical knowledge training as prescribed in 14 CFR 141 Appendix B (3)(a)(1), and successfully pass the FAA Knowledge Test.
- **Aeronautical Experience (Flight Training):** Successfully complete all flight lessons as outlined in this syllabus and accumulate at least 35 hours of aeronautical experience, ensuring proficiency in all required maneuvers and procedures.
- **Stage Checks and End-of-Course Test:** Pass all stage checks and the End-of-Course Test.
- **Graduation Certificate:** To earn your graduation certificate, you must meet all the aeronautical knowledge and experience requirements for the course. This certificate will be issued by the chief instructor, or an assistant chief instructor or recommending instructor delegated by the chief instructor, in accordance with 14 CFR 141.85. This certificate signifies that you have met all the requirements and are prepared to take the FAA practical test to obtain your Private Pilot Certificate.

Part 61 Learners:

- **Aeronautical Knowledge (Ground Training):** While there is no minimum time requirement under part 61, it is recommended to complete a thorough course of aeronautical knowledge training, similar to the 35-hour requirement under part 141, to ensure comprehensive understanding and preparation.
  Note: The Gold Seal Ground School Course provides a certificate attesting to your completion of a home-study course, meeting the aeronautical knowledge training requirement.
- **Aeronautical Experience (Flight Training):** Complete at least 40 hours of flight training as prescribed in 14 CFR 61.109.
- **Stage Checks and End-of-Course Test:** Although not mandatory under part 61, it is highly beneficial to undergo stage checks and an end-of-course test to ensure readiness for the FAA practical test.

FAA Practical Test: After meeting the required flight experience and aeronautical knowledge, you must successfully pass the FAA practical test to obtain your Private Pilot Certificate.

Embark on this journey with us, where learning is not just about passing tests but becoming a skilled, knowledgeable, confident, and safe pilot ready to take on the skies!

Required Materials

The resources below are required for course completion. To help learners prepare and understand new tasks in the syllabus, most lessons indicate several study resources, which contain important reference information about the required tasks. Resources are listed in the lessons by their acronym (e.g. GS=Gold Seal Ground School, AFH=FAA Airplane Flying Handbook). Many of these resources are available at no cost from the FAA.

- Gold Seal Private Pilot Ground School (GS)
- Navigational Plotter
- Flight Computer (Manual E6B or Electronic)
- Federal Aviation Regulations (officially, the Code of Federal Regulations, i.e. 14 CFRs)
- Aeronautical Information Manual (AIM)
- Airplane Flying Handbook (AFH), FAA-H-8083-3
- Pilot's Handbook of Aeronautical Knowledge (PHAK). FAA-H-8083-25
- Private Pilot - Airplane Airman Certification Standards (ACS), FAA-S-ACS-6

Recommended Materials

While the resources below are not mandatory for course completion, we highly recommend a selection of supplementary materials to enrich your learning experience. These resources are available at no cost from the FAA, offering an invaluable supplement to your studies.

- Aeronautical Chart Users' Guide
- Aviation Weather Handbook (AWH), FAA-H-8083-28
- Weight & Balance Handbook (WB), FAA-H-8083-1
- Risk Management Handbook (RMH), FAA-H-8083-2

Current FAA documents and handbook versions should be used for the most up-to-date information.

Digital syllabus viewers: Click the underlined links above to download the FAA resources.

Private Pilot Flight Training Lessons

The Gold Seal Private Pilot Flight Training Course Syllabus is aligned with the standards set forth in 14 CFR 141, Appendix B - Private Pilot Certification Course. Presented below is a recommended timeline, detailing estimated completion times for each lesson to meet the aeronautical experience requirements. This schedule is provided as a guideline to assist both learners and instructors in planning and pacing the course effectively. Please note that these time estimates are not mandatory, but suggested durations.

Lesson	Lesson Title	Total	Dual	Solo	X/C	Night	Instru-ment
1	Introduction to Aircraft and the Flight	1.0	1.0				
2	Essentials of Aircraft Control	1.0	1.0				
3	Refining Takeoff and Landings	1.2	1.2				
4	Instrument Familiarization and Attitude Flying	1.3	1.3				1.0
5	Handling In-Flight Emergencies	1.5	1.5				
6	Advanced Aircraft Control and Ground Reference	1.7	1.7				
7	Slow Flight, Stalls, and Recovery	1.5	1.5				
8	Procedures for Go-Arounds and Forward Slips	1.2	1.2				
9	Pre-Solo Flight Review	1.2	1.2				
10	First Solo Flight - Traffic Patterns	1.2	0.6	0.6			
11	**Stage One Check - Solo Proficiency Review**	1.5	1.5				0.5
12	Short-Field and Soft-Field Takeoff and Landing	1.2	1.2				
13	Solo Practice Flight - Short and Soft Field	1.2		1.2			
14	Navigation Fundamentals and Cross-Country	1.2	1.2				
15	First Dual Cross-Country	1.5	1.5		1.5		0.5
16	Night Flight Introduction and Local Orientation	1.2	1.2			1.2	0.3
17	Night Operations and Towered Airport	1.5	1.5			1.5	
18	Dual Night Cross-Country Flight	2.0	2.0		2.0	2.0	
19	Solo Cross-Country Flight	2.0		2.0	2.0		
20*	Solo Cross-Country Flight(s) (Part 61)	5.0*		5.0*	5.0*		
21	**Stage Two Check - Advanced Solo and**	1.5	1.5				
22	Comprehensive Skills Review	1.2	1.2				
23	Complex Flight Operations and Scenario-Based	1.2	1.2				0.3
24	Solo Practice Flight - Comprehensive Maneuvers	1.5		1.5			
25	**Stage Three Check - Pre-Checkride Review**	1.5	1.5				
26	**End-of-Course Test - Mock Checkride**	2.0	2.0				0.4
	Part 141 Total Time (hours)	**35.0**	**29.7**	**5.3**	**5.5**	**4.7**	**3.0**
	Part 61 Total Time (hours)	**40.0**	**29.7**	**10.3**	**10.5**	**4.7**	**3.0**

*Lesson 20 is only required for Part 61 learners. This lesson time is only included in the Part 61 totals. Part 141 learners may optionally complete this lesson for additional practice.

Required Flight Training - Part 141 - Private Pilot

List of the flight tasks required by 14 CFR 141 Appendix B and where each is located within this syllabus.

Section	Subject	Stage	Lesson(s)
4.(a).(1)	35 hours of training if the course is for an airplane.	1-3	All Lessons
4.(b).(1)	20 hours of flight training from a certificated flight instructor.	1 2 3	1-11 12, 14-18, 21 22, 23, 25, 26
4.(b).(1).i	3 hours of cross-country flight training in a single-engine airplane.	2	15, 18
4.(b).(1).(ii)	3 hours of night flight training in a single-engine airplane that includes:	2	16-18
4.(b).(1).(ii).(A)	• One cross-country flight of more than 100-nautical-miles total distance.	2	18
4.(b).(1).(ii).(B)	• 10 takeoffs and 10 landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport.	2	16-18
4.(b).(1).(iii)	3 hours of flight training in a single engine airplane on the control and maneuvering of a single engine airplane solely by reference to instruments, including straight and level flight, constant airspeed climbs and descents, turns to a heading, recovery from unusual flight attitudes, radio communications, and the use of navigation systems/facilities and radar services appropriate to instrument flight.	1 2 3	4, 11 15, 16 23, 26
4.(b).(1).(iv)	3 hours of flight training in a single-engine airplane in preparation for the practical test within 60 days preceding the date of the test.	3	25, 26

Part 61 Training: Learners training under Part 61 should reference the specific aeronautical experience requirements listed in 14 CFR Part 61.109. This section outlines the necessary flight tasks and associated hours for obtaining a Private Pilot Certificate.

Stage 1 - Basic Flight Skills and Pre-Solo Preparation

Objective: The objective of Stage 1 is to equip the learner with the essential flying skills and procedural knowledge required for safe solo flight. Throughout this stage, learners will be introduced to fundamental flight maneuvers, emergency procedures, and critical aircraft control techniques. This foundational training ensures that each learner develops the confidence and competence necessary to operate an aircraft independently within the traffic pattern and prepares them for the comprehensive Stage One Check.

Lesson	Title
1	Introduction to Aircraft and the Flight Environment
2	Essentials of Aircraft Control
3	Refining Takeoffs and Landings
4	Instrument Familiarization and Attitude Flying
5	Handling In-Flight Emergencies
6	Advanced Aircraft Control and Ground Reference Maneuvers
7	Slow Flight, Stalls, and Recovery
8	Procedures for Go-Arounds and Forward Slips
9	Pre-Solo Flight Review
10	First Solo Flight - Traffic Patterns
11	**Stage One Check - Solo Proficiency Review**

Completion Standards: Stage 1 completion will be achieved when the learner has successfully passed the Stage One Check, demonstrating thorough proficiency in all the required maneuvers and procedures. The learner must show the ability to conduct solo flights safely, maintaining strict adherence to flight safety standards, operational procedures, and air traffic control requirements. The successful completion of this stage verifies that the learner is prepared for more advanced flight training, having established a solid base of essential flying skills.

Lesson 1 - Introduction to Aircraft and the Flight Environment

Objective: To familiarize the learner with the training airplane, including its systems, controls, and basic aerodynamic principles. The learner will also be introduced to the airport environment, emphasizing the understanding of runway and taxiway layouts, markings, and lighting. This lesson will include preflight preparation processes, including the use of checklists and understanding the documentation required for flight. Emergency procedures and the location of emergency equipment will also be covered to ensure safety preparedness from the very beginning of flight training.

Lesson Requirements **Study Resources:** GS: Sec 1, 2 AFH: Ch 1, 2, 3

Tasks	Description
☐ Preflight Inspection	Become familiar with and use appropriate checklists, check certificates and documents, aircraft logbooks, airplane condition.
☐ Flight Deck Familiarization	Identify flight deck controls, instruments, and avionics.
☐ Starting Procedures	Demonstrate engine start-up and checklist usage.
☐ Taxi Procedures	Practice taxiing, focusing on control use and airport signage.
☐ Effects of Controls	Understand how controls affect the aircraft on the ground and in flight.
☐ Introduction to Checklists	Learn the importance of using checklists for all phases of flight.
☐ Normal Takeoff	Execute a standard takeoff with instructor assistance.
☐ Four Fundamentals of Flight	Practice straight and level flight, climbs, descents, and turns.
☐ Collision Avoidance Procedures	Learn and apply visual scanning techniques and proper communication.
☐ Normal Approach and Landing	Perform a standard approach and landing with instructor assistance.
☐ Postflight Procedures	Conduct a postflight inspection and secure the aircraft.

Completion Standards: The lesson will be considered successfully completed when the learner demonstrates a basic understanding of the airplane's systems and controls, uses checklists effectively, and completes a thorough preflight inspection. The learner should be able to identify major parts of the airport, understand traffic patterns, and recognize key airport markings and lights. Additionally, the learner should show an awareness of the location and purpose of onboard emergency equipment and understand the initial actions to take in common emergency scenarios.

_____ _____ _____

Completion Date **Flight Time** **Instructor Signature**

Lesson 2 - Essentials of Aircraft Control

Objective: To enhance the learner's proficiency with the primary controls of the aircraft through the execution of basic flight maneuvers including straight and level flight, climbs, turns, and descents. The lesson will also reinforce the importance of effective flight deck management, radio communications, and collision avoidance procedures.

Lesson Requirements **Study Resources:** GS: Sec 1, 2 AFH: Ch 3, 4, 6

Task	Description
☐ Review Previous Lesson	Review and reinforce tasks from prior lesson(s) to build proficiency.
☐ Preflight Inspection	Check certificates and documents, aircraft logbooks, airplane condition.
☐ Flight Deck Management	Manage resources and workflow efficiently during flight operations.
☐ Radio Communications	Practice standard radio communication phrases and procedures.
☐ Straight-and-Level Flight	Learn and practice maintaining straight and level flight at various airspeeds.
☐ Climbs and Climbing Turns	Execute and maintain controlled climbs and turning climbs.
☐ Turns to Headings	Perform coordinated turns to specific headings.
☐ Descents and Descending Turns	Manage and execute controlled descents and turning descents.
☐ Level-off Techniques	Learn to smoothly transition from climbs and descents to level flight.
☐ Use of Trim	Use trim to aid in controlling the aircraft with minimal control pressure.
☐ Collision Avoidance Procedures	Implement visual scanning techniques and situational awareness to prevent in-flight collisions.
☐ Postflight Procedures	Conduct a postflight inspection and secure the aircraft.

Completion Standards: The lesson is successfully completed when the learner can demonstrate control over the aircraft by maintaining straight and level flight within ±200 feet, airspeed within ±20 knots, and heading within ±20 degrees. During climbs and descents, the learner should not deviate from the assigned altitude by more than 200 feet before leveling off. The learner should also exhibit proper communication skills, effective flight deck management, and adhere to collision avoidance procedures.

_____ _____ _____

Completion Date **Flight Time** **Instructor Signature**

Lesson 3 - Refining Takeoffs and Landings

Objective: To develop the learner's proficiency in traffic pattern operations, including normal and crosswind takeoffs and landings. This lesson will also emphasize the importance of wake turbulence avoidance and runway incursion avoidance, ensuring the learner can handle various airport environments and wind conditions safely.

Lesson Requirements **Study Resources:** GS: Sec 1, 2 AFH: Ch 6, 8, 9

Task	Description
☐ Review Previous Lesson	Review and reinforce tasks from prior lesson(s) to build proficiency.
☐ Preflight Inspection	Check certificates and documents, aircraft logbooks, airplane condition.
☐ Before Takeoff Check	Perform comprehensive checks before takeoff including control surfaces, instruments, systems, and identifying emergency landing locations.
☐ Normal Takeoff and Departure	Execute a standard takeoff and establish a proper climb out under normal conditions.
☐ Normal Approach and Landing	Perform a standard approach and landing, focusing on approach path management and smooth touchdown.
☐ Crosswind Takeoff and Departure	Conduct takeoffs and initial climb in crosswind conditions, applying appropriate control inputs to counteract drift.
☐ Crosswind Approach and Landing	Manage crosswind corrections during final approach and touchdown, ensuring safe and controlled landing.
☐ Traffic Patterns	Navigate through standard traffic patterns, understanding entry, exit, and closed traffic procedures.
☐ Runway Incursion Avoidance	Practice taxi and ground operations to avoid runway incursions and ensure safety in the airport environment.
☐ Collision Avoidance in Traffic Pattern	Practice visual scanning techniques and proper communication protocols to identify and avoid other aircraft within the traffic pattern, always ensuring safe separation and situational awareness.
☐ Wake Turbulence Avoidance	Learn and apply procedures to minimize risks associated with wake turbulence during takeoffs and landings.
☐ Postflight Procedures	Conduct a postflight inspection and secure the aircraft.

Completion Standards: The lesson will be considered successfully completed when the learner can perform, with minimal instructor assistance, both normal and crosswind takeoffs and landings. Specific tolerances include maintaining runway alignment during takeoff within ±5 degrees and achieving landings within the first third of the runway. The learner should maintain traffic pattern altitude ±150 feet, airspeed ±15 knots, and manage crosswind corrections effectively. Additionally, the learner should demonstrate a clear understanding of wake turbulence and runway incursion avoidance procedures, ensuring safe operations in and around the airport.

_____ _____ _____

Completion Date **Flight Time** **Instructor Signature**

Lesson 4 - Instrument Familiarization and Attitude Flying

Objective: To improve the learner's proficiency in the fundamentals of flight using primary flight instruments and to introduce basic instrument maneuvers that are critical for maintaining proper aircraft attitude. This lesson aims to develop the learner's ability to rely on instruments to control the aircraft in various phases of flight.

Lesson Requirements **Study Resources:** GS: Sec 1, 3 AFH: Ch 3, 5, 18

Task	Description
☐ Review Previous Lesson	Review and reinforce tasks from prior lesson(s) to build proficiency.
☐ Preflight Inspection	Check certificates and documents, aircraft logbooks, airplane condition.
☐ Flight by Reference to Instruments *	Familiarize learners with flight solely be referencing the primary flight instruments including the airspeed indicator, altimeter, attitude indicator, heading indicator, turn coordinator, and vertical speed indicator.
☐ Instrument Scan Techniques *	Teach effective scanning techniques for maintaining situational awareness using instruments.
☐ Straight-and-Level Flight *	Practice maintaining straight and level flight solely by reference to instruments.
☐ Constant Airspeed Climbs and Descents *	Perform constant airspeed climbs and descents using instrument readings.
☐ Turns to a Heading *	Conduct coordinated turns to specific headings using only instruments for guidance.
☐ Recovery from Unusual Flight Attitudes *	Practice recognizing and recovering from unusual flight attitudes using both outside visual references and by reference to flight instruments only. This involves identifying nose-high and nose-low attitudes, interpreting instrument readings, and applying proper control inputs to return the aircraft to normal flight conditions.
☐ Best Rate and Best Angle of Climb	Demonstrate and practice the best rate of climb (Vy) and best angle of climb (Vx) using instrument readings to optimize performance.
☐ Cruise Climb and Cruise Descent	Engage in cruise climb and cruise descent operations, focusing on maintaining specified parameters on flight instruments.
☐ Postflight Procedures	Conduct a postflight inspection and secure the aircraft.

*** By reference to instruments only.**

Completion Standards: The lesson will be successfully completed when the learner demonstrates the ability to maintain specified flight parameters with minimal deviation: altitude within ±150 feet, airspeed within ±15 knots, and heading within ±15 degrees during maneuvers. The learner should show effective use of instrument scan techniques and accurately perform climbs, descents, turns by reference to instruments, and recovery from unusual flight attitudes. Additionally, the learner should be able to explain the function and importance of each primary flight instrument.

Completion Date **Flight Time** **Instructor Signature**

Lesson 5 - Handling In-Flight Emergencies

Objective: To enhance the learner's ability to manage in-flight emergencies and abnormal situations effectively, including simulated engine malfunctions and system failures. This lesson aims to equip learners with the skills necessary to recognize, react to, and resolve emergencies safely using appropriate procedures, checklists, and memory items for various scenarios.

Lesson Requirements **Study Resources:** GS: Sec 3 AFH: Ch 4, 18

Task	Description
☐ Review Previous Lesson	Review and reinforce tasks from prior lesson(s) to build proficiency.
☐ Preflight Inspection	Check certificates and documents, aircraft logbooks, airplane condition.
☐ Emergency Equipment Familiarization	Discuss the location and use of onboard emergency equipment and survival gear.
☐ Use of Checklists and Memory Items	Practice the timely and accurate use of emergency checklists and memory items to ensure proper procedures are followed during emergencies.
☐ System and Equipment Malfunctions	Train on handling various simulated system and equipment malfunctions.
☐ Managing In-Flight Emergencies	Train on procedures for effectively managing various in-flight emergencies, including system failures, adverse weather encounters, and other unforeseen operational disruptions. Focus on maintaining control of the aircraft, prioritizing tasks, and communicating effectively with ATC or others as necessary.
☐ Aborted Takeoff Procedures	Practice procedures for aborting a takeoff safely. Advise the tower of intentions if at a towered airport.
☐ Simulated Engine Failures	Perform simulated engine failure procedures during various phases of flight such as takeoff roll, initial climb, and cruise.
☐ Emergency Approaches and Landings	Execute emergency approaches and conduct simulated forced landings both from the practice area and while in the traffic pattern, ensuring these maneuvers are practiced in areas where an actual landing could be performed safely.
☐ Flap Malfunctions	Train on handling flap malfunctions, specifically focusing on performing no flap landings to simulate scenarios where flaps fail to deploy normally.
☐ Postflight Procedures	Conduct a postflight inspection and secure the aircraft.

Completion Standards: This lesson will be considered successfully completed when the learner can confidently and safely handle in-flight emergencies and abnormal situations with minimal instructor assistance. Specific tolerances include maintaining altitude within ±100 feet, airspeed within ±10 knots, and heading within ±10 degrees during non-emergency maneuvers. The learner must display a comprehensive understanding of emergency equipment and demonstrate the effective use of emergency checklists and memory items, maintaining control and adherence to correct procedures during simulated emergencies such as aborted takeoffs, engine failures, and forced landings.

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Completion Date **Flight Time** **Instructor Signature**

Lesson 6 - Advanced Aircraft Control and Ground Reference Maneuvers

Objective: To advance the learner's proficiency in aircraft control through precision maneuvers including steep turns and ground reference maneuvers. This lesson enhances the learner's ability to accurately manage the effects of wind and to perform precise maneuvers necessary for safe and efficient flight operations. The maneuvers practiced also help reinforce traffic pattern operations, wake turbulence avoidance, and improve proficiency in both normal and crosswind approaches and landings.

Lesson Requirements **Study Resources:** GS: Sec 1, 2, 3 AFH: Ch 7, 9, 10

Task	Description
☐ Review Previous Lesson	Review and reinforce tasks from prior lesson(s) to build proficiency.
☐ Preflight Inspection	Check certificates and documents, aircraft logbooks, airplane condition.
☐ Steep Turns	Practice steep turns to master maintaining precise bank angles and altitude control.
☐ Rectangular Course	Fly a rectangular course to improve skills in tracking and understanding wind correction.
☐ S-turns	Execute S-turns across a road or similar reference line to manage varying wind conditions.
☐ Turns Around a Point	Perform turns around a point to develop coordination and wind drift correction abilities.
☐ Traffic Patterns Review	Review traffic pattern entries and operations, enhancing skills in navigation and coordination within the pattern.
☐ Wake Turbulence Avoidance	Learn and apply techniques to avoid wake turbulence during all phases of flight.
☐ Traffic Patterns	Practice entering and flying the standard traffic pattern approaching from different directions, emphasizing proper entry, smooth transitions between legs, accurate altitude and airspeed control, and correct communications.
☐ Normal and Crosswind Approach and Landing	Perform both normal and crosswind approaches and landings, focusing on approach path management, wind correction techniques, and achieving safe, controlled touchdowns.
☐ Postflight Procedures	Conduct a postflight inspection and secure the aircraft.

Completion Standards: The lesson will be successfully completed when the learner can perform steep turns, S-turns, turns around a point, and fly a rectangular course with the following tolerances: maintain altitude within ±150 feet, airspeed within ±15 knots, and heading within ±15 degrees. Additionally, the learner must demonstrate proficient pattern work, including correct entry, exit, leg transitions, and maintaining appropriate pattern altitude and airspeed. For landings, the learner should achieve safe, controlled touchdowns within the proper touchdown zone, under normal and crosswind conditions. The learner should also apply effective wind correction techniques during both normal and crosswind approaches and demonstrate the ability to manage aircraft configuration and speed accurately throughout the approach and landing phase.

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Completion Date **Flight Time** **Instructor Signature**

Lesson 7 - Slow Flight, Stalls, and Recovery

Objective: To enhance the learner's ability to manage aircraft during slow flight and to develop awareness and recovery skills from stall conditions in various flight attitudes. This lesson focuses on building the learner's competence in handling low-speed aerodynamics, stall recognition, and effective recovery techniques, including an introduction to the fundamentals of spin awareness.

Lesson Requirements **Study Resources:** GS: Sec 2 AFH: Ch 5

Task	Description
☐ Review Previous Lesson	Review and reinforce tasks from prior lesson(s) to build proficiency.
☐ Preflight Inspection	Check certificates and documents, aircraft logbooks, airplane condition.
☐ Maneuvering During Slow Flight	Practice maintaining control of the aircraft at minimal controllable airspeed to understand the characteristics and handling during slow flight.
☐ Stall Awareness and Recovery	Train on recognizing the signs of an approaching stall and executing immediate recovery maneuvers for both power-on and power-off stalls.
☐ Power-Off Stalls	Perform stalls that occur when the aircraft is configured for landing with power reduced, focusing on entry various attitudes and correct recovery techniques.
☐ Power-On Stalls	Execute stalls that occur during takeoff or climb-out phases, emphasizing entry various attitudes and correct recovery techniques.
☐ Spin Awareness and Recovery	Introduce basic concepts of spin dynamics, recognition, and recovery procedures to increase awareness and avoidance of spin conditions.
☐ Postflight Procedures	Conduct a postflight inspection and secure the aircraft.

Completion Standards: The lesson is successfully completed when the learner can maintain control during slow flight and stall entries and recoveries within specific tolerances: altitude within ±150 feet, airspeed within ±15 knots, and heading within ±15 degrees. Altitude loss during stall recovery should be minimized without any indications of a secondary stall. The learner must demonstrate confident handling of the aircraft during power-off and power-on stalls and apply immediate and correct recovery procedures. Additionally, the learner should exhibit a basic understanding of the conditions leading to a spin and demonstrate appropriate avoidance techniques. Mastery of these skills shows the learner's growing proficiency in managing complex flight dynamics safely and effectively.

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Completion Date **Flight Time** **Instructor Signature**

Lesson 8 - Procedures for Go-Arounds and Forward Slips to a Landing

Objective: To introduce the learner to go-around procedures, forward slips to a landing, and recovery from a balked or bouncing and ballooning during landing. Additionally, the learner will gain proficiency in takeoffs and landings, enhancing their ability to handle various landing scenarios and unexpected flight conditions.

Lesson Requirements **Study Resources:** GS: Sec 2, 3, 4 AFH: Ch 9

Task	Description
☐ Review Previous Lesson	Review and reinforce tasks from prior lesson(s) to build proficiency.
☐ Preflight Inspection	Check certificates and documents, aircraft logbooks, airplane condition.
☐ Recovery from a Balked Landing	Practice recovery techniques for bouncing or ballooning during landing to ensure a safe touchdown.
☐ Go-Around and Rejected Landings	Practice and perfect the procedure for safely aborting a landing and climbing out under various scenarios.
☐ Forward Slip to a Landing	Learn and execute forward slips to reduce altitude efficiently and align with the runway when necessary.
☐ Unexpected ATC Requests	Respond to non-standard ATC instructions, including runway changes and non-standard pattern entries and exits.
☐ ATC Light Signals Communication	Understand and respond appropriately to ATC light signals in case of communication failure.
☐ Wind Shear Avoidance	Identify and avoid wind shear during critical phases of flight.
☐ Simulated Engine Failure in Pattern	Execute emergency procedures for a simulated engine failure within the traffic pattern, including emergency descent and landing.
☐ Postflight Procedures	Conduct a postflight inspection and secure the aircraft.

Completion Standards: The learner must demonstrate a solid understanding and ability to execute go-around procedures, forward slips to a landing, and recovery from a balked landing. Additionally, the learner must show proficiency in managing flight in the traffic pattern. Altitude should be maintained within ±150 feet, airspeed within ±15 knots, and heading within ±15 degrees. These skills reflect the learner's growing capability to handle various operational challenges and emergency situations effectively.

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Completion Date **Flight Time** **Instructor Signature**

Lesson 9 - Pre-Solo Flight Review

Objective: To consolidate and evaluate the learner's proficiency in all pre-solo maneuvers and procedures necessary for safe solo flight operations. This lesson aims to ensure that the learner has a comprehensive understanding and practical ability to perform each task with minimal instructor intervention, focusing on readiness for solo flight.

Lesson Requirements

Task	Description
☐ Review all Previous Lessons	Review and reinforce tasks from prior lesson(s) to build proficiency.
☐ Preflight Assessment and Inspection	Check certificates and documents, aircraft logbooks, airplane condition.
☐ Operation of Airplane Systems	Ensure understanding of all primary and secondary airplane systems.
☐ Engine Starting and Taxiing	Practice starting the engine and taxi procedures, including run-ups.
☐ Runway Incursion Avoidance	Reinforce techniques to avoid runway incursions during ground operations.
☐ Collision Avoidance	Practice vigilant visual scanning and situational awareness to avoid other aircraft, emphasizing techniques in high-traffic areas.
☐ Windshear Recognition and Avoidance	Identify and avoid windshear conditions during all phases of flight, particularly during takeoff and landing.
☐ Wake Turbulence Avoidance	Learn and apply strategies to minimize risks associated with wake turbulence during takeoffs, landings, and in-flight operations.
☐ Normal and Crosswind Takeoffs and Landings	Review techniques for handling takeoffs and landings under normal and crosswind conditions.
☐ Straight and Level Flight, and Turns in Both Directions	Maintain straight and level flight, as well as executing coordinated turns to the left and right, focusing on precise control and stability.
☐ Climbs and Climbing Turns	Perform climbing maneuvers and climbing turns, emphasizing smooth transitions, consistent climb rates, and leveling off at an assigned altitude.
☐ Descents, with and Without Turns, Using High and Low Drag Configurations	Execute descents and descending turns with various configurations to manage airspeed and rate of descent effectively and leveling off at an assigned altitude.
☐ Airport Traffic Patterns, Including Entry and Departure Procedures	Review and demonstrate standard entry and exit procedures for airport traffic patterns, focusing on correct altitude, airspeed, and positioning for safe operations.
☐ Flight by Reference to Instruments	Confirm ability to fly the aircraft solely by reference to instruments.
☐ Maneuvering During Slow Flight	Practice flying the aircraft at low speeds and high angles of attack.
☐ Stall Awareness and Recovery	Review procedures for recognizing and recovering from power-off and power-on stalls.
☐ Steep Turns	Execute steep turns while maintaining strict altitude and airspeed control.
☐ Ground Reference Maneuvers	Execute ground reference maneuvers to enhance understanding of wind effects and ground speed control.
☐ Go-Around and Rejected Landing Procedures	Demonstrate procedures for safely aborting a landing.
☐ Forward Slips to a Landing	Demonstrate forward slips to simulate descent and landing under crosswind or emergency conditions.
☐ Recovery from Bouncing or Ballooning During Landing	Review techniques to recover safely from improper landings.
☐ Emergency Procedures and Simulated Engine Failures	Review emergency procedures including approaches with simulated engine malfunctions.
☐ Radio Communication Proficiency	Ensure proficient use of radio for all phases of flight, including emergency communication.
☐ Postflight Procedures	Conduct a postflight inspection and secure the aircraft.

Completion Standards: The learner must perform all the reviewed maneuvers and procedures confidently and safely, with minimal instructor guidance. The learner must be the sole manipulator of the controls during the entire flight to ensure readiness for solo operations. The learner must maintain flight within ±100 feet altitude, ±10 degrees heading, and ±10 knots airspeed during maneuvers, and demonstrate the ability to manage all aspects of flight independently. Successful completion of this lesson indicates that the learner is prepared for solo flight.

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Completion Date **Flight Time** **Instructor Signature**

Lesson 10 - First Solo Flight - Traffic Patterns

Objective: To prepare and evaluate the learner for their first solo flight, focusing on traffic pattern operations. The lesson consists of a dual instruction portion where the learner demonstrates proficiency in pre-solo maneuvers and a supervised solo portion where the learner conducts solo traffic pattern operations, including takeoffs, landings, and go-arounds (if necessary), under instructor supervision from the ground.

Lesson Requirements **Study Resources:** GS: Sec 2 AFH: Ch 1, 6

Task	Description
Preflight Portion:	
☐ Presolo Knowledge Test	Ensure the learner completes the presolo aeronautical knowledge test in accordance with 14 CFR 61.87(b), demonstrating understanding of applicable sections of parts 61 and 91; airspace rules and procedures for the airport where the solo flight will be performed; and flight characteristics and operational limitations for the make and model of aircraft to be flown.
☐ Instructor Endorsements	Obtain necessary instructor endorsements certifying readiness and legal eligibility for solo flight.
Dual Flight Portion:	
☐ Review Previous Lesson	Review and reinforce tasks from prior lesson(s) to build proficiency.
☐ Preflight Inspection	Check certificates and documents, aircraft logbooks, airplane condition.
☐ Radio Communication Proficiency	Execute proper radio communications during all ground and flight operations.
☐ Normal and Crosswind Takeoff and Landing	Perform takeoffs and landings in both normal and crosswind conditions with the instructor.
☐ Emergency Situation Handling	Practice response to simulated emergency situations to ensure readiness for solo flight.
☐ Postflight Procedures	Conduct a comprehensive postflight debrief and aircraft securing with the instructor.
Solo Flight Portion:	
☐ Radio Communications	Execute proper radio communications while operating solo.
☐ Traffic Pattern Solo Operations	Navigate the traffic pattern independently, performing all required maneuvers and checks.
☐ Normal and Crosswind Solo Takeoff and Climb	Perform solo takeoffs and climbs in both normal and crosswind conditions.
☐ Normal and Crosswind Solo Approach and Landing	Execute solo approaches and landings, adjusting for normal and crosswind conditions.
☐ Go-Around (if required)	Perform a go-around if conditions or safety considerations necessitate a balked landing.
☐ After Landing, Parking, and Securing Procedures	Complete after landing procedures including taxiing, parking, and securing the aircraft independently.
☐ Postflight Procedures	Conduct a postflight inspection and secure the aircraft.

Completion Standards: The learner must satisfactorily pass the pre-solo knowledge test and demonstrate safe, competent handling of the aircraft during both the dual and solo portions. The learner must maintain flight parameters within ±100 feet altitude, ±10 degrees heading, ±10 knots airspeed, and demonstrate effective coordination throughout the maneuvers. Successful completion of this lesson indicates the learner's readiness for further solo operations and their ability to manage the aircraft safely and independently in the traffic pattern.

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Completion Date **Flight Time** **Instructor Signature**

Note to Instructors: *An endorsement guide is provided in an appendix at the end of this syllabus.*

Lesson 11 - Stage One Check - Solo Proficiency Review

Objective: This stage check evaluates the learner's foundational flying skills taught in the initial lessons. The learner's ability to perform all maneuvers and procedures effectively will be assessed, ensuring they are prepared for more advanced training. The focus is on confirming proficiency and readiness to progress, emphasizing adherence to performance standards and safety protocols.

Lesson Requirements

Task	Task
☐ Review all Previous Lessons	☐ Flight by Reference to Instruments
☐ Preflight Assessment and Inspection	☐ Maneuvering During Slow Flight
☐ Operation of Airplane Systems	☐ Stall Awareness and Recovery
☐ Engine Starting and Taxiing	☐ Steep Turns
☐ Runway Incursion Avoidance	☐ Recovery from Unusual Flight Attitudes
☐ Collision Avoidance	☐ Ground Reference Maneuvers
☐ Windshear Recognition and Avoidance	☐ Go-Around and Rejected Landing Procedures
☐ Wake Turbulence Avoidance	☐ Forward Slips to a Landing
☐ Normal and Crosswind Takeoffs and Landings	☐ Recovery from Bouncing or Ballooning During Landing
☐ Straight and Level Flight, and Turns in Both Directions	☐ Emergency Procedures and Simulated Engine Failures
☐ Climbs and Climbing Turns	☐ Radio Communications
☐ Descents, With and Without Turns, Using High and Low Drag Configurations	☐ Postflight Procedures
☐ Airport Traffic Patterns, Including Entry and Departure Procedures	

Completion Standards: The learner must show competence in managing all aspects of flight operations, from preflight to postflight procedures, including all pre-solo maneuvers, effective communication, and emergency management. The learner must demonstrate their ability to maintain control of the aircraft within these tolerances: altitude within ±100 feet, airspeed within ±10 knots, and heading within ±10 degrees during all maneuvers. Additionally, the learner must perform all maneuvers without instructor assistance, demonstrating readiness for more advanced training and solo flight operations beyond the local airport and adherence to all safety protocols.

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Completion Date **Flight Time** **Instructor Signature**

Stage 2 - Performance Skills and Cross-Country Flying

Objective: The objective of Stage 2 is to expand the learner's proficiency in specialized takeoff and landing techniques, including short-field and soft-field operations. This stage also aims to build confidence and autonomy in solo flights while introducing essential navigation skills required for cross-country flying. Learners will engage in both dual and solo cross-country flights to apply these navigation skills in practical scenarios. Additionally, this stage covers night flying requirements, offering learners both theoretical knowledge and practical experience in night operations within controlled and uncontrolled airport environments.

Lesson	Title
12	Short-Field and Soft-Field Takeoff and Landing Techniques
13	Solo Practice Flight - Short and Soft Field Techniques
14	Navigation Fundamentals and Cross-Country Flight Planning
15	First Dual Cross-Country
16	Night Flight Introduction and Local Orientation
17	Night Operations and Towered Airport Procedures
18	Dual Night Cross-Country Flight
19	Solo Cross-Country Flight
20	Solo Cross-Country Flight(s) (Part 61)
21	**Stage Two Check - Advanced Solo and Navigation Skills**

Completion Standards: Stage 2 will be deemed complete when the learner successfully passes the Stage Two Check, demonstrating advanced proficiency in performance takeoff and landing techniques, as well as navigation and cross-country flying skills. The learner must also show competence in managing night flight operations, adhering to all regulatory requirements for night flying. Completion standards include the ability to conduct advanced solo cross-country flights safely, navigate effectively using both visual and instrument flight rules, and perform specialized takeoffs and landings within precise operational tolerances. Successful completion of this stage confirms the learner's readiness to handle more complex flying environments and prepares them for the comprehensive review and checkride preparations in the next stage of their training.

Lesson 12 - Short-Field and Soft-Field Takeoff and Landing Techniques

Objective: This lesson aims to equip learners with the necessary skills and techniques for performing takeoffs and landings on short and soft fields. Learners will understand the different challenges these conditions present and how to adapt their takeoff and landing techniques to meet these challenges effectively. Emphasis is placed on understanding the environmental and operational factors that influence these maneuvers.

Lesson Requirements **Study Resources:** GS: Sec 3 AFH: Ch 6, 9

Task	Description
☐ Review Previous Lesson	Review and reinforce tasks from prior lesson(s) to build proficiency.
☐ Preflight Inspection	Check certificates and documents, aircraft logbooks, airplane condition.
☐ Soft-field Takeoff and Climb	Practice takeoffs and climbs from surfaces that simulate soft fields, emphasizing minimal ground contact and obstacle clearance.
☐ Soft-field Approach and Landing	Perform landings on simulated soft surfaces, focusing on gentle touchdowns and maintaining control without excessive braking.
☐ Short-field Takeoff and Climb	Execute takeoffs from short runways or confined areas, maximizing climb performance to clear obstacles safely.
☐ Short-field Approach and Landing	Conduct landings where precision is required and minimal landing distance is available, using appropriate flaps, precise airspeed, aiming for precise touchdown points, and maximum braking.
☐ Postflight Procedures	Conduct a postflight inspection and secure the aircraft.

Completion Standards: The learner must demonstrate a clear understanding and practical ability to perform short-field and soft-field takeoffs and landings. Completion standards require that the learner maintains altitude within ±100 feet, airspeed within ±10 knots, and heading within ±10 degrees during these maneuvers. The learner should exhibit control and precision, effectively managing the aircraft's performance to adapt to the specific demands of the runway environment and surface conditions. This includes correctly applying techniques to minimize ground roll and maximize obstacle clearance in short-field operations, and preserving momentum and directional control on softer surfaces.

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Completion Date **Flight Time** **Instructor Signature**

Lesson 13 - Solo Practice Flight - Short and Soft Field Techniques

Objective: The objective of this lesson is to solidify the learner's ability to independently manage and execute specialized takeoff and landing techniques, as well as other essential maneuvers in a solo flight setting. This solo practice aims to build the learner's confidence and proficiency, ensuring they can apply the skills learned in varying conditions and scenarios without instructor assistance.

Lesson Requirements **Study Resources:** GS: Sec 3 AFH: Ch 6, 7, 8, 9

Task	Description
☐ Review Previous Lesson	Review and reinforce tasks from prior lesson(s) to build proficiency.
☐ Preflight Inspection	Check certificates and documents, aircraft logbooks, airplane condition.
☐ Normal and Crosswind Takeoff and Landing	Practice executing takeoffs and landings under both normal and crosswind conditions. Focus on controlling the aircraft during takeoff to achieve stable climbs and during landing to ensure precise and safe touchdowns in varying wind scenarios.
☐ Soft-field Takeoff and Landing	Practice takeoffs and landings on simulated soft field conditions, focusing on minimizing ground contact during takeoff and ensuring gentle, controlled touchdowns during landings.
☐ Short-field Takeoff and Landing	Execute takeoffs and landings in confined or short runway conditions, maximizing performance to safely clear obstacles on takeoff and minimizing landing distance with precise touchdown points.
☐ Traffic Pattern Operations	Execute multiple circuits within the traffic pattern, focusing on maintaining consistent airspeed, altitude, and proper sequencing.
☐ Radio Communication Proficiency	Practice proficient radio communications, ensuring clear and correct transmissions and responses during all phases of the solo flight.
☐ Emergency Approach and Landing	Simulate emergency landing scenarios to reinforce decision-making and execution under stress.
☐ Ground Reference Maneuvers	Practice ground reference maneuvers including S-turns and turns around a point to enhance control and awareness of wind effects.
☐ Forward Slip to a Landing	Perform forward slips to landing, improving skill in rapid descent and runway alignment techniques.
☐ Go-around/Rejected Landing	Practice go-around procedures from approach or landing phases to ensure readiness to abort landings safely.
☐ Postflight Procedures	Conduct a postflight inspection and secure the aircraft.

Completion Standards: The learner must complete the listed maneuvers with minimal deviations from expected performance standards. Specifically, the learner must maintain altitude within ±100 feet, airspeed within ±10 knots, and heading within ±10 degrees during all maneuvers. Additionally, the learner should exhibit confident control over the aircraft, navigating through traffic patterns and ground reference maneuvers with precision. Successful completion of this lesson signifies the learner's growing independence and readiness to handle complex flying tasks.

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Completion Date **Flight Time** **Instructor Signature**

Lesson 14 - Navigation Fundamentals and Cross-Country Flight Planning

Objective: The objective of this lesson is to equip learners with the necessary skills to effectively navigate using both traditional methods like pilotage and dead-reckoning, and modern technologies such as GPS and VOR systems. Additionally, this lesson introduces comprehensive cross-country flight planning, covering chart usage to weather assessment and performance calculations. The focus is on preparing learners for safe and efficient navigation and flight management over longer distances.

Lesson Requirements **Study Resources:** GS: Sec 4, 5 PHAK: Ch 10-16

Task	Description
☐ Review Previous Lesson	Review and reinforce tasks from prior lesson(s) to build proficiency.
☐ Preflight Inspection	Check certificates and documents, aircraft logbooks, airplane condition.
☐ Cross-Country Flight Planning	Learn to plan flights using aeronautical charts, Chart Supplement, NOTAMs, and other relevant publications.
☐ Performance and Limitations	Learn to determine aircraft performance parameters and weight and balance computations. Practice calculating groundspeed, estimating time of arrival, and fuel requirements for planned flights.
☐ Acquiring Weather Information	Obtain and interpret weather information critical for flight planning.
☐ Flight Deck Management	Develop skills in managing flight deck resources during flight preparation and execution.
☐ Pilotage	Practice using visual references on the ground to navigate.
☐ Dead-Reckoning	Learn to navigate using time, speed, distance, and heading calculations.
☐ Use of Navigation Systems	Train on using VORs for orientation and tracking radials, and GPS for position and course tracking.
☐ Radio Communications	Enhance skills in using radio for ATC communication and radar services.
☐ In-Flight Weather Information Acquisition	Train on obtaining and using weather updates during flight.
☐ In-Flight Visibility Estimation	Train on techniques for estimating visibility while airborne.
☐ Recognizing Critical Weather Situations	Learn to recognize and respond to weather situations that could impact flight safety.
☐ Postflight Procedures	Conduct a postflight inspection and secure the aircraft.

Completion Standards: This learner must demonstrate a thorough understanding of navigation systems and effectively integrate the use of pilotage, dead-reckoning, and electronic aids to maintain a precise course. Learners must be able to manage flight deck operations and communicate proficiently with ATC. Flight parameters such as altitude, heading, and airspeed should be maintained within strict tolerances: altitude within ±100 feet, airspeed within ±10 knots, and heading within ±10 degrees during navigation exercises. Completion of this lesson signifies the learner's readiness to handle more complex navigation scenarios essential for cross-country flying.

Completion Date **Flight Time** **Instructor Signature**

Lesson 15 - First Dual Cross-Country

Objective: The objective of this lesson is to strengthen the learner's skills in planning and executing a cross-country flight under dual instruction. The focus is on reinforcing the learner's ability to use traditional and electronic navigation tools effectively, manage in-flight changes, and handle abnormal conditions and emergency procedures. This lesson builds confidence in the learner's capability to undertake longer flights, emphasizing accurate navigation, comprehensive flight planning, and adherence to aviation regulations.

Lesson Requirements **Study Resources:** GS: Sec 4, 5 PHAK: Ch 10-16

Task	Description
☐ Review Previous Lesson	Review and reinforce tasks from prior lesson(s) to build proficiency.
☐ Preflight Inspection	Check certificates and documents, aircraft logbooks, airplane condition.
☐ Cross-Country Planning Discussion	Review the principles of cross-country flight planning, including route selection and alternate planning.
☐ Creating a Navigation Log	Develop a detailed navigation log, incorporating waypoints, headings, times, and fuel calculations.
☐ Preflight Preparations	Conduct comprehensive preflight checks including weather briefings, aircraft performance assessments, and weight and balance computations.
☐ VFR Flight Plan	Learn to file, open, and close a VFR flight plan with flight service stations.
☐ Flight Computer and Nav Tools	Utilize a flight computer for preflight planning and course plotting and real-time adjustments during flight.
☐ Cross-Country Flight	Perform the cross-country flight under instructor supervision, applying learned navigation techniques.
☐ Pilotage	Use visual references on the ground to navigate.
☐ Dead-Reckoning	Navigate using time, speed, distance, and heading calculations.
☐ Navigation Systems	Use VORs and GPS systems for navigation accuracy and reliability.
☐ In-Flight Management	Manage the flight deck effectively, ensuring efficient utilization of all resources and adherence to operational procedures during the flight.
☐ Using Radar Services	Utilize radar services such as flight following to enhance situational awareness and safety while in controlled airspace.
☐ Flight by Reference to Instruments	Practice flight solely by reference to instruments while simultaneously navigating a portion of the cross-country route.
☐ Managing In-Flight Emergencies	Practice handling simulated emergency scenarios, including abnormal system conditions and malfunctions.
☐ Lost Procedures	Train on the procedures to follow if disoriented or lost during flight, including how to use all available resources to reorient the flight path.
☐ Diversion to an Alternate Airport	Plan and execute a diversion to an alternate airport as if responding to an unexpected event or condition during the flight.
☐ Performance Takeoffs and Landings	Execute short-field and soft-field takeoffs and landings during the cross-country flight.
☐ Postflight Procedures	Conduct a postflight inspection and secure the aircraft.

Completion Standards: This learner must demonstrate proficient use of navigation systems, effective communication with air traffic control, and proper management of all flight-related tasks. The learner must maintain flight parameters within the following tolerances: altitude within ±100 feet, airspeed within ±10 knots, and heading within ±5 degrees. Additionally, the learner should execute all cross-country planning and in-flight adjustments accurately, with stabilized approaches and precise performance landings. Successful completion of this lesson confirms the learner's readiness to manage complex flying tasks and adapt to changing conditions during cross-country operations.

Completion Date **Flight Time** **Instructor Signature**

Lesson 16 - Night Flight Introduction and Local Orientation

Objective: The objective of this lesson is to familiarize learners with the essential preparations and operations for night flying. This includes understanding the changes in visual perception at night, using aircraft and airport lighting effectively, and managing the flight deck under diminished light conditions. The lesson builds confidence and competence in handling typical and emergency situations encountered during night flight. ***Note:*** *Landings at night should be made to a full stop.*

Lesson Requirements **Study Resources:** GS: Sec 3, 5 AFH: Ch 11

Task	Description
☐ Review Previous Lesson	Review and reinforce tasks from prior lesson(s) to build proficiency.
☐ Preflight Inspection	Check certificates and documents, aircraft logbooks, airplane condition.
☐ Night Preflight Assessment	Conduct thorough preflight checks focusing on aircraft lighting systems and all navigational aids.
☐ Night Flying Regulations	Understand FAA regulations specific to night flying, including required equipment, operational limitations, and currency requirements.
☐ Human Factors in Night Flying	Discuss human factors affecting night flying, such as visual illusions, fatigue, and the importance of maintaining night vision.
☐ Airport Lighting and Identification	Learn to identify different types of airport lighting and their significance during night operations.
☐ Aircraft and Personal Equipment Requirements	Review required night flying equipment for the aircraft and recommended personal gear for pilot safety.
☐ Night Safety Precautions	Discuss safety precautions necessary both on the ground and in the air during night operations.
☐ Taxiing and Runway Incursion Avoidance at Night	Practice safe taxiing procedures and runway incursion avoidance techniques in low-light conditions.
☐ Takeoffs and Landings at Night	Perform normal, short, and soft field takeoffs and landings under night conditions.
☐ Night Traffic Patterns and Go-Arounds	Navigate through traffic patterns specifically adjusted for night flying and execute go-arounds when necessary.
☐ Night Emergency Procedures	Practice emergency procedures specific to night flying with scenario-based training.
☐ Flight by Reference to Instruments	Reinforce skills in flying solely by reference to instruments.
☐ Postflight Procedures	Conduct a postflight inspection and secure the aircraft.

Completion Standards: This learner must confidently navigate the local practice area and airport traffic pattern at night, correctly identify and use aircraft and airport lighting, and maintain strict control over the aircraft. Specific performance metrics include maintaining altitude within ±200 feet, airspeed within ±10 knots, and heading within ±15 degrees. Additionally, the learner must demonstrate the ability to manage all aspects of night flight safely and effectively, including emergency procedures and flight by reference to instruments. Mastery of these tasks indicates readiness to proceed with more complex night flying operations.

Completion Date **Flight Time** **Instructor Signature**

Lesson 17 - Night Operations and Towered Airport Procedures

Objective: The aim of this lesson is to enhance the learner's proficiency in conducting night operations and operations at towered airports at night. This includes mastering night takeoffs and landings, effective communication with air traffic control, and navigating towered airspace under night conditions. The lesson will also cover critical emergency procedures like handling lost communications and interpreting light gun signals to ensure comprehensive readiness for night flying in controlled environments. ***Note:*** *Landings at night should be made to a full stop.*

Lesson Requirements **Study Resources:** GS: Sec 2, 3, 5 AFH: Ch 11 PHAK: Ch 14

Task	Description
☐ Review Previous Lesson	Review and reinforce tasks from prior lesson(s) to build proficiency.
☐ Preflight Inspection	Check certificates and documents, aircraft logbooks, airplane condition.
☐ Review of Night Flying Regulations	Reinforce FAA regulations specific to night flying, emphasizing those applicable to operations within towered airspace.
☐ Human Factors and Night Vision	Discuss techniques to enhance night vision and manage fatigue during night operations, crucial for safe flying.
☐ Navigating Towered Airspace at Night	Navigate within controlled airspace under night conditions, understanding the challenges and requirements of night VFR operations.
☐ Takeoffs and Landings at a Towered Airport at Night	Perform normal, short, and soft field night takeoffs and landings at an airport with an operating control tower, focusing on precise control and adherence to tower instructions.
☐ Night Traffic Patterns and Go-Arounds	Navigate through traffic patterns specifically adjusted for night flying and execute go-arounds when necessary.
☐ Radio Communications at Night	Practice radio communications specific to night operations at towered airports, including standard phraseology and responses.
☐ Lost Communications Procedures and Light Gun Signals	Train on procedures to follow in the event of lost communications during night operations at a towered airport, including the use of light gun signals.
☐ Postflight Procedures	Conduct a postflight inspection and secure the aircraft.

Completion Standards: The learner must demonstrate their ability to perform takeoffs and landings at a towered airport during nighttime, adhering strictly to ATC instructions and tower communications. The learner must maintain flight parameters within the following tolerances: altitude within ±150 feet, airspeed within ±10 knots, and heading within ±10 degrees. Furthermore, the learner should exhibit a thorough understanding of night flying regulations, effective resource management, and the ability to respond to visual signals from the tower during lost communication scenarios. By the end of this lesson, the learner must have completed at least 8 takeoffs and landings at night to a full stop. Mastery of these elements indicates readiness to handle night operations in more complex and controlled environments safely and efficiently.

Completion Date **Flight Time** **Instructor Signature**

Lesson 18 - Dual Night Cross-Country Flight

Objective: The objective of this lesson is to develop the learner's ability to plan and execute a night cross-country flight, navigating effectively over a distance exceeding 100 NM with precision and safety. The focus is on reinforcing the learner's skills in using navigation systems and adapting to the challenges of night flying, including landing at unfamiliar airports and managing flight under reduced visibility conditions.

Lesson Requirements **Study Resources:** GS: Sec 2, 3, 4, 5 PHAK: Ch 10-16

Task	Description
☐ Review Previous Lesson	Review and reinforce tasks from prior lesson(s) to build proficiency.
☐ Preflight Inspection	Check certificates and documents, aircraft logbooks, airplane condition.
☐ Night Cross-Country Flight Planning	Plan a cross-country flight that meets the minimum distance requirement of more than 100 NM.
☐ Preflight Preparations and Checks	Conduct thorough preflight preparations with a focus on nighttime conditions, including weather briefings and aircraft systems checks.
☐ Navigation at Night	Navigate using pilotage, dead reckoning, and electronic navigation, such as GPS and VORs.
☐ Night Flight Management	Manage flight resources and the flight deck environment effectively during nighttime operations.
☐ Emergency Procedures at Night	Practice emergency procedures specific to night flying, preparing for scenarios such as electrical failures or disorientation.
☐ Use of Night Vision and Lighting	Enhance skills in using aircraft lighting systems and maintaining night vision throughout the flight.
☐ Landing at Unfamiliar Airports	Perform landings at airports not previously visited, focusing on approach and landing techniques suitable for night operations.
☐ Lost Procedures	Review the procedures to follow if disoriented or lost during flight, including using all available resources to reorient the flight path.
☐ Diversion to an Alternate Airport	Plan and execute or simulate a diversion to an alternate airport as if responding to an unexpected event or condition during the flight.
☐ Radio Communications	Maintain correct communications with the airports utilized and enroute air traffic control, emphasizing the unique requirements of night flying.
☐ Postflight Procedures	Conduct a postflight inspection and secure the aircraft.

Completion Standards: The learner must demonstrate proficiency in conducting a night cross-country flight, maintaining strict adherence to the planned route within a 2 NM deviation unless a diversion is necessary. Specific performance metrics include maintaining altitude within ±100 feet, airspeed within ±10 knots, and heading within ±10 degrees. Additionally, the learner must have completed a total of at least 3 hours of night flight training, including 10 takeoffs and 10 landings to a full stop by the completion of this lesson. Upon successful completion, the learner will receive the instructor's endorsement for solo cross-country privileges in their logbook, confirming their readiness to undertake solo cross-country flights.

Completion Date **Flight Time** **Instructor Signature**

Lesson 19 - Solo Cross-Country Flight

Objective: The objective of this lesson is to enhance the learner's proficiency in planning and executing a solo cross-country flight. The flight must cover a minimum total distance of 100 NM if conducted under Part 141, or 150 NM under Part 61, with at least one segment involving a straight-line distance of at least 50 NM between takeoff and landing locations. This experience builds the learner's confidence and ability to manage extended routes, ensuring thorough preparation and strict adherence to flight regulations. The lesson emphasizes comprehensive flight planning, precise navigation, and effective flight deck management across a diverse geographic area.

Lesson Requirements **Study Resources:** GS: Sec 2, 4, 5 PHAK: Ch 10-16

Task	Description
☐ Preflight Inspection	Check certificates and documents, aircraft logbooks, airplane condition.
☐ Cross-Country Flight Planning	Plan a solo cross-country flight that meets the minimum distance requirements (100 NM under Part 141, 150 NM under Part 61) with at least one segment over 50 NM.
☐ Preflight Preparations	Conduct comprehensive preflight checks focused on the extended nature of the flight, including weather, NOTAMs, and aircraft readiness.
☐ Obtaining Weather Information	Gather and interpret weather data to plan and adjust flight routes as necessary.
☐ VFR Flight Plan	File, open, and close a VFR flight plan with flight service stations.
☐ VFR Navigation and Radar Services	Utilize pilotage, dead reckoning, and electronic navigation systems such as VORs, GPS, and radar services to navigate accurately.
☐ Flight Deck Management	Efficiently manage the flight deck during longer flight operations, maintaining focus and managing resources.
☐ Airport Operations	Perform full-stop landing(s) at both towered and non-towered airports, adhering to appropriate communication and procedural standards, to demonstrate proficiency in varied airport environments.
☐ Radio Communications and ATC Interaction	Communicate with multiple air traffic control facilities, ensuring clear and accurate transmissions. Use VFR Flight Following if available.
☐ Computing Groundspeed, ETAs, and Fuel Consumption	Calculate groundspeed, estimate times of arrival at various checkpoints, and manage fuel consumption throughout the flight.
☐ Emergency Procedures	Be prepared to handle potential emergencies that might arise during longer cross-country flights.
☐ Performance Takeoffs and Landings	Execute short-field and soft-field takeoffs and landings as part of the cross-country itinerary.
☐ Postflight Procedures and Review	Complete a detailed postflight analysis and inspection, including aircraft securing and a critique session with the instructor to discuss flight performance and decision-making.

Completion Standards: The learner must plan and conduct the solo cross-country flight, utilizing pilotage, dead reckoning, and electronic navigation aids effectively. The learner must maintain altitude within ±100 feet, airspeed within ±10 knots, and heading within ±10 degrees, and stay within 2 NM of the planned route, unless deviations are necessary. Proficiency in managing the flight deck and interacting with ATC over an extended period and in various airspace must be demonstrated. Upon completion, the learner's performance will be evaluated through a detailed postflight critique to assess their decision-making, problem-solving, and overall performance during the flight. By the end of this lesson, the learner must have completed at least three takeoffs and landings to a full stop at airports with operating control towers.

Completion Date **Flight Time** **Instructor Signature**

Lesson 20 - Solo Cross-Country Flight(s) (Part 61)

Objective: The objective of this lesson is to enhance the part 61 learner's proficiency in conducting solo cross-country flights. This involves demonstrating effective planning, navigation, and overall flight management for a flight that includes a landing at an airport located more than 50 NM from the original departure point. Part 61 learners may complete this lesson multiple times to meet the minimum experience requirements and build proficiency according to the Airman Certification Standards.

Note: This lesson is optional for part 141 learners, who may choose to complete it for additional solo cross-country practice.

Lesson Requirements **Study Resources:** GS: Sec 2, 4, 5 PHAK: Ch 10-16

Task	Description
☐ Preflight Inspection	Check certificates and documents, aircraft logbooks, airplane condition.
☐ Cross-Country Flight Planning	Independently plan a cross-country flight that includes a destination more than 50 NM straight-line distance from the departure airport.
☐ Preflight Preparations	Conduct thorough preflight checks, including weather assessments, aircraft performance evaluations, and fuel management.
☐ Obtaining Weather Information	Gather and interpret weather data to plan and adjust flight routes as necessary.
☐ VFR Flight Plan	File, open, and close a VFR flight plan with flight service stations.
☐ VFR Navigation and Radar Services	Utilize pilotage, dead reckoning, and electronic navigation systems such as VORs, GPS, and radar services to navigate accurately.
☐ Flight Deck Management	Manage the flight deck resources efficiently during the solo flight.
☐ Radio Communications and ATC Interaction	Handle all communications with airports and air traffic control, maintaining professionalism and accuracy. Use VFR Flight Following if available.
☐ Airport Operations	Perform full-stop landing(s) at both towered and non-towered airports, adhering to appropriate communication and procedural standards, to demonstrate proficiency in varied airport environments.
☐ Computing Groundspeed, ETAs, and Fuel Consumption	Calculate groundspeed, estimate times of arrival at various checkpoints, and manage fuel consumption throughout the flight.
☐ Emergency Procedures	Be prepared to execute emergency procedures as learned in prior training if necessary.
☐ Postflight Procedures	Conduct a postflight inspection and secure the aircraft.

Completion Standards: The learner must plan and conduct the solo cross-country flight(s), utilizing pilotage, dead reckoning, and electronic navigation aids effectively. The flight(s) should be conducted safely and efficiently, integrating all previously learned skills to meet FAA ACS standards. The learner should demonstrate effective planning, accurate navigation, and competent flight management throughout the journey. Specific performance metrics include maintaining altitude within ±100 feet, airspeed within ±10 knots, and heading within ±10 degrees, and must remain within 2 NM of the planned route. Upon completion, the learner's performance will be evaluated through a detailed postflight critique to assess their decision-making, problem-solving, and overall performance during the flight. By the end of this lesson, the part 61 learner must have accumulated at least 5 hours of solo cross-country flight time.

_____ _____ _____

Completion Date **Flight Time** **Instructor Signature**

Lesson 21 - Stage Two Check - Advanced Maneuvers and Navigation Skills

Objective: The objective of this stage check is to assess the learner's readiness to progress to the final stage which focuses on review lessons and checkride preparation. This assessment involves a thorough evaluation by a flight instructor to verify the learner's proficiency in performance takeoffs and landings, advanced solo flight, navigation skills, and aeronautical decision making and judgment. The learner must independently demonstrate a comprehensive understanding and competently execute all tasks and maneuvers required for safe and effective flight operations.

Lesson Requirements

Task	Task
☐ Preflight Inspection	☐ Stalls - Power-on and Power off
☐ Preflight Preparations	☐ Spin Awareness
☐ Airworthiness Requirements	☐ Cross-Country Flight Planning
☐ Airplane Maintenance Records	☐ Navigation use Pilotage and Dead Reckoning
☐ Operation of Airplane Systems	☐ Navigation Systems
☐ Preflight Assessment	☐ Lost Procedures
☐ Flight Deck Management	☐ Diversion to an Alternate Airport
☐ Engine Starting	☐ Systems and Equipment Malfunctions
☐ Radio Communication	☐ Managing In-Flight Emergencies
☐ Airport Markings, Signs, and Lights	☐ Emergency Descent
☐ Taxiing	☐ Emergency Approach and Landing
☐ Runway Incursion Avoidance	☐ Traffic Patterns
☐ Before Takeoff Check	☐ Go-around/Rejected Landing
☐ Short and Soft Field Takeoff and Landings	☐ Forward Slip to a Landing
☐ Steep Turns	☐ After Landing Procedures
☐ Maneuvering During Slow Flight	☐ Parking and Securing the Airplane
☐ Stalls - Power-on and Power off	☐ Postflight Procedures

Completion Standards: The learner must demonstrate consistent proficiency across all evaluated tasks, meeting the current FAA Private Pilot Airman Certification Standards. Additionally, the learner should exhibit effective management of the flight deck and maintain strict adherence to all operational procedures. The ability to perform complex maneuvers and navigate under various conditions will be critical in determining readiness for the next stage of training and the eventual checkride.

Completion Date **Flight Time** **Instructor Signature**

Stage 3 - Review and Checkride Preparation

Objective: The objective of Stage 3 is to refine and consolidate the learner's mastery of all required flight maneuvers and operational procedures in preparation for the FAA practical test. The stage begins with a comprehensive skills review to evaluate and pinpoint areas needing enhancement. This is followed by complex flight operations and scenario-based training, designed to intensively challenge the learner, and boost their decision-making skills under varied flight conditions. After these targeted training sessions, learners engage in solo practice to refine their maneuvers, culminating in a thorough pre-checkride review and a mock checkride. The focus throughout is on ensuring learners can consistently meet or exceed FAA Airman Certification Standards, demonstrating robust flight proficiency and operational safety as they prepare for the practical test.

Lesson	Title
22	Comprehensive Skills Review
23	Complex Flight Operations and Scenario-Based Training
24	Solo Practice Flight - Comprehensive Maneuvers Refinement
25	**Stage Three Check - Pre-Checkride Review**
26	**End-of-Course Test - Mock Checkride**

Completion Standards: Stage 3 will be considered complete when the learner successfully passes the Stage Three Check and the End-of-Course Test, and Mock Checkride, demonstrating a high level of proficiency in all flight maneuvers and adherence to FAA standards. The learner must show exceptional ability in managing complex flight operations, effectively handling emergency procedures, and navigating various flight scenarios. The learner must consistently perform all maneuvers with precision and confidence, maintaining tight tolerances in accordance with the FAA standards: or in the absence of a specified standards, maintain altitude within ±100 feet, airspeed within ±10 knots (or +10/-0 knots as appropriate), and heading within ±10 degrees, and specified angle of bank within ±10 degrees. Additionally, the learner must exhibit comprehensive understanding and application of the knowledge areas pertinent to the private pilot certification, demonstrating readiness for the FAA practical test. Successful completion of this stage signifies that the learner is fully prepared to undertake and pass the checkride, qualifying them for the Private Pilot certificate.

Lesson 22 - Comprehensive Skills Review

Objective: The objective of this lesson is to conduct an extensive review of all previously learned flight maneuvers and procedures to ensure the learner has a solid grasp of each element. This session is dedicated to identifying any weaknesses or gaps in the learner's skills, providing targeted practice to enhance proficiency. The focus is on refining techniques and building confidence across a wide range of flight operations, preparing the learner for the upcoming checkride.

Lesson Requirements

Task	Description
☐ Preflight Inspection	Conduct thorough preflight checks to ensure aircraft readiness.
☐ Preflight Preparations	Prepare for flight by reviewing weather, NOTAMs, and flight plans.
☐ Airworthiness Requirements	Verify the aircraft meets all airworthiness criteria before flight.
☐ Airplane Maintenance Records	Review the maintenance logs to identify aircraft inspection currency and compliance with all regulations.
☐ Operation of Airplane Systems	Familiarize with all operational systems of the aircraft.
☐ Preflight Assessment	Assess the aircraft and environment to ensure safety before takeoff.
☐ Flight Deck Management	Effectively manage all resources and controls within the flight deck.
☐ Engine Starting	Perform engine start procedures correctly and safely.
☐ Radio Communication	Practice clear and effective ATC and airport communications
☐ Airport Markings, Signs, and Lights	Review and identify all airport markings, signs, and lights.
☐ Taxiing	Practice safe and controlled taxiing, remaining alert to any hazards.
☐ Runway Incursion Avoidance	Apply techniques to avoid potential runway incursions.
☐ Windshear Recognition and Avoidance	Identify and avoid windshear conditions during all phases of flight, particularly during takeoff and landing.
☐ Wake Turbulence Avoidance	Apply strategies to minimize risks associated with wake turbulence during takeoffs, landings, and in-flight operations.
☐ Before Takeoff Check	Conduct a comprehensive check of all systems before takeoff.
☐ Short and Soft Field Takeoff and Landings	Execute takeoffs and landings under short and soft field conditions.
☐ Ground Reference Maneuvers	Practice ground reference maneuvers including rectangular courses, turns around a point, and S-turns to demonstrate control of the aircraft relative to ground features, particularly focusing on wind correction.
☐ Steep Turns	Perform steep turns maintaining precise control over the aircraft.
☐ Maneuvering During Slow Flight	Demonstrate control and stability during slow flight maneuvers.
☐ Power-off Stalls	Practice and recover from power-off stalls safely.
☐ Power-on Stalls	Practice and recover from power-on stalls safely.
☐ Spin Awareness	Discuss and demonstrate awareness techniques to prevent spins.
☐ Lost Procedures	Review the procedures to follow if disoriented or lost during flight, including using all available resources to reorient the flight path.
☐ Diversion to an Alternate Airport	Plan and execute, or simulation a diversion to an alternate airport as if responding to an unexpected event or condition during the flight.
☐ Emergency Descent	Conduct an emergency descent under controlled conditions.
☐ Emergency Approach and Landing	Execute emergency landing procedures effectively.
☐ Systems and Equipment Malfunctions	Identify and manage hypothetical malfunctions during flight.

Task	Description
☐ Managing In-Flight Emergencies	Demonstrate procedures for handling various in-flight emergencies, focusing on aircraft control, task prioritization, and effective communication.
☐ Traffic Patterns	Navigate traffic patterns with precision and safety.
☐ Go-around/Rejected Landing	Perform go-around maneuvers in response to changing conditions.
☐ Forward Slip to a Landing	Execute a forward slip to landing proficiently.
☐ After Landing Procedures	Follow proper procedures after landing for safety and compliance.
☐ Parking and Securing the Airplane	Secure the aircraft post-flight following proper procedures.
☐ Postflight Procedures	Complete all postflight actions, including securing the aircraft, debrief and log entries.

Completion Standards: The learner must demonstrate improved handling and understanding of all maneuvers, maintaining strict tolerances for flight parameters. The learner must maintain altitude within ±100 feet, airspeed within ±10 knots (or +10/-0 knots as appropriate), heading within ±10 degrees, and angle of bank within ±10 degrees. The review will highlight areas where the learner excels and pinpoint where further practice is needed, ensuring readiness for more rigorous testing and evaluation in the subsequent lessons.

_____ _____ _____

Completion Date **Flight Time** **Instructor Signature**

Lesson 23 - Complex Flight Operations and Scenario-Based Training

Objective: The objective of this lesson is to provide an intensive review and practice session covering all complex flight operations using scenario-based training, with a focus on preparing the learner for solo execution of these tasks. This lesson aims to identify areas needing additional practice, ensuring the learner can safely and confidently manage various flight scenarios alone.

Note to Instructors: *Task descriptions omitted. For guidance on conducting this lesson using scenario-based training to evaluate the learner's performance effectively, please refer to Appendix C: Scenario-Based Training, which provides detailed information on creating and implementing relevant instructive scenarios.*

Lesson Requirements

Task	Task
☐ Preflight Inspection	☐ Short and Soft Field Takeoff and Landings
☐ Preflight Preparations	☐ Navigation Using Pilotage and Dead Reckoning
☐ Airworthiness Requirements	☐ Navigation Systems
☐ Airplane Maintenance Records	☐ Lost Procedures
☐ Operation of Airplane Systems	☐ Diversion to an Alternate Airport
☐ Preflight Assessment	☐ Emergency Descent
☐ Flight Deck Management	☐ Emergency Approach and Landing
☐ Engine Starting	☐ Systems and Equipment Malfunctions
☐ Radio Communication	☐ Managing In-Flight Emergencies
☐ Airport Markings, Signs, and Lights	☐ Traffic Patterns
☐ Taxiing	☐ Go-around/Rejected Landing
☐ Runway Incursion Avoidance	☐ Forward Slip to a Landing
☐ Before Takeoff Check	☐ After Landing Procedures
☐ Wake Turbulence Avoidance	☐ Parking and Securing the Airplane
☐ Windshear Recognition and Avoidance	☐ Postflight Procedures

Completion Standards: The learner must demonstrate improved handling of complex flight operations and scenarios, meeting strict tolerances for precision and control: altitude within ±100 feet, airspeed within ±10 knots (or +10/-0 knots as appropriate), heading within ±10 degrees, and bank angles within ±10 degrees. The learner must display a thorough understanding of all maneuvers, effectively managing the flight deck, and responding appropriately to simulated emergency situations. Successful completion indicates readiness for solo practice and ultimately preparation for the checkride.

Completion Date **Flight Time** **Instructor Signature**

Lesson 24 - Solo Practice Flight - Comprehensive Maneuvers Refinement

Objective: The objective of this lesson is to enable the learner to independently refine their flying skills by practicing all maneuvers required for the private pilot certificate. This solo flight serves as an opportunity for self-assessment, allowing the learner to identify strengths and areas requiring further improvement. Learners are encouraged to approach this flight with the mindset of preparing for the final stage check and the end-of-course test, focusing on achieving and exceeding the FAA Airman Certification Standards. Learners should repeat this lesson as needed or seek additional instructor guidance to ensure readiness for the subsequent evaluations.

Lesson Requirements **Study Resources:** GS: Sec 6 AFH: Ch 3, 5

Task	Task
☐ Preflight Inspection	☐ Steep Turns
☐ Preflight Preparations	☐ Maneuvering During Slow Flight
☐ Airworthiness Requirements	☐ Power-off Stalls
☐ Airplane Maintenance Records	☐ Power-on Stalls
☐ Operation of Airplane Systems	☐ Spin Awareness
☐ Preflight Assessment	☐ Emergency Descent
☐ Flight Deck Management	☐ Emergency Approach and Landing
☐ Engine Starting	☐ Systems and Equipment Malfunctions
☐ Radio Communication	☐ Traffic Patterns
☐ Airport Markings, Signs, and Lights	☐ Go-around/Rejected Landing
☐ Taxiing	☐ Forward Slip to a Landing
☐ Runway Incursion Avoidance	☐ After Landing Procedures
☐ Before Takeoff Check	☐ Parking and Securing the Airplane
☐ Short and Soft Field Takeoff and Landings	☐ Postflight Procedures
☐ Ground Reference Maneuvers	

Completion Standards: The learner must demonstrate precise control over the aircraft, adhering to the following tolerances: altitude within ±100 feet, airspeed within ±10 knots (or +10/-0 knots as appropriate), heading within ±10 degrees, and bank angle within ±10 degrees. Mastery of these tasks during solo flight indicates readiness for the formal assessments to follow. Learners are expected to independently manage the flight deck effectively, maintain situational awareness throughout all maneuvers, and handle any simulated or real emergencies with competence.

_____ _____ _____

Completion Date **Flight Time** **Instructor Signature**

Lesson 25 - Stage Three Check - Pre-Checkride Review

Objective: The objective of this lesson is to conduct a detailed evaluation of the learner's readiness for the End-of-Course Check and the FAA practical test. This stage check assesses all maneuvers and procedures covered throughout the course, ensuring the learner can perform them to the standards required for the private pilot certificate. The review affirms the learner's proficiency in handling flight scenarios, navigation, and managing in-flight emergencies.

***Note to Instructors**: This lesson should be completed within 60 days preceding the date of the practical test.*

Lesson Requirements **Study Resources:** GS: Sec 6 ACS AFH: Ch 1 PHAK: Ch 1

Task	Task
☐ Preflight Inspection	☐ Maneuvering During Slow Flight
☐ Preflight Preparations	☐ Power-off Stalls
☐ Airworthiness Requirements	☐ Power-on Stalls
☐ Airplane Maintenance Records	☐ Navigation using Pilotage and Dead Reckoning
☐ Operation of Airplane Systems	☐ Navigation Systems
☐ Preflight Assessment	☐ Spin Awareness
☐ Flight Deck Management	☐ Systems and Equipment Malfunctions
☐ Engine Starting	☐ Managing In-flight Emergencies
☐ Radio Communication	☐ Emergency Descent
☐ Airport Markings, Signs, and Lights	☐ Emergency Approach and Landing
☐ Taxiing	☐ Traffic Patterns
☐ Runway Incursion Avoidance	☐ Go-around/Rejected Landing
☐ Before Takeoff Check	☐ Forward Slip to a Landing
☐ Short and Soft Field Takeoff and Landings	☐ After Landing Procedures
☐ Ground Reference Maneuvers	☐ Parking and Securing the Airplane
☐ Steep Turns	☐ Postflight Procedures

Completion Standards: The learner must demonstrate precise execution of all maneuvers and adherence to procedural standards required by the FAA Private Pilot Airman Certification Standards, or in the absence of specific standards, the learner will maintain altitude within ±100 feet, airspeed within ±10 knots (or +10/-0 knots as appropriate), and heading within ±10 degrees, and bank angles within ±10 degrees during maneuvers. If the learner fails to meet these criteria, additional training will be recommended by the evaluating instructor. Mastery in these areas confirms the learner's capability to pilot an aircraft safely and competently and indicates readiness for the end-of-course test and mock checkride.

_____ _____ _____

Completion Date **Flight Time** **Instructor Signature**

Lesson 26 - End-of-Course Test - Mock Checkride

Objective: The objective of this lesson is to conduct a comprehensive evaluation and assessment of all skills required for certification, including aircraft operation, flight planning, navigation, and emergency management. The mock checkride will simulate the FAA practical test to verify the learner's readiness for obtaining the private pilot certificate. This thorough review ensures that the learner can confidently perform all required maneuvers and procedures, demonstrating the proficiency expected of a private pilot.

***Note to Instructors**: This lesson should be completed within 60 days preceding the date of the practical test.*

Lesson Requirements **Study Resources:** GS: Sec 6 ACS AFH: Ch 1 PHAK: Ch 1

Task	Task
☐ Pilot Qualifications	☐ Steep Turns
☐ Preflight Inspection	☐ Maneuvering During Slow Flight
☐ Preflight Assessment	☐ Stalls - Power-on and Power-off
☐ Procuring Weather Information	☐ Spin Awareness and Recovery
☐ Airworthiness Requirements	☐ Flight by Reference to Instruments
☐ Airplane Maintenance Records	☐ Recovery from Unusual Flight Attitudes
☐ Cross-Country Flight Planning	☐ Pilotage and Dead Reckoning
☐ Calculating Performance and Limitations	☐ Navigation Systems
☐ Operation of Airplane Systems	☐ Diversion Procedures
☐ Human Factors Awareness	☐ Emergency Descent
☐ Flight Deck Management	☐ Emergency Approach and Landing
☐ Engine Starting	☐ Managing In-Flight Emergencies
☐ Radio Communication	☐ Systems and Equipment Malfunctions
☐ Airport Markings, Signs, and Lights	☐ Traffic Patterns
☐ Taxiing	☐ Normal and Crosswind Approach and Landing
☐ Runway Incursion Avoidance	☐ Go-around/Rejected Landing
☐ Before Takeoff Check	☐ Forward Slip to a Landing
☐ Wake Turbulence Avoidance	☐ After Landing Procedures
☐ Normal and Crosswind Takeoff and Climb	☐ Parking and Securing the Airplane
☐ Short and Soft Field Takeoff and Landings	☐ Postflight Procedures
☐ Ground Reference Maneuvers	

Completion Standards: The End-of-Course Test is successfully completed when the learner demonstrates precise execution of all tasks, adhering to the FAA Private Pilot Airman Certification Standards. Specific performance metrics include maintaining altitude within ±100 feet, airspeed within ±10 knots (or +10/-0 knots as appropriate), heading within ±10 degrees, and bank angles must be controlled within ±10 degrees during maneuvers. At no time should the performance of any maneuver or the outcome of the flight be in doubt. If any areas are deficient, additional instruction will be recommended. Successful completion of this lesson indicates the learner's preparedness to schedule the FAA practical test.

Completion Date **Flight Time** **Instructor Signature**

Appendix A: Enrollment and Graduation Certificates

Enrollment Certificate

This is to certify that

_____

Learner Name

is enrolled in the Federal Aviation Administration approved Private Pilot Certification Course

conducted by

_____

School Name and Certificate Number

_____ _____

Chief Instructor *Enrollment Date*

Graduation Certificate

This is to certify that

_____

Learner Name and Number

has satisfactorily completed the course requirements, stages and tests, received _____ hours of cross-country training, and has graduated from the Federal Aviation Administration approved Private Pilot Certification Course

conducted by

_____

School Name and Certificate Number

_____ _____

Chief Instructor *Date of Graduation*

Appendix B: Endorsements

Solo Flight

1. Pre-solo aeronautical knowledge: § 61.87(b)
I certify that _____ [First name, MI, Last name] has satisfactorily completed the pre-solo knowledge test of § 61.87(b) for the _____ [make and model] aircraft.
_____ [date] _____ [CFI Signature] _____ [CFI #] _____ [expiration date]

2. Pre-solo flight training: § 61.87(c)(1) and (2)
I certify that _____ [First name, MI, Last name] has received and logged pre-solo flight training for the maneuvers and procedures that are appropriate to the _____ [make and model] aircraft. I have determined [he or she] has demonstrated satisfactory proficiency and safety on the maneuvers and procedures required by § 61.87 in this or similar make and model of aircraft to be flown.
_____ [date] _____ [CFI Signature] _____ [CFI #] _____ [expiration date]

3. Solo flight (first 90 calendar-day period): § 61.87(n)
I certify that _____ [First name, MI, Last name] has received the required training to qualify for solo flying. I have determined [he or she] meets the applicable requirements of § 61.87(n) and is proficient to make solo flights in _____ [make and model]. [date]
_____ [date] _____ [CFI Signature] _____ [CFI #] _____ [expiration date]

4. Solo flight (each additional 90 calendar-day period): § 61.87(p)
I certify that _____ [First name, MI, Last name] has received the required training to qualify for solo flying. I have determined that [he or she] meets the applicable requirements of § 61.87(p) and is proficient to make solo flights in _____ make and model].
_____ [date] _____ [CFI Signature] _____ [CFI #] _____ [expiration date]

5. Solo flight in Class B airspace: § 61.95(a)
I certify that _____ [First name, MI, Last name] has received the required training of § 61.95(a). I have determined [he or she] is proficient to conduct solo flights in _____ [name of Class B] airspace. _____ [List any applicable conditions or limitations.]
_____ [date] _____ [CFI Signature] _____ [CFI #] _____ [expiration date]

6. Solo flight to, from, or at an airport located within Class B airspace: § 61.95(b) and § 91.131(b)(1)
I certify that _____ [First name, MI, Last name] has received the required training of § 61.95(b)(1). I have determined that [he or she] is proficient to conduct solo flight operations at _____ [name of airport]. _____ [List any applicable conditions or limitations.]
_____ [date] _____ [CFI Signature] _____ [CFI #] _____ [expiration date]

Cross-Country

1. Initial solo cross-country flight: § 61.93(c)(1) and (2)
I certify that _____ [First name, MI, Last name] has received the required solo cross-country training. I find [he or she] has met the applicable requirements of § 61.93, and is proficient to make solo cross-country flights in a _____ [make and model] aircraft, _____ [aircraft category].
_____ [date] _____ [CFI Signature] _____ [CFI #] _____ [expiration date]

2. Individual solo cross-country flight: § 61.93(c)(3)
I certify that _____ [First name, MI, Last name] has received the required solo cross-country training. I find [he or she] has met the applicable requirements of § 61.93, and is proficient to make solo cross-country flights in a _____ [make and model] aircraft, _____ [aircraft category].
_____ [date] _____ [CFI Signature] _____ [CFI #] _____ [expiration date]

3. Repeated solo cross-country flights not more than 50 NM from the point of departure: § 61.93(b)(2)
I certify that _____ [First name, MI, Last name] has received the required training in both directions between and at both _____ _____ [airport names]. I have determined that [he or she] is proficient of § 61.93(b)(2) to conduct repeated solo cross-country flights over that route, subject to the following conditions: _____ [List any applicable conditions or limitations.]
_____ [date] _____ [CFI Signature] _____ [CFI #] _____ [expiration date]

Knowledge Test

1. Aeronautical knowledge test: §§ 61.35(a)(1), 61.103(d), and 61.105
I certify that _____ [First name, MI, Last name] has received the required training in accordance with § 61.105. I have determined [he or she] is prepared for the Private Pilot Airplane knowledge test.
_____ [date] _____ [CFI Signature] _____ [CFI #] _____ [expiration date]

Practical Test

1. Flight proficiency/practical test: §§ 61.103(f), 61.107(b), and 61.109
I certify that _____ [First name, MI, Last name] has received the required training in accordance with §§ 61.107 and 61.109. I have determined [he or she] is prepared for the Private Pilot Airplane practical test.
_____ [date] _____ [CFI Signature] _____ [CFI #] _____ [expiration date]

2. Prerequisites for practical test: § 61.39(a)(6)(i) and (ii)
I certify that _____ [First name, MI, Last name] has received and logged training time within 2 calendar-months preceding the month of application in preparation for the practical test and [he or she] is prepared for the required practical test for the issuance of the Private Pilot certificate.
_____ [date] _____ [CFI Signature] _____ [CFI #] _____ [expiration date]

3. Review of deficiencies identified on airman knowledge test: § 61.39(a)(6)(iii), as required.
I certify that _____ [First name, MI, Last name] has demonstrated satisfactory knowledge of the subject areas in which [he or she] was deficient on the Private Pilot Airplane airman knowledge test.
_____ [date] _____ [CFI Signature] _____ [CFI #] _____ [expiration date]

Appendix C: Scenario-Based Training

Scenario-based training (SBT) is a highly effective educational approach that situates learners in realistic and relevant contexts, challenging them to apply their theoretical knowledge and practical skills to solve problems as they would in real-world situations. This method enhances decision-making skills, reinforces procedural understanding, and improves situational awareness, all critical competencies for any pilot. By engaging in scenarios that mimic the complexities of actual flights, learners gain invaluable experience in handling unexpected events and making swift, informed decisions under pressure. For instructors, creating tailored scenarios based on the specific training being conducted and the certification level sought by the learner ensures that each training session is both relevant and challenging, directly contributing to the learner's ability to meet FAA standards and beyond.

To help illustrate the application of scenario-based training, a sample scenario is included below. This scenario demonstrates how instructors can integrate and correlate various tasks such as abnormal conditions and busy airspace navigation into a typical flight mission, providing learners with practical, hands-on experience in managing common challenges faced by pilots. This scenario not only tests technical skills but also enhances the learner's ability to remain composed and resourceful during flights, key attributes of a competent pilot.

Scenario: Daytime Business Trip with Equipment Malfunction

Brief: The learner is tasked with flying to a regional airport for a simulated business trip, planning to return the same day. The flight involves transitioning through busy airspace near a major city. The weather is clear, making it an ideal day for VFR flying.

Execution: The flight begins smoothly with the learner using GPS navigation to route through the congested airspace. Mid-flight, the instructor simulates a GPS failure, forcing the learner to switch to backup navigation methods, including VOR navigation and pilotage. As the learner navigates the busy airspace without GPS, the instructor introduces an additional challenge by simulating an emergency descent due to a traffic conflict reported by ATC.

Tasks Integrated:

- ☐ **GPS Failure Management:** Immediately switch to using VOR navigation and confirm position using pilotage, maintaining orientation and situational awareness without GPS assistance.
- ☐ **Busy Airspace Navigation:** Manage the flight path manually, ensuring compliance with airspace requirements and avoiding potential traffic conflicts without reliance on GPS.
- ☐ **Emergency Descent:** Execute a controlled emergency descent as directed by ATC to avoid an imminent traffic conflict, demonstrating quick response and adherence to safety protocols.
- ☐ **Radio Communication:** Maintain clear and effective communication with ATC throughout the scenario, particularly during the emergency descent and subsequent return to normal flight.
- ☐ **Post-Emergency Procedures:** After resolving the simulated emergency, conduct a thorough check of the aircraft's systems to ensure no further issues before continuing the flight.
- ☐ **Landing Preparation:** Prepare for landing at the destination airport using traditional navigation methods and complete the business trip objective under simulated pressured conditions.

This scenario is designed to test the learner's ability to handle common in-flight technology failures and emergency procedures while managing the additional pressures of a business-related mission. It emphasizes the importance of backup navigation skills, situational awareness, and effective communication, especially in busy and complex airspace during daylight operations.

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