### Private Pilot Airplane Single Engine Land Flight Training Syllabus

#### AC 60-14 & FAA-S-ACS-6

20 Hours Dual, 20 Hours Solo, 18 Hours Ground or Home Study

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* * 3 Hours Total Required prior to Practical Test

**OBJECTIVES:** You will acquire specific aeronautical knowledge, flight proficiency, and risk management standards for the private pilot certification in the Airplane Category, Single-Engine Land Class. Training will be augmented for the specific type of avionics, automation and autopilot systems installed.

**COMPLETION STANDARDS:** You show by written record, and will demonstrate through oral and by practical tests, that you meet the required aeronautical skill, knowledge, experience and performance standards to safely execute the responsibilities of Pilot In Command.

**ENROLLMENT PREREQUISITES:** A person may enroll in this course provided that the person holds at least a third-class medical, and a student pilot certificate prior to his or her first solo flight.
HOW TO USE THIS SYLLABUS Lesson elements contain bulleted items represented by a double line arrow to the left of each subject:

⇒ Soft Field Takeoff and Climb
The double line arrow serves as a checklist for each lesson element, and is marked solid by the instructor in his copy when that element is completed:

⇒ Soft Field Takeoff and Climb
Incomplete elements from previous lessons may be completed on subsequent lessons. If an element of a previous lesson is incomplete, it must be completed prior to starting the next block.

Elements of any Block that are not accomplished should be completed as soon as possible. Each lesson can be repeated as often as necessary, however, no element of the next block should be introduced until all the elements of the previous block have been finished. Hours SOLO - DUAL - GROUND refer to Flight (Dual, Solo) and Home Study or One on One Ground Instruction. Pre and post flight briefings are not indicated on this syllabus, but are generally .5 hours per flight, except cross-country briefings, and preparation for the practical test.

GROUND TRAINING HOME STUDY: Completion of ground training is required prior to the completion of flight training. If home studying, the student will be administered quizzes or a final knowledge test. The student must show proof that he or she passed the final knowledge test with a score of at least 80% Ground training with home study shall at a minimum consist of the following subjects and elements:

- Aircraft General
- Engines / Propellers
- Normal Procedures Checklist
- Powerplant Management
- Aircraft Fuel System
- Performance / Flight Planning
- Flight Controls / Wing Flaps
- Fuel Management
- Flight Profiles
- Emergency Procedures
- Electrical Systems
- Flight Instruments
- Landing Gear
- Systems Failure Analysis
- Avionics and Auto-pilot
- Collision Avoidance
- CFIT

- Environmental Systems
- Anti-ice / De-ice
- High Altitude Flight
- Flight in Icing Conditions
- Aeronautical Decision Making
- Weight and Balance Procedures
- Aircraft Loading Procedures
- Systems Review / FAR's
- Optional Equipment /Modifications
- Emergency Procedures Checklist
- Scenario Based Flight Training
- Single Pilot Resource Management
- Runway Incursion Avoidance
- Positive Aircraft Control
- Risk Management
- Knowledge Test

ABOUT THIS TRAINING: This training provides the student pilot with a detailed summary of specific knowledge and skill required by the FAA for initial certification as a Private Pilot with an Airplane, Single-Engine land Class Rating. By using this training system, the specific requirements of 14 CFR 61.87 and aeronautical experience requirements of 14 CFR 61.109 are met.

GENERAL RULES: (These rules may vary according to your location.)

1- Weather Minimums. The maximum surface wind conditions, existing or forecast for any proposed point of departure or arrival must not exceed: Dual 30 Kts., a crosswind component of 15 Kts., or the maximum crosswind component specified by the manufacturer. Solo 20 Kts., or a crosswind component of 10 Kts. No forecast of severe turbulence, or gust factor of 15% Vs1. Ceiling & Visibility: Local Day- Dual 1500/3; Solo 1500/5; Night Local- Dual 1500/3; Solo 3000/5: Cross-Country Day- Dual 3000/5; Solo 3000/10: Cross-Country Night- Dual 3000/10; Solo 5000/15.

2- The word "Clear" will be called before engaging the starter. Students shall not hand prop airplanes for starting.

3- Taxi speed shall be no faster than a brisk walk. Brakes are not to be used to turn, except as necessary. Keep the inside wheel turning during tight turns.

4- In case of fire, get a fire extinguisher and get help.

5- In case of an unplanned landing on or off an airport, properly secure the aircraft including tie down, or at least with the brakes set and the wheels chocked. Close & lock doors. Call your home base and/or CFI.

6- Have at least 1 hour reserve fuel after planned completion of flight.

7- Be alert for other aircraft in the air and on the ground. Shallow turning during climbs and glides will help you see above and below. Before maneuvering, perform two clearing turns of 90 degrees heading change to assure safe separation from other aircraft. See and be seen is the key to collision avoidance.

8- When emergency landings are practiced, minimum recovery shall be at least 500' above the ground.

9- Practice areas will be specified by the instructor. Remain in the areas while practicing, and monitor the appropriate radio frequency.

10- Except for takeoffs and landings, no flight operations will be conducted below 500' above the ground. Recoveries from solo maneuvers such as stalls, slow flight, & constant altitude turning shall be made at least 2000 feet above the ground solo, and 1500 above the ground dual.

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BLOCK ONE--LESSONS 1 - 9
9 Hours Dual - .5 Hours Solo - 7.5 Hours Ground

BLOCK ONE OBJECTIVES: You will be instructed in the basic flying procedures and skills necessary for the first solo flight.

BLOCK ONE COMPLETION STANDARDS: This block will be completed when you are able to conduct solo flights safely.
Lesson #1. **Straight & Level Flight, Climbs, Turns & Descents**
1 Hour Flight, 1 Hour Ground.

Name________________ Date_________ TOT__________
START________ OFF________ ON________ IN________

Objectives: During this lesson, you will be introduced to the training airplane, safety precautions, aeromedical factors, preflight preparation, ground operations, airport and traffic pattern operations, and basic flying maneuvers.

Content: Introduce

⇒ Preflight Preparation
⇒ Visual Inspection
⇒ Airplane Systems
⇒ Cockpit Management
⇒ Starting Engine
⇒ Normal and Crosswind Taxiing
⇒ Pre-Takeoff Check
⇒ Radio Communications & ATC Light Signals
⇒ Traffic Pattern Operations
⇒ Airport And Runway Marking & Lighting
⇒ Runway Incursion Avoidance
⇒ Normal And Crosswind Takeoff & Climb
⇒ Medium Banked Turns, Climbing & Descending Turns
⇒ Positive Exchange of Flight Controls
⇒ Collision Avoidance Precautions
⇒ Normal And Crosswind Approach And Landing
⇒ Post Flight Procedures, Post Flight Discussion
⇒ Preview Of Next Lesson

Completion Standards: You should, with assistance, perform a line check, use checklists, taxi, perform a pre-takeoff check, display an understanding of ground safety, and maintain altitude within 200 feet, heading within 20 degrees, and airspeed within 20 knots.

Notes:
Lesson #1 (Briefing)

⇒ Positioning aircraft controls for wind.
⇒ Familiarity with airport markings (including hold short lines), signs, and lights.
⇒ Aircraft lighting.
⇒ Use an airport diagram or taxi chart during taxi.
⇒ Towered and non-towered airport operations.
⇒ Visual indicators for wind.
⇒ Airport information resources (Chart Supplements U.S., airport diagrams, and appropriate publications).
⇒ Good cockpit discipline during taxi.
⇒ Appropriate taxi speeds.
⇒ Procedures for appropriate cockpit activities during taxiing including taxi route planning, briefing the location of Hot Spots, and communicating and coordinating with ATC.
⇒ Procedures unique to night operations.
⇒ Hazards of low visibility operations.
⇒ The importance of documenting any in-flight/post-flight discrepancies.
⇒ National Transportation Safety Board (NTSB) accident/incident reporting.
⇒ Airport security.
⇒ Maintain directional control after touchdown while decelerating to an appropriate speed.
⇒ Utilize runway incursion avoidance procedures after landing.
⇒ Park in an appropriate area, considering the safety of nearby persons and property.
⇒ Plan the taxi route to the ramp.
⇒ Follow the appropriate procedure for engine shutdown.
⇒ Complete the after landing checklist after the airplane has stopped.
⇒ Complete the engine shutdown checklist.
⇒ Disembark passengers safely and remain aware of passenger movement while on the ramp area.
⇒ Record aircraft discrepancies and notes for possible service needs before the next flight.
⇒ Conduct an appropriate post flight inspection and secure the aircraft.
Lesson #2. **Coordinated Control Inputs**
1 Hour Flight, 1 Hour Ground.

Name________________ Date ___________ TOT ________

START ________ OFF ________ ON ________ IN ________

Objectives: You will review the procedures given in the previous lesson, and gain proficiency in basic flight maneuvers and aircraft control. Instruction will then be given with instruments and outside references. Coordination exercises, and ground reference maneuvers will be introduced.

Content:
Review Technical Subject Areas during Preflight Discussion Pertaining to Today's Lesson. Review Pilot Operations, Procedures and Maneuvers As Necessary.

⇒ Preflight
⇒ Obtaining Weather Information
⇒ Visual Inspection
⇒ Airplane Systems
⇒ Cockpit Management
⇒ Starting Engine
⇒ Normal And Crosswind Taxiing
⇒ Pre Takeoff Check
⇒ Radio Communications & ATC Light Signals
⇒ Traffic Pattern Operations
⇒ Airport And Runway Marking And Lighting
⇒ Normal And Crosswind Takeoff & Climb
⇒ Medium Banked Turns, Climbing & Descending Turns
⇒ Effects Of Flight Controls
⇒ Collision Avoidance Precautions

**Introduce**
⇒ Climbs, Descents, Climbing & Descending Turns, By Instrument References Only
⇒ Changes of Airspeed and Configuration in Level Flight
⇒ Adverse Yaw & Remedy
⇒ Forward Slips
⇒ Glides & Gliding Turns
⇒ Descents With and Without Turns Using High & Low Drag Configurations
⇒ Post Flight Discussion
⇒ Preview Of Next Lesson

Completion Standards: You will be able to preflight, make takeoffs & climbs, and control heading within 10 degrees, airspeed within 10 knots, and altitude within 100 feet, with assistance from the instructor.

Notes:
Lesson #2 (Briefing)

⇒ Starting under various atmospheric conditions, using external power and hand propping safety.

⇒ Starting procedures for carbureted, fuel injected, diesel, Full Authority Digital Engine Control (FADEC), or turbine engines, as applicable.

⇒ Equipment limitations (such as starter cycles).

⇒ Proper positioning of the airplane.

⇒ Propeller safety and awareness to include passenger briefing, including dangers associated with hand propping.

⇒ Implications of engine(s) starting with a weak or depleted battery, including considerations for use of external power.

⇒ Abnormal start.

⇒ Hot and cold weather operation.

⇒ Electrical system failure following aircraft engine starts.

⇒ Engine fires related to over-priming/cold weather starting.

⇒ Position the airplane properly considering structures, other aircraft, and the safety of nearby persons and property.

⇒ Utilize the checklist as appropriate during engine start.

⇒ Starting under various atmospheric conditions.

⇒ The effects of forward slips affecting indicated airspeed versus true airspeed.

⇒ Low altitude maneuvering.

⇒ Establish the slipping attitude at the point from which a landing can be made using the recommended approach and landing configuration and airspeed; adjust pitch attitude as required.

⇒ Maintain a ground track aligned with the runway/landing path centerline and an airspeed, which results in minimum float during the round out.

⇒ Make smooth, timely, and correct control application during the recovery from the slip, the round out, and the touchdown.

⇒ Touch down within 400 feet beyond a specified point with no drift, and with the airplane’s longitudinal axis aligned with and over the runway centerline.

⇒ Maintain crosswind correction and directional control throughout the approach and landing sequence.

⇒ Complete the appropriate checklist.

⇒ Execute a timely go-around decision when the approach cannot be made within the tolerances specified above.

**Forward Slip to a Landing**

⇒ When and why forward slips are used and differences between side and forward slips.
Go-Around/Rejected Landing

⇒ Make a timely decision to discontinue the approach to landing.
⇒ Apply takeoff power immediately and transition to climb pitch attitude for VX or VY as appropriate +10/-5 knots.
⇒ Retract the flaps, as appropriate.
⇒ Retract the landing gear after establishing a positive rate of climb and in accordance with manufacturer’s guidance.
⇒ Maneuver to the side of the runway/landing area when necessary to clear and avoid conflicting traffic.
⇒ Maintain takeoff power and VY +10/-5 or as recommended by aircraft manufacturer to a safe maneuvering altitude.
⇒ Maintain directional control and proper wind-drift correction throughout the climb.
⇒ Complete the appropriate checklist.

⇒ Establish and maintain an airspeed, approximately 5-10 knots above the 1G stall speed, at which the airplane is capable of maintaining controlled flight without activating a stall warning.
⇒ Accomplish coordinated straight-and-level flight, turns, climbs, and descents with landing gear and flap configurations specified by the instructor without activating a stall warning.
⇒ Divide attention between airplane control, traffic avoidance and orientation.
⇒ Maintain the specified altitude, ±100 feet; specified heading, ±10°; airspeed +10/-0 knots; and specified angle of bank, ±10° or as recommended by aircraft manufacturer to a safe maneuvering altitude.

Maneuvering During Slow Flight

⇒ The range and limitations of stall warning indicators (e.g.: aircraft buffet, stall horn, etc.).
⇒ The interplay of aerodynamic factors (angle of attack (AOA), airspeed, load factor, aircraft configuration, aircraft weight, and aircraft attitude).
⇒ Select an entry altitude that will allow the Task to be completed no lower than 1,500 feet AGL.
Lesson #3. **Flying Precise Patterns Over The Ground**
1 Hour Flight, 1 Hour Ground.

Name________________ Date_________ TOT ________

START_______ OFF________ ON________ IN_______

Objectives: This lesson will be a review of the operations previously introduced. Instruction will be given in takeoffs and climbs, minimum controllable airspeed, and ground reference maneuvers.

Content:
Review Technical Subject Areas during Preflight Discussion Pertaining to Today's Lesson. Review Pilot Operations, Procedures and Maneuvers As Necessary.

⇒ Preflight

⇒ Ground Operations

⇒ Airport And Traffic Pattern Operations & Radio Procedures

⇒ Takeoffs and Climbs

⇒ Flight By Reference To Instruments, Climbs, Turns & Descents

⇒ Descents With and Without Turns Using High & Low Drag Configurations

⇒ Coordination Exercises (as appropriate)

⇒ Post Flight Procedures

**Introduce**

⇒ Maneuvering At Minimum Controllable Airspeed

⇒ Spin Awareness

⇒ Rectangular Course

⇒ Turns About A Point

⇒ S Turns Across A Road

⇒ Post Flight Discussion

⇒ Forward Slips To Landing

⇒ Preview of Next Lesson

Completion Standards: The Student will be expected to display proficiency in maintaining airspeed within 10 knots, heading within 10 degrees, and altitude within 100 feet.

Notes:
Lesson #3 (Briefing)

⇒ Positioning aircraft controls for wind.
⇒ Airport markings, signs, and lights.
⇒ Aircraft lighting.
⇒ Safe taxi procedures at towered and non-towered airports:
  ⇒ Maintain taxiway/runway alignment
⇒ Situational awareness to avoid runway incursions
⇒ Visual indicators for wind.
⇒ Airport information resources including Chart Supplements U.S., airport diagrams, and appropriate publications.
⇒ Good cockpit discipline during taxi, including maintaining a sterile cockpit, proper speed, separation between other aircraft and vehicles, and communication procedures.
⇒ Rules for entering or crossing runways.
⇒ Proper engine management including leaning, per manufacturer’s recommendations.
⇒ Distractions during aircraft taxi.
⇒ Taxi instructions/clearances.
⇒ Perform a brake check immediately after the airplane begins moving.
⇒ Position the flight controls properly for the existing wind conditions.
⇒ Control direction and speed without excessive use of brakes.
⇒ Control the airplane during ground operations.
⇒ Maintaining situational awareness to avoid runway incursions
⇒ Taxiing to avoid other aircraft/vehicles and hazards
⇒ Exhibit proper positioning of the aircraft relative to hold lines.
⇒ Exhibit procedures to ensure clearances/instructions are received, recorded, and read back correctly.
⇒ Exhibit situational awareness and taxi procedures in the event the aircraft is on a taxiway that is between parallel runways.
⇒ Use an airport diagram or taxi chart during taxi.

Steep Turns

⇒ Maneuvering speed, including changes in weight.
⇒ Controlling rate and radius of turn.
⇒ Accelerated stalls.
⇒ Overbanking tendencies.
⇒ Use of trim in a turn.
⇒ Aerodynamics associated with steep turns.
⇒ Aerobatic requirements and limitations.
⇒ Establish the manufacturer’s recommended airspeed or if one is not stated, a safe airspeed not to exceed VA.

⇒ Roll into a coordinated 360° steep turn with a 45° bank.

⇒ Perform the Task in the opposite direction, as specified by the instructor.

⇒ Maintain the entry altitude ±100 feet, airspeed ±10 knots, bank ±5°; and roll out on the entry heading, ±10° or as recommended by aircraft manufacturer to a safe maneuvering altitude.

Ground Reference Maneuvers

⇒ The effects of wind on ground track and relation to a ground reference point.

⇒ The effects of bank angle and groundspeed on rate and radius of turn.

⇒ The entry/exit requirements of the maneuver.

⇒ The relationship of rectangular course to airport traffic pattern.

⇒ Determine the area is clear of terrain, obstacles, and other aircraft and the aircraft will remain in the appropriate airspace.

⇒ Select a suitable ground reference.

⇒ Identify a suitable emergency landing area.

⇒ Rectangular course: enter a left or right pattern, 600 to 1,000 feet above ground level (AGL) at an appropriate distance from the selected reference area, 45° to the downwind leg

⇒ S-turns: enter perpendicular to the selected reference line, 600 to 1,000 feet AGL at an appropriate distance from the selected reference area

⇒ Turns around a point: enter at an appropriate distance from the reference point, 600 to 1,000 feet AGL at an appropriate distance from the selected reference area

⇒ Apply adequate wind-drift correction during straight and turning flight to maintain a constant ground track if around a rectangular reference area or to track a constant radius turn on each side of the selected reference line or a selected point.

⇒ If performing a pattern such as S-Turns, reverse the turn directly over the selected reference line; if performing turns around a point, complete turns in either direction around the selected reference point.

⇒ Divide attention between airplane control, traffic avoidance and the ground track while maintaining coordinated flight.

⇒ Maintain altitude ±100 feet; maintain airspeed ±10 knots or as recommended by aircraft manufacturer to a safe maneuvering altitude.
Lesson #4. **Dealing With Operational Emergencies**
1 Hour Flight, 1 Hour Ground.

Name________________ Date_________  TOT _________

START________ OFF________ ON________ IN________

Objectives: This lesson will consist of a review of all previous maneuvers. Instruction will be given in flight by reference to instruments, and flight at critically slow airspeeds.

Content:

⇒ Review Technical Subject Areas during Preflight
   Discussion Pertaining to Today's Lesson. Review Pilot Operations, Procedures and Maneuvers As Necessary.

⇒ Preflight

⇒ Ground Operations

⇒ Airport And Traffic Pattern Operations

⇒ Takeoffs And Climbs

⇒ Turn Maneuvers

⇒ Flight At Minimum Controllable Airspeeds

⇒ Forward Slips To Landing

⇒ Constant Altitude Turns

⇒ Imminent and/or Full Stalls- Power Off

⇒ Imminent and/or Full Stalls- Power On

⇒ Constant Airspeed Climbs And Descents By Reference To Instruments

⇒ Glides To Approach And Landing

⇒ Turns To Headings By Reference To Instruments

**Introduce**

⇒ Full Stalls- Power Off

⇒ Full Stalls- Power On

⇒ Systems And Equipment Malfunctions

⇒ The importance of the 1,500-foot AGL minimum altitude.

⇒ How the maneuver relates to a normal flight.

⇒ Approach to stall indications, Full stall indications.

⇒ Which aircraft inputs are required to meet heading or bank angle requirements.

⇒ The stall recovery procedure.

⇒ The importance of establishing the correct aircraft configuration during the recovery process and the consequences of failing to do so.

⇒ Aerodynamics associated with stalls and spins in various aircraft configurations and attitudes.

⇒ Circumstances that can lead to an inadvertent stall or spin.

⇒ Post Flight Discussion & Preview Of Next Lesson

Completion Standards: You will have completed this lesson when you will, with minimum assistance, be able to perform the procedures and maneuvers given in the previous lessons, and display a basic knowledge of elementary emergency procedures and of the importance of airspeed control during approaches.

Notes:
Lesson #4 (Briefing)

⇒ The purpose of the run-up.
⇒ Wake turbulence avoidance.
⇒ An emergency locator transmitter (ELT).
⇒ Division of attention and scanning.
⇒ Different than expected runway.
⇒ Divide attention between inside and outside the cockpit.
⇒ Ensure that powerplant and instrumentation are suitable for run-up and takeoff, including temperature(s) and pressure(s).
⇒ Communication procedures and ATC phraseology.
⇒ ATC light gun signal recognition.
⇒ Transponders.
⇒ Radar assistance.
⇒ Lost communication procedures.
⇒ Use of automated weather and airport information.
⇒ Equipment issues that could cause loss of communication.
⇒ Single-pilot resource management (SRM) and/or crew resource management (CRM).
⇒ Transmit using phraseology and procedures as specified in the AIM.
⇒ Towered and non-towered airport operations and runway selection.
⇒ Airport signs and markings, lighting, and wind indicators.
⇒ Collision avoidance, scanning, obstacle and wire strike avoidance.
⇒ Right-of-way rules.
⇒ Wake turbulence recognition and resolution.
⇒ Wind shear avoidance.
⇒ Runway incursion avoidance.
⇒ Use of automated weather and airport information.
⇒ Use of radio for proper communications.
⇒ Parachuting operations.
⇒ Approach and landing considerations for different types of aircraft.
⇒ Go-around or rejected takeoff, if appropriate.
⇒ Correct for wind drift to maintain the proper ground track.
⇒ Maintain orientation with the runway/landing area in use.
⇒ Maintain an awareness of the position of other aircraft in the pattern.
⇒ Accomplish the before takeoff checklist, ensure the airplane is in safe operating condition as recommended by the manufacturer, and provide the departure briefing.
⇒ Review takeoff performance, such as airspeeds, takeoff distance, departure, and emergency procedures.
⇒ Avoid runway incursions and ensure no conflict with traffic prior to taxiing into takeoff position.
Lesson #5. Flying Solely By Reference To Instruments
1 Hour Flight, 1 Hour Ground.

Name________________ Date_________  TOTSTART________ OFF________ ON________ IN________

Objectives: This lesson will consist of a review of the previous lesson. Instruction will be given in Flight Maneuvering Solely By Reference To Instruments,

Content:

⇒ Flight instrument function and operation.
⇒ Flight instrument sensitivity, limitations, and potential errors in unusual attitudes.
⇒ Flight instrument correlation (pitch instruments/bank instruments).
⇒ Aerodynamic factors related to maintaining straight-and-level flight.
⇒ Vestibular illusions (leans) and spatial disorientation.
⇒ Appropriate pitch, bank, and power settings for the airplane being flown.
⇒ Aerodynamics associated with stalls and spins in various aircraft configurations and attitudes.
⇒ Circumstances that can lead to an inadvertent stall or spin.
⇒ Spin recovery procedures.

Introduce

⇒ Transition to climb pitch attitude and power setting on an assigned heading using proper instrument cross-check and interpretation, and coordinated control application.
⇒ Climbs descents & turns to headings solely by reference to instruments at a constant airspeed to specific altitudes in straight flight and turns.
⇒ Recognize unusual flight attitudes solely by reference to instruments and perform the correct, coordinated, and smooth control application to resolve unusual pitch and bank attitudes while staying within the airplane’s limitations and flight parameters
⇒ Level off at the assigned altitude and maintain altitude ±200 feet, heading ±20° and airspeed ±10 knots
⇒ Maneuvering at Minimum Controllable Airspeed by Reference To Instruments Only.
⇒ Full Stall Series, By Reference to Instruments Only.
⇒ Emergency Approach And Landing
⇒ Go-Around Procedures From Final Approach
⇒ Post Flight Discussion
⇒ Preview Of Next Lesson

Completion Standards: You will display the ability to use smooth and coordinated control inputs to perform all maneuvers previously reviewed, and maintain heading within 10 degrees, airspeed within 10 knots, and desired altitude within 100 feet.

Notes:
Lesson #5 (Briefing)

⇒ Takeoff distance.
⇒ Takeoff power.
⇒ Atmospheric conditions.
⇒ Wind conditions and effects.
⇒ The application of VX or VY and variations with altitude.
⇒ The manufacturer’s recommended emergency procedures for relating to the takeoff sequence.
⇒ The demonstrated crosswind component for the aircraft.
⇒ Handling engine failure during takeoff and climb.
⇒ Criticality of takeoff distance available.
⇒ Plans for engine failure after takeoff.
⇒ Sterile cockpit environment.
⇒ Verify ATC clearance and no aircraft is on final before crossing the Hold Line.
⇒ Verify aircraft is on the assigned/correct runway.
⇒ Ascertain wind direction with or without visible wind direction indicators.
⇒ Determining if crosswind component is beyond the pilot’s ability or aircraft manufacturer maximum demonstrated value.
⇒ Position the flight controls for the existing wind conditions.

⇒ Clear the area; taxi into the takeoff position and align the airplane on the runway centerline/takeoff path.
⇒ Confirm takeoff power; and proper engine and flight instrument indications prior to rotation:
⇒ Rotate and lift off at the recommended airspeed and accelerate to VY (or other speed as appropriate for aircraft).
⇒ Establish a pitch attitude that will maintain VY +10/-5 knots (or other airspeed as appropriate for aircraft).
⇒ Retract the landing gear and flaps in accordance with manufacturer’s guidance.
⇒ Maintain takeoff power and VY +10/-5 or as recommended by aircraft manufacturer to a safe maneuvering altitude.
⇒ Maintain directional control and proper wind-drift correction throughout the takeoff and climb.
⇒ Comply with responsible environmental practices, including noise abatement and published departure procedures.
⇒ Complete the appropriate checklist.
Lesson #6. **Piloting The Airplane Smoothly & Accurately**
1 Hour Flight, .5 Hour Ground.

Name________________ Date ________ TOT ________

START ________ OFF ________ ON ________ IN ________

Objectives: You will review all previous maneuvers, and will be instructed in engine failures on takeoff and during initial climb. At least three takeoffs and landings will be accomplished with minimum assistance from the instructor.

Content:

⇒ Review Technical Subject Areas during Preflight Discussion Pertaining to Today's Lesson. Review Pilot Operations, Procedures and Maneuvers As Necessary.

⇒ Preflight
⇒ Ground Operations
⇒ Airport & Traffic Pattern Operations
⇒ Takeoffs & Climbs
⇒ Turn Maneuvers
⇒ Flight at Critically Slow Airspeeds
⇒ Normal Approaches And Landings
⇒ Forward Slips To Landing
⇒ Full Stalls, Power On & Power Off
⇒ Go-Around Procedures From Final Approach
⇒ Post Flight Procedures

Introduce

⇒ Engine Failure On Takeoff & During Climb
⇒ Go-Around Procedures From The Landing Flare in Various Flight Configurations, Including Turns.
⇒ Post-Flight Briefing & Preview Of Next Lesson

Completion Standards: You should perform basic pilot operations with smoothness and accuracy, and demonstrate adequate knowledge of emergency forced landing procedures during climbs.

Notes:
Lesson #6 (Briefing)

⇒ Stabilized approach and interpretation and use of visual glide scope indicators.

⇒ Energy management.

⇒ Atmospheric conditions.

⇒ Wind conditions and effects.

⇒ Emergency procedures during approach and landing.

⇒ Land and hold short operations (LAHSO) or option to refuse LAHSO restriction.

⇒ Failure to recognize the need to perform a go-around/rejected landing.

⇒ Low altitude stall/spin.

⇒ Land and hold short operations. (LAHSO).

⇒ Maintain a stabilized approach and recommended airspeed, or in its absence, not more than 1.3 VSO, with wind gust factor applied +10/-5 knots, or as recommended by the aircraft manufacturer for the aircraft type and gust velocity.

⇒ Make smooth, timely, and correct control applications:

⇒ Execute a timely go-around decision when the approach cannot be made within the tolerances specified above or for any other condition that may result in an unsafe approach or landing.
Lesson #7. **Review And Practice As Needed**

1 Hour Flight, .5 Hours Ground.

Name________________ Date_________ TOT ________

START_______ OFF_______ ON_______ IN_______

Objectives: This lesson is a review of operations previously performed. You will practice maneuvers and improve the precision of your execution of pilot operations.

Content:

⇒ Review Technical Subject Areas during Preflight
   Discussion Pertaining to Today's Lesson.

⇒ Preflight

⇒ Ground Operations

⇒ Airport & Traffic Pattern Operations

⇒ Takeoffs & Climbs

⇒ Turn Maneuvers

⇒ Flight at Critically Slow Airspeeds

⇒ Flight Maneuvering by Reference to Ground Objects

⇒ Emergency Procedures

⇒ Go-Arounds

⇒ Approaches and Landings

⇒ Forced Landing Procedures in the Landing Pattern

⇒ Post Flight Briefing and Preview of Next Lesson

Completion Standards: You will perform basic pilot operations with smoothness and accuracy, and exercise good judgment.
Lesson #7 (Briefing)

⇒ Explaining the use of charts, tables, and data to determine performance.
⇒ Partial or complete power loss
⇒ Engine roughness or overheat
⇒ Carburetor or induction icing
⇒ Loss of oil pressure
⇒ Fuel starvation
⇒ Electrical malfunction
⇒ Vacuum/pressure, and associated flight instruments malfunction
⇒ Pitot/static system malfunction
⇒ Landing gear or flap malfunction
⇒ Inoperative trim
⇒ Inadvertent door or window opening
⇒ Structural icing
⇒ Smoke/fire/engine compartment fire
⇒ Any other emergency appropriate to the airplane
⇒ Glass cockpit operations
⇒ Factors affecting performance to include atmospheric conditions, pilot technique, aircraft condition, and airport environment.
⇒ The effects of loading on performance.
⇒ The effects of exceeding weight and balance limits.
⇒ The effects of weight and balance changes over the course of the flight.
⇒ Aerodynamics.
⇒ Limitations.
⇒ Variations in flight performance resulting from weight and balance changes during flight.
⇒ Published aircraft performance data as it relates to expected performance.
⇒ Compute weight and balance for a given scenario, which includes practical techniques to resolve out-of-limit calculations and determine if the weight and balance will remain within limits during all phases of flight.
Lesson #8. **Pre-Solo Preparation**

1 Hour Flight, 1 Hour Ground. Ground Briefing & Review of Pre-Solo Written Exam on the last 3 pages of this syllabus.

Name________________ Date_________ TOT ________

START______ OFF_______ ON________ IN________

Objectives: This lesson will consist of an evaluation of your pre-solo knowledge, and flight proficiency, and of a determination of your readiness for solo flight. You will have the opportunity to correct any faulty performance areas during this lesson. The Pre-Solo Written Exam should be administered before the completion of this lesson.

Content:

⇒ Review Technical Subject Areas during Preflight Discussion Pertaining to Today's Lesson. Administer Pre-Solo Written Exam.

⇒ Preflight

⇒ Ground Operations

⇒ Airport And Traffic Pattern Operations

⇒ Takeoffs And Climbs

⇒ Flight At Critically Slow Airspeeds

⇒ Turn Maneuvers

⇒ Flight Maneuvering By Reference To Ground Objects

⇒ Emergency Operations

⇒ Approaches And Landings

⇒ Other (Specify)

⇒ Post Flight Briefing And Preview Of Next Lesson

Completion Standards: You will perform takeoffs, landings & go-arounds without instructor assistance, and demonstrate your ability to safely solo the airplane in the local area. You will have completed the Pre-Solo Written Exam, and review the exam with your instructor.

Notes:
Lesson #8 (Briefing)

⇒ Major components of the systems:

⇒ Primary flight controls and trim

⇒ Flaps, leading edge devices, and spoilers as appropriate

⇒ Powerplant and propeller (basic engine knowledge)

⇒ Landing gear

⇒ Fuel, oil, and hydraulic

⇒ Electrical

⇒ Avionics

⇒ Pitot-static, vacuum/pressure and associated flight instruments

⇒ Environmental

⇒ Deicing and anti-icing

⇒ Normal operation of systems.

⇒ Abnormal operation of systems (recognition of system failures/malfunctions).

⇒ Systems interaction and pilot monitoring of automated systems.

⇒ Troubleshooting system failures/malfunctions.

⇒ Mismanagement of airplane systems, which can cause a problem or system failure.

⇒ Determining and/or declaring an emergency.

⇒ Detection and management of threats and errors.

⇒ Use immediate action items during emergency operations, as applicable.
Lesson #9. **First Solo Flight**
.5 Hours Dual, .1 Hour Solo, .5 Hours Ground.

Name________________ Date ________ TOT ________

START________ OFF________ ON_______ IN________
SOLO ________ OFF________ ON_______ IN________

Objectives: During this lesson, you will accomplish your first solo flight, if the required level of skill is displayed.

Content:

⇒ Review Technical Subject Areas during Preflight Discussion Pertaining to Today’s Lesson.

⇒ Preflight

⇒ Ground Operations

⇒ Airport And Traffic Pattern Operations

⇒ Takeoffs And Climbs

⇒ Flight Maneuvering By Reference To Ground Objects

⇒ Emergency Operations

⇒ Approaches And Landings

⇒ Endorsements for Solo Flight

⇒ Other Endorsements (Complex, High Performance)

**Introduce**

⇒ Solo Flight In The Traffic Pattern. Approximately 15 Minutes, 3 Takeoffs & Landings

⇒ Post-Flight Briefing & Preview Of Next Lesson

Completion Standards: You should display the ability to successfully perform your first supervised solo flight.

Notes:
BLOCK TWO - LESSONS 10 - 16
8 Hours Dual, 5 Hours Solo, 7.5 Hours Ground

BLOCK TWO OBJECTIVES: You will be instructed in the conduct of night flight operations, and in cross-country flying, and will have the opportunity to practice solo flight and maneuvers in the local area.

BLOCK TWO COMPLETION STANDARDS: You will demonstrate that you can safely conduct solo cross-country flights and night flight operations.
Lesson #10. **Preparation For Cross-Country Flights**
1 Hour Dual, 1.0 Hour Ground.

Name________________ Date_________ TOT ________
START_______ OFF_______ ON_______ IN_______

Objectives: You will learn maximum performance maneuvers and radio navigation in preparation for cross-country flying.

Contents:
- Review
- Preflight
- Ground Operations
- Airport And Traffic Pattern Operations
- Takeoffs And Climbs
- Flight At Critically Slow Airspeeds
- Turn Maneuvers
- Approaches And Landings
- Go-Around

**Introduce**
- Maximum Performance Takeoffs & Landings, Soft-Field Takeoffs And Landings
- Emergency Descent
- VOR Locating And Tracking Procedures
- GNSS Courses Interception and Tracking
- Pilotage and dead reckoning.

- Determining heading, speed, and course.
- Estimating time, speed, and distance.
- True airspeed and density altitude.
- Wind correction angle.
- Topography.
- Plotting a course.
- Magnetic compass errors.
- Route selection.
- Altitude selection.
- Power setting selection.
- Prepare a document or electronic equivalent to be used in flight for comparison with planned fuel consumption and times over waypoints while dead reckoning.
- Use of the magnetic direction indicator in navigation, to include turns to headings.
- Verify the airplane’s position within 3 nautical miles of the flight-planned route.
- Arrive at the en route checkpoints within 5 minutes of the initial or revised estimated time of arrival and provide a destination estimate.
- Maintain the selected altitude, ±200 feet and headings, ±15°.

Completion Standards: Maintain desired headings within 10 degrees, altitude within 100 feet and airspeed within 5 knots, while demonstrating proficiency in maximum performance takeoffs & landings, and in radio navigation.

Notes:
Lesson #10. (Briefing)

**Short-Field Approach and Landing**

⇒ Landing distance.

⇒ Hazards of other than hard-surfaced runways.

⇒ Obstruction clearance.

⇒ Stabilized approach.

⇒ Energy management.

⇒ Wind conditions and effects.

⇒ Density altitude.

⇒ Emergency procedures during approach and landing.

⇒ Land and hold short operations.

⇒ Maintain a stabilized approach and recommended airspeed, or in its absence, not more than 1.3 VSO, with wind gust factor applied +10 /-5 knots or as recommended by aircraft manufacturer to a safe maneuvering altitude.

⇒ Make smooth, timely, and correct control application during the round out and touchdown.

⇒ Touch down smoothly at an appropriate airspeed.

⇒ Touch down within the available runway, at or within 200 feet beyond the specified point, threshold markings or runway numbers, with no side drift, minimum float, and with the airplane’s longitudinal axis aligned with and over the runway center line/landing path.

⇒ Maintain crosswind correction and directional control throughout the approach and landing sequence, as required.

⇒ Execute a safe and timely go-around decision when the approach cannot be made within the tolerances specified above or for any other condition that may result in an unsafe approach or landing.

⇒ Apply brakes as necessary, to stop in the shortest distance consistent with safety.

⇒ Utilize after landing runway incursion avoidance procedures.

⇒ The importance of weight transfer from wheels to wings.

⇒ P factor in turning tendencies.

⇒ The effects of aircraft configuration.

⇒ The effects of runway surface.

⇒ Takeoff distance.

⇒ Takeoff power.

⇒ Wind conditions and effects.

⇒ Density altitude.

⇒ Application of VX or VY.

⇒ Emergency procedures during takeoff and climb.

⇒ Hazards of other than hard surfaced runway.

⇒ Clear the area, taxi into the takeoff position and align the Airplane on the runway centerline without stopping while advancing the throttle smoothly to takeoff power.

⇒ Confirm takeoff power, and proper engine and flight instrument indications prior to rotation.
⇒ Establish and maintain a pitch attitude that will transfer the weight of the airplane from the wheels to the wings as rapidly as possible.

⇒ Lift off at the lowest possible airspeed consistent with safety and remain in ground effect while accelerating to VX or VY, as appropriate.

⇒ Establish a pitch attitude for VX or VY, as appropriate, and maintain selected airspeed -5 knots during the climb.

⇒ Retract landing gear and flaps after a positive rate of climb has been verified or in accordance with aircraft manufacturer's guidance.

⇒ Maintain takeoff power and VY +10/-5 or as recommended by aircraft manufacturer to a safe maneuvering altitude.

⇒ Consider the wind conditions, landing surface, obstructions, and selects a suitable touchdown point.

⇒ Maintain a stabilized approach and recommended airspeed, or in its absence, not more than 1.3 VSO, with wind gust factor applied +10/-5 knots.

⇒ Make smooth, timely, and correct control application during the round out and touchdown and, for tricycle gear airplanes, keep the nose wheel off the surface until loss of elevator effectiveness.

⇒ Touch down softly with minimum sink rate and no drift, with the airplane’s longitudinal axis aligned with center of the runway.

⇒ Maintain full up elevator during rollout and exit the “soft” area at a speed that would preclude sinking into the surface.
Lesson #11. **Practice Maneuvers & Operations**
2 Hours Solo.

Name________________ Date ________ TOT ________

START_______ OFF________ ON_______ IN_______

Objectives: You will practice certain maneuvers to develop competency, smoothness and accuracy.

Contents:

⇒ Preflight

⇒ Ground Operations

⇒ Airport And Traffic Pattern Operations

⇒ Proceed To and Return From Practice Area

⇒ Maneuvering at Critically Slow Airspeeds

⇒ Constant Altitude Turns

⇒ Full Stalls, Power On & Power Off

⇒ Normal and/or Crosswind Takeoffs & Landings

⇒ Post Flight Procedures

Completion Standards: You will have practiced maneuvers and pilot operations, and will maintain desired headings within 10 degrees, altitude within 100 feet and airspeed within 5 knots.

Notes:
Lesson #12. **Night Flight #1**  
1.5 Hours Dual, 1 Hour Ground.

Name________________ Date_________ TOT ________

START_______ OFF________ ON_______ IN_______

Objectives: You will learn about the necessary preparation and equipment essential for night operations, and will perform navigation to and operations at an unfamiliar airport, including at least ten takeoffs and landings. Instruction will be given in emergency procedures for night operations.

Contents:
Introduce

⇒ Preflight Discussion

⇒ Preflight

⇒ Preparation And Equipment For Night Operations

⇒ Ground Operations

⇒ Airport And Traffic Pattern Operations

⇒ Normal and/or Crosswind Takeoffs And Climbs

⇒ Maneuvering At Minimum Controllable Airspeed

⇒ Full Stalls, Power On & Power Off

⇒ Emergency Procedures

⇒ Lost Procedures

⇒ Navigation by ATC

⇒ Approaches And Landings - Including Blackout Approaches And Landings

⇒ Go-Around

⇒ Post Flight Procedures

⇒ Post Flight Discussion And Preview

Completion Standards: You will maintain orientation throughout the flight, and by oral questioning and demonstration, display competence in performing night emergency procedures.

Notes:
Lesson #12. (Briefing)

⇒ Physiological aspects of night flying as it relates to vision.
⇒ Lighting systems identifying airports, runways, taxiways and obstructions, as well as pilot controlled lighting.
⇒ Airplane equipment requirements for night operations.
⇒ Airplane lighting systems: type, interpretation in flight, when to use each lighting system.
⇒ Personal equipment essential for night flight.
⇒ Night orientation, navigation, and chart reading techniques.
⇒ Safety precautions and emergencies unique to night flying.
⇒ Somatogravic illusion and black hole approach illusion.
⇒ Disorientation that can be experienced in unusual attitudes at night.
⇒ Visual scanning techniques during night operations.
⇒ Hazards of inadvertent IMC.
⇒ Collision avoidance, scanning, obstacle and wire strike avoidance.
⇒ Environmental considerations at night (e.g., IMC; terrain (roads)).
⇒ Physiological aspects of night flying.
⇒ The effects of aircraft configuration.
⇒ The effects of runway surface.
⇒ Takeoff distance.
⇒ Takeoff power.
⇒ Obstruction clearance.
⇒ Wind conditions and effects.
⇒ Minimum safe altitude.
⇒ Density altitude.
⇒ Application of VX or VY.
⇒ Emergency procedures during takeoff and climb.
⇒ Verify proper aircraft configuration.
⇒ Complete the appropriate checklist.
Lesson #13. **Night Flight #2**
1.5 Hours Dual, .5 Hour Ground.

Name________________ Date_________ TOT _________
START_______ OFF_______ ON_______ IN_________

Objectives: You will learn about the necessary preparation and equipment essential for night operations, and will perform navigation to and operations at an unfamiliar airport, including at least ten takeoffs and landings. Instruction will be given in emergency procedures for night operations.

Contents:
Introduce

⇒ Preflight Discussion

⇒ Preflight

⇒ Preparation And Equipment For Night Operations

⇒ Physiological Aspects related to Vision

⇒ Ground Operations

⇒ Airport And Traffic Pattern Operations

⇒ Normal and/or Crosswind Takeoffs And Climbs

⇒ Maneuvering At Minimum Controllable Airspeed

⇒ Full Stalls, Power On & Power Off

⇒ Emergency Procedures

⇒ Lost Procedures

⇒ Navigation by ATC

⇒ Approaches and Landings - Including Blackout Approaches and Landings

⇒ Go-Around

⇒ Post Flight Procedures

⇒ Post Flight Discussion And Preview

Completion Standards: You will maintain orientation throughout the flight, and by oral questioning and demonstration, display competence in performing night emergency procedures.

Notes:
Lesson #13 (Briefing)

**Emergency Descent**

⇒ Glide speed, distance.

⇒ Stabilized approach.

⇒ Energy management.

⇒ Wind conditions and effects.

⇒ Situations, such as depressurization, cockpit smoke and/or engine fire that require an emergency descent.

⇒ Emergency procedures.

⇒ Communications.

⇒ ATC clearance deviations.

⇒ ELTs and/or other emergency locating devices.

⇒ Radar assistance to VFR aircraft.

⇒ Transponder.

⇒ Low-altitude maneuvering.

⇒ Collision avoidance, scanning, obstacle and wire strike avoidance.

⇒ Having the right-of-way in an emergency.

⇒ Failure to maintain situational awareness during an emergency descent.

⇒ Stalls and spins.

⇒ Difference between using VNE and VFE, and when each one is appropriate.

⇒ Analyze the situation and select an appropriate course of action.

⇒ Establish and maintain the appropriate airspeed and configuration for the emergency descent.

⇒ Establish appropriate propeller pitch (if constant speed), flap deployment, and gear position (if retractable) relative distance and altitude to selected landing area.

⇒ Exhibit orientation, division of attention and proper planning.

⇒ Maintain positive load factors during the descent.

⇒ Follow the appropriate checklist.

⇒ Emergency equipment.

⇒ Climate extremes (hot/cold).

⇒ The hazards of mountainous terrain.

⇒ The hazards of overwater operations.

⇒ Gear to meet basic physical needs until rescue.

⇒ ELT operation, limitations and testing requirements.

⇒ Being prepared to meet basic needs (water, clothing, shelter) for 48 to 72 hours in the event of an unplanned off-airport landing.

⇒ Identify appropriate equipment that should be onboard the airplane.

⇒ Identify appropriate personal gear to meet physical needs until rescue.

⇒ Brief the proper use of the fire extinguisher and other survival equipment.
Lesson #14. Dual Cross-Country Instruction
3 Hours Dual, 3 Hours Ground.

Name________________ Date_________ TOT ________
START_______ OFF________ ON_______ IN________

Objectives: You will be introduced to Cross-Country Navigation (At least 50 NM between two points,) and be able to obtain maximum performance during short and soft field takeoffs and landings. In addition, you will learn to apply the principles of Pilotage, Dead Reckoning, and Radio Navigation, locate the airplane's position relative to a radio facility, and to intercept and track a given radial or bearing.

Content:
Introduction Of Technical Subject Areas For Today's Lesson.

⇒ Preflight

⇒ Ground Operations Includes:
  1-Navigation & Flight Planning
  2-High Altitude Operations
  3-Federal Aviation Regulations
  4-Use Of Minimum Equipment List
  5-Publications
  6-Radio Communications & Reporting
  7-Logbook Entries & Certificate Endorsements
  8-Obtaining Weather Information

⇒ Airport And Traffic Pattern Operations

⇒ Takeoffs And Climbs

Introduce

⇒ Short & Soft Field Takeoff And Climb

⇒ Pilotage & Dead Reckoning

⇒ Navigation Systems and Radar Services

⇒ Lost Procedures

⇒ Radio Aids And Radar Services

⇒ Flight On A Federal Airway

⇒ Diversion To Alternate

⇒ Short Field Approaches & Landings

⇒ Soft Field Approaches & Landings

⇒ Post Flight Discussion & Preview Of Next Lesson

Completion Standards: You will demonstrate how to correctly perform short field takeoffs and landings, correctly locate your position in relation to a radio facility, intercept and track a given radial or bearing, and be able to explain the radio aids and radar services available.

Notes:
Lesson #14 (Briefing)

⇒ Route planning, including consideration of special use airspace.

⇒ Applying universal coordinated time (UTC) to flight planning.

⇒ Converting and calculating time relative to time zones and estimated time of arrival.

⇒ Calculating time, climb and descent rates, course, distance, heading, true airspeed and ground speed.

⇒ Fuel planning.

⇒ Altitude selection accounting for terrain and obstacles, glide distance of the aircraft, VFR cruising altitude, and the effect of wind.

⇒ Conditions conducive to icing.

⇒ Symbology found on VFR charts including airspace, obstructions and terrain features.

⇒ Elements of a VFR flight plan.

⇒ Procedures for activating and closing a VFR flight plan in controlled and non-controlled airspace.

⇒ Seasonal weather phenomena.

⇒ Various classes of airspace.

⇒ Maintaining VFR at night.

⇒ Special use airspace.

⇒ Compliance with or avoidance of specific en route airspace.

⇒ Requirements for basic VFR weather minimums and flying in particular classes of airspace.

⇒ Requirements for flying in special use airspace (SUA), and special flight rule areas (SFRA).

⇒ Identify airspace and operate accordingly with regards to communication and equipment requirements.

⇒ Limitations of ATC services.

⇒ A route overflying significant environmental influences, such as mountains or large bodies of water.

⇒ Flight in areas unsuitable for landing or below personal minimums.

⇒ Seasonal weather patterns.

⇒ Prepare, present and explain a cross-country flight plan assigned by the instructor including a risk analysis based on real time weather.

⇒ Select appropriate routes, altitudes, and checkpoints.

⇒ Recalculate fuel reserves based on a scenario provided by the instructor.

⇒ Create a navigation log and simulate filing a VFR flight plan.

⇒ Interpret departure, en route, arrival route with reference to appropriate and current charts.

⇒ Apply pertinent information from Chart Supplements U.S.; NOTAMs relative to airport, runway and taxiway closures; and other flight publications.
⇒ Flight plan shall be to the first fuel stop, based on the maximum allowable passengers, baggage, and/or cargo loads using real-time weather and appropriate and current aeronautical charts.

⇒ Identify airspace, obstructions, and terrain features.

⇒ Select appropriate navigation system/facilities and communication frequencies.

⇒ Types of airspace/airspace classes and basic VFR weather minimums.

⇒ Charting symbology.

⇒ Special use, special flight rules areas, and other airspace areas.

⇒ Temporary flight restrictions.

⇒ Aircraft speed limitations in various classes of airspace.

⇒ Radar assistance to VFR aircraft (e.g. operations, equipment, available services, traffic advisories). Ground-based navigation (orientation, course determination, equipment, tests and regulations).

⇒ Satellite-based navigation (e.g. equipment, regulations, authorized use of databases, and Receiver Autonomous Integrity Monitoring (RAIM)).

⇒ Transponder (Mode(s) A, C, and S).

⇒ Selecting an alternate destination.

⇒ Deviating from ATC instructions and/or the flight plan.

⇒ The value of recording time at waypoints.

⇒ The assistance available if lost (radar services, communication procedures).

⇒ Declaring an emergency.
Lesson #15. **Solo Cross-Country Flight**

3 Hours Solo & Cross-Country, .5 Hours Ground.

Name________________ Date ___________ TOT ________

START _______ OFF _______ ON _______ IN _______

Objectives: During this lesson, you will conduct a solo cross-country flight, using pilotage, dead reckoning and radio navigation, with a landing at least 50 nautical miles from the point of origin. Your instructor will endorse you for a specific cross-country flight, after examining your preflight preparation & planning.

Contents:

⇒ Preflight

⇒ Ground Operations

⇒ Airport And Traffic Pattern Operations

⇒ Takeoffs And Climbs

⇒ Cross-Country Flying

⇒ Approaches And Landings

⇒ Post Flight Procedures

⇒ Post Flight Discussion & Preview

Completion Standards: You will have successfully completed your flight. The instructor will determine how the flight operations were conducted by oral questioning.

Notes:
Lesson #16. **Cross-Country Evaluation**
1 Hour Dual, 1 Hour Ground.

Name________________ Date_________ TOT________

START________ OFF________ ON________ IN________

Objectives: During this lesson you will be evaluated to
determine your ability to plan and execute a cross-country
flight safely. You will also have the opportunity to practice
takeoffs, landings and other tasks, in preparation for solo
cross-country flights.

Contents:

⇒ Preflight Discussion

⇒ Preflight

⇒ Obtaining Weather Information

⇒ Determining Performance And Limitations

⇒ Cross-Country Flight Planning

⇒ Airplane Systems

⇒ Ground Operations

⇒ Airport And Traffic Pattern Operations

⇒ Takeoffs And Climbs

⇒ Pilotage And Dead Reckoning

⇒ Navigation Systems and Radar Services

⇒ Diversion To Alternate

⇒ Lost Procedures

⇒ Approaches And Landings

⇒ Post Flight Procedures

Completion Standards: You will demonstrate the ability to
conduct cross-country flights, displaying competence and
safety, and an understanding of the national airspace
system pertinent to the airspace in which the flight is to be
conducted. You will also gain further proficiency in takeoffs,
landings and other tasks as required to improve technique.

Notes:
BLOCK THREE - Lessons 17 - 23
3 Hours Dual - 14.5 Hours Solo - 3 Hours Ground

BLOCK THREE OBJECTIVES: You will complete solo cross-country requirements, and receive instruction in preparation for the practical test.

BLOCK THREE COMPLETION STANDARDS: This block will be completed when you are ready for the practical test.
Lesson #17. **Solo Cross-Country Flights**
Several Flights - 10 Hours Solo Cross-Country, .5 Hours Ground or as necessary for each flight

Name________________ Date_________ TOT ________

START_______ OFF_______ ON_______ IN_______

Objectives: You will complete several cross-country flights, including a flight of at least 300 nautical miles with landings at a minimum of three points, one of which is at least 100 nautical miles from the original point of departure.

Contents:

⇒ Preflight
⇒ Ground Operations
⇒ Airport And Traffic Pattern Operations
⇒ Takeoffs And Climbs
⇒ Cross-Country Flying
⇒ Approaches And Landings
⇒ Post Flight Procedures
⇒ Preview of Next Lesson

Completion Standards: This lesson will be successfully completed when, through oral questioning and logbook records, the instructor determines that your cross-country solo flight requirements are met.

Notes:
Lesson #18. **Dual Preparation For The Practical Test 1**
1 Hour Dual, .5 Hours Ground.

Name________________ Date __________ TOT _________

START _______ OFF _______ ON _______ IN _______

Objectives: The instructor will determine your proficiency in all pilot operations required for the practical test.

Contents:

⇒ ADM and Risk Management
⇒ Preflight, Ground Operations
⇒ Airport And Traffic Pattern Operations
⇒ Takeoffs And Climbs
⇒ Cross-Country Flying
⇒ Flight By Reference To Instruments
⇒ Flight At Critically Slow Airspeeds
⇒ Turn Maneuvers
⇒ Flight Maneuvering By Reference To Ground Objects
⇒ Emergency Operations
⇒ Approaches And Landings, Post Flight Procedures
⇒ Post Flight Discussion To Include Questioning About In-Flight Distractions
⇒ Airman Certification Standards for Private Pilot Certification in the Airplane Category, Single-Engine Land Class
⇒ Preview of Next Lesson.

Completion Standards: You will demonstrate adequate knowledge and skill required for the successful completion of the practical test. Additional study or practice will be assigned, if needed.

Notes:
Lesson #18 (Briefing)

⇒ Currency, regulatory compliance, privileges, and limitations.
⇒ Location of airman documents and identification required when exercising private pilot privileges.
⇒ The required documents to provide upon inspection.
⇒ Pilot logbook/record-keeping.
⇒ Compensation.
⇒ Towing.
⇒ Category and class.
⇒ Endorsements.
⇒ Medical certificates: class, expiration, privileges, temporary disqualifications.
⇒ Drugs, alcohol regulatory restrictions that affect the pilot’s ability to operate safely.
⇒ Act as PIC under VFR in a scenario given by the instructor.
⇒ Use available aviation weather resources to obtain an adequate weather briefing.
⇒ Correlate weather information to determine alternate requirements.
⇒ Correlate available weather information to make a competent go/no-go or diversion decision.
⇒ Update/interpret weather in flight.
⇒ Evaluate environmental conditions using valid and reliable information sources to be able to make a competent go/no-go or diversion decision.
⇒ Given a scenario based on real time weather, where it would be appropriate, divert.
⇒ Use cockpit displays of digital weather and aeronautical information, as applicable.
Lesson #19. **Solo Preparation For The Practical Test 1**

1.5 Hours Solo.

Name________________ Date_________ TOT ________

START_______ OFF_______ ON_______ IN_______

Objectives: You will be able to perform specific flight maneuvers with proficiency, as assigned by the instructor.

Contents:

⇒ Preflight

⇒ Ground Operations

⇒ Airport And Traffic Pattern Operations

⇒ Takeoffs And Climbs

⇒ Flight At Critically Slow Airspeeds

⇒ Turn Maneuvers

⇒ Flight Maneuvering By Reference To Ground Objects

⇒ Approaches And Landings

⇒ Post Flight Procedures

⇒ Post Flight Discussion And Preview

Completion Standards: You will have completed solo maneuvers as specified by the instructor, with proficiency and accuracy.

Notes:
Lesson #20. Dual Preparation For The Practical Test 2
1 Hour Dual, .5 Hours Ground.

Name________________ Date_________ TOT________
START________ OFF________ ON________ IN________

Objectives: The instructor will make a further determination that you are ready for the flight test, and introduce distractions to reinforce awareness of division of attention and airplane control.

Contents:
⇒ Airman Certification Standards for Private Pilot Certification in the Airplane Category, Single-Engine Land Class
⇒ Single Pilot Resource Management
⇒ Preflight
⇒ Ground Operations
⇒ Airport And Traffic Pattern Operations
⇒ Takeoffs And Climbs
⇒ Cross-Country Flying
⇒ Flight By Reference To Instruments
⇒ Flight At Critically Slow Airspeeds
⇒ Turn Maneuvers
⇒ Flight Maneuvering By Reference To Ground Objects.
⇒ Emergency Operations
⇒ Approaches And Landings
⇒ Post Flight Procedures
⇒ Realistic Distractions

Completion Standards: This lesson will be successfully completed when you display the confidence, knowledge and skill necessary for successful completion of the practical test.

Notes:
Lesson #20. (Briefing)

⇒ General airworthiness requirements and compliance for airplanes.
⇒ Certificate location and expiration dates
⇒ Required inspections
⇒ Inspection requirements
⇒ Individuals who can perform maintenance on the aircraft, including A&P and IA roles in aircraft maintenance and inspections.
⇒ Pilot-performed preventive maintenance.
⇒ Equipment requirements for day and night flight for example: flying with inoperative equipment (approved Minimum Equipment List (MEL), Kinds of Operation Equipment List (KOEL), VFR and placards.
⇒ Proving airworthiness (specifcits of the aircraft-compliance with Airworthiness Directives or applicability of Safety Bulletins).
⇒ Obtaining a special flight permit.
⇒ Experimental aircraft airworthiness.
⇒ Inoperative equipment.
⇒ Equipment failure during flight.
⇒ Discrepancy records or placards.
⇒ Determine the aircraft is airworthy in a scenario given by the instructor.
⇒ Explain conditions where flight can be made with inoperative equipment.
⇒ Explain requirements for obtaining and flying with a Special Flight Permit.
⇒ Locate and explain operating limitations, placards, instrument markings, POH/AFM, weight and balance data, and equipment list.
⇒ Acceptable sources of weather data for flight planning purposes.
⇒ Weather products required for preflight planning and en route operations.
⇒ Current and forecast weather for departure, en route and arrival phases of flight.

Meteorology applicable to the airport, local area, departure, en route, alternate, and destination of a VFR flight in Visual Meteorological Conditions (VMC) to include expected climate and hazardous conditions such as:

⇒ Atmospheric composition and stability
⇒ Wind (e.g. crosswind, tailwind, wind shear, etc.)
⇒ Temperature
⇒ Moisture/precipitation
⇒ Weather system formation, including air masses and fronts
⇒ Clouds
⇒ Turbulence
⇒ Thunderstorms
⇒ Icing and freezing level information
⇒ Fog
⇒ Frost
⇒ METARs and TAFs
⇒ Weather related charts
⇒ Weather advisories
⇒ PIREPs
⇒ En route weather resources.
⇒ Cockpit displays of digital weather and aeronautical information.
Lesson #21. Solo Preparation For The Practical Test 2
1.5 Hours Solo.

Name________________ Date_________ TOT_________

START________ OFF________ ON________ IN________

Objectives: You will practice flight maneuvers assigned by the instructor.

Contents:
⇒ Preflight
⇒ Ground Operations
⇒ Airport And Traffic Pattern Operations
⇒ Takeoffs And Climbs
⇒ Cross-Country Flying
⇒ Flight Maneuvering At Critically Slow Airspeeds
⇒ Turn Maneuvers
⇒ Approaches And Landings
⇒ Post Flight Procedures
⇒ Post Flight Discussion And Preview

Completion Standards: You will, through oral questioning display preparedness for the practical test.

Notes:
Lesson #22. Solo Preparation For The Practical Test 3
1.5 Hours Solo, .5 Hours Ground.

Name________________ Date_________ TOT ________
START_______ OFF_______ ON_______ IN_______

Objectives: You will practice flight maneuvers as necessary in preparation for the practical test.

Contents:
⇒ Preflight
⇒ Ground Operations
⇒ Airport And Traffic Pattern Operations
⇒ Takeoffs And Climbs
⇒ Cross-Country Flying
⇒ Flight Maneuvering At Critically Slow Airspeeds
⇒ Turn Maneuvers
⇒ Approaches And Landings
⇒ Post Flight Procedures
⇒ Post Flight Discussion And Preview

Completion Standards: You will, through oral questioning display preparedness for the practical test.

Notes:
Lesson #22 (Briefing)

⇒ Hypoxia

⇒ Hyperventilation

⇒ Middle ear and sinus problems

⇒ Spatial disorientation

⇒ Motion sickness

⇒ Carbon monoxide poisoning

⇒ Stress and fatigue

⇒ Dehydration and nutrition

⇒ Hypothermia

⇒ Optical illusions

⇒ The effects of alcohol, drugs, and over-the-counter medications, and associated regulations.

⇒ The effects of dissolved nitrogen in the bloodstream of a pilot or passenger in flight following scuba diving.

⇒ The effects of hazardous attitudes on aeronautical decision making.

⇒ Collision avoidance, scanning, obstacle and wire strike avoidance.

⇒ The pilot/airplane interface to include: pilot monitoring duties and the interaction with charts and avionic equipment.

⇒ Personal risk factors and the conflict between being goal oriented and adhering to personal limitations.

⇒ Optical illusions.
Lesson #23. **Practical Test Evaluation**
1 Hour Dual, 1 Hour Ground

Name________________ Date_________  TOT ________

START_______ OFF_______ ON_______ IN_______

Objectives: You will practice pilot operations in preparation for the practical test.

Contents:

⇒ Airman Certification Standards for Private Pilot Certification in the Airplane Category, Single-Engine Land Class

⇒ Ground Operations

⇒ Airport And Traffic Pattern Operations

⇒ Takeoffs and Climbs

⇒ Cross-Country Flying

⇒ Flight at Critically Slow Airspeeds

⇒ Turn Maneuvers

⇒ Flight Maneuvering by Reference to Ground Objects|

⇒ Additional Maneuver(s) as Specified

⇒ Approaches and Landings

⇒ Post Flight Procedures

Completion Standards: You will have completed solo maneuvers with increased accuracy, and be ready for the Stage Three Check.

Notes:
Lesson #23 (Briefing)

⇒ Pilot self-assessment.

⇒ Determine if the aircraft is appropriate for the mission by considering load, range, equipment and aircraft capability.

⇒ Environmental factors that could affect the flight plan:
  ⇒ Terrain
  ⇒ Route selection
  ⇒ Obstruction
  ⇒ Weather
  ⇒ External pressures.
  ⇒ Seasonal weather phenomena.

⇒ Oxygen use regulations, system operational guidelines, and system checks, if applicable.

⇒ Passenger briefing requirements and appropriate information.

⇒ PIC responsibility to have available material for the flight as planned.

⇒ Use of portable electronic devices.

⇒ Use of automation.

⇒ Inappropriate use of technology.

⇒ The impact of reported discrepancies.

⇒ Passenger behavior that could negatively affect safety.

⇒ Brief occupants on the use of safety belts, shoulder harnesses, doors, sterile cockpit, and flight control freedom of movement, and emergency procedures.

⇒ Conduct an appropriate pre take-off briefing.
This is to certify that ________________ has satisfactorily completed the
PRIVATE PILOT CERTIFICATION COURSE
on this _______day of ____________, 20______.

The above named individual has satisfactorily completed each required stage of the approved course of training including the tests for those stages, and has received _______Hours of Cross-Country Flight Training

Signature of Flight Instructor Printed Name CFI# Exp. Date
Preparation for Solo Flight
Pre-Solo Written Exam

Instructor’s Name____________________

Student’s Name____________________

Date____________________

Use additional sheets of paper if necessary to answer these questions.

1. What preflight action is required prior to a solo flight in the local area? (91.103)

2. What are the restrictions on the proximity of one aircraft to another in flight? (91.111)

3. If an Airplane is converging at approximately the same altitude with a glider, which has the right-of-way? (91.113)

4. When two aircraft are approaching each other head-on, in which direction should each pilot alter course? (91.113)

5. When two aircraft, neither on final approach, are approaching an airport for the purpose of landing, but one aircraft is lower than the other, which, in general, has the right of way? (91.113)

6. What constitutes an acrobatic maneuver? (91.303)

7. At what time of day must an aircraft's position lights be turned on? (91.209)

8. Under what conditions may a pilot deviate from control tower instructions? (PHAK 13)
9. What are the standard light signals for control of airport traffic, and what is the meaning of each signal, both on the ground, and in the air? (PHAK 13)

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<th>Color &amp; Type</th>
<th>On Ground</th>
<th>In Flight</th>
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<td>Alternating RED and GREEN</td>
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10. Do Federal Aviation Regulations specifically prohibit operation of an aircraft in a careless or reckless manner? Explain what constitutes careless or reckless operation. (91.13)

11. Is intentionally flying in close proximity to any structure, other than for takeoff and landing considered to be careless and reckless operation? Why? (91.13)

12. Except when necessary for takeoff and landing, what is considered to be a minimum safe altitude for all flight situations? (91.119)

13. What is the minimum safe altitude over congested areas as established by regulations? (91.119)

14. There is no altimeter setting available at a given airport, what setting should be used for a local flight? (91.121)

15. What are the dimensions of class "D" airspace? (PHAK 14)
16. Are there any operations authorized within class "D" airspace other than for the purpose of landing or taking off? (PHAK 14)

17. When operating an aircraft equipped with a two-way radio at an airport with a federally operated control tower, is the pilot required to maintain communications with the tower? (PHAK 14)

18. When operating at an airport with a control tower, is compliance with tower instructions mandatory? (PHAK 14)

19. May a right-hand traffic pattern be executed at an airport with a control tower even though the standard traffic pattern is to the left? (PHAK 14)

20. What is the difference between a ground control clearance to taxi and a clearance to taxi to a specific runway? (PHAK 14)

21. In the event of transmitter failure, what communications action is recommended when operating at an airport with a control tower? (PHAK 14)

22. What is the standard direction of all turns for an airplane approaching to land at an airport without a control tower? (PHAK 14)

23. What types of facilities may have a designated CTAF? (PHAK 14)

24. Do instructions received from an airport ground controller have the same authority as those received from the in-flight controller?

25. What are the basic VFR weather minimums in a class D airspace, and its extensions? (91.155)
26. Is a restricted radiotelephone operator permit required to operate a VHF radio within the US? (FCC.gov)

27. What frequencies are necessary for operations at this airport? (AFD)

28a. What are the basic VFR Weather minimums in class E airspace at or below 1200 feet above the ground? (91.155)

28b. What are the basic VFR Weather minimums in class E airspace between 1,200 AGL and 10,000 feet MSL within controlled airspace? (91.155)

29. Which aircraft has the right-of-way when one aircraft is being overtaken by another? (91.113)

30. In what direction should the course be altered to pass well clear of another aircraft that is being overtaken? (91.113)

31. In the case of lost radio contact with the control tower, what is the prescribed action for the traffic pattern entry, approach, and landing?

32. What are appropriate altitudes when operating an aircraft under VFR conditions in level cruising flight above 3,000 AGL? (91.159)

33. Is it mandatory for the pilot to keep the seatbelt fastened during takeoffs, landings and while enroute? (91.107)

34. What visual display is used to indicate that an airport runway or taxiway is closed to traffic?
35. What class of medical certificate is required for solo flight? (FAA.gov)

36. Is an instructor endorsement required for solo flight? If yes, where is the endorsement located? (61.87)

37. Who is responsible for determining aircraft airworthiness prior to flight? (91.7)

38. What documents are required to be on board the aircraft prior to flight? (PHAK 8)

39. What is the maximum useable fuel for your aircraft with standard tanks? (POH)

40. What is the minimum oil required? (POH)

41. What are the best rate-of-climb and obstruction-clearance climb airspeeds for your aircraft? (POH)

42. What are the zero-flap and full-flap approach speeds for your aircraft? (POH)

43. What is the maximum allowable flap setting for takeoff? (POH)

44. What is the maximum allowable RPM drop during the magneto check on runup? (POH)
45. What is the first indication of induction system icing? (PHAK 6)

46. What is the maximum flap extension speed? (POH)

47. What is the placarded maneuvering speed, and what is its definition? (AFH)

48. Describe the emergency procedure for a partial or complete engine failure. (AFH)

49. During stall practice, recovery should be completed no lower than what AGL altitude?

What MSL altitude is appropriate for this practice area?

50. Explain the procedure for executing a go-around?
APPENDIX 1 Additional lessons as necessary. The following pages contain additional flight lessons to be used as necessary. For example, if you need additional lessons prior to solo, etc…
Lesson #9a. **Additional Preparation for Solo Flight**

.5 Hours Dual, .1 Hour Solo, .5 Hours Ground.

Name________________ Date_________  TOT_________

START________ OFF________ ON_______ IN________

SOLO ________ OFF________ ON_______ IN________

Objectives: During this lesson, you will accomplish your first solo flight, if the required level of skill is displayed.

Content:

⇒ Review Technical Subject Areas during Preflight Discussion Pertaining to Today's Lesson.

⇒ Preflight

⇒ Ground Operations

⇒ Airport And Traffic Pattern Operations

⇒ Takeoffs And Climbs

⇒ Flight Maneuvering By Reference To Ground Objects

⇒ Emergency Operations

⇒ Approaches And Landings

⇒ Other (Specify)

⇒ Post Flight Procedures

**Introduce**

⇒ Solo Flight In The Traffic Pattern. Approximately 15 Minutes, 3 Takeoffs & Landings

⇒ Post-Flight Briefing & Preview Of Next Lesson

Completion Standards: You should display the ability to successfully perform your first supervised solo flight.

Notes:
Lesson #9b. **Additional Preparation for Solo Flight**

.5 Hours Dual, .1 Hour Solo, .5 Hours Ground.

Name________________ Date_________ TOT________

START_______ OFF_______ ON_______ IN_______

SOLO ________ OFF_______ ON_______ IN_______

Objectives: During this lesson, you will accomplish your first solo flight, if the required level of skill is displayed.

Content:

⇒ Review Technical Subject Areas during Preflight Discussion Pertaining to Today's Lesson.

⇒ Preflight

⇒ Ground Operations

⇒ Airport And Traffic Pattern Operations

⇒ Takeoffs And Clims

⇒ Flight Maneuvering By Reference To Ground Objects

⇒ Emergency Operations

⇒ Approaches And Landings

⇒ Other (Specify)

⇒ Post Flight Procedures

**Introduce**

⇒ Solo Flight In The Traffic Pattern. Approximately 15 Minutes, 3 Takeoffs & Landings

⇒ Post-Flight Briefing & Preview Of Next Lesson

Completion Standards: You should display the ability to successfully perform your first supervised solo flight.

Notes:
Lesson #9c. **Additional Preparation for Solo Flight**
.5 Hours Dual, .1 Hour Solo, .5 Hours Ground.

Name________________ Date_________  TOT________
START_______ OFF________ ON_______ IN_______
SOLO ________ OFF_______ ON_______ IN_______

Objectives: During this lesson, you will accomplish your first solo flight, if the required level of skill is displayed.

Content:

⇒ Review Technical Subject Areas during Preflight Discussion Pertaining to Today's Lesson.

⇒ Preflight

⇒ Ground Operations

⇒ Airport And Traffic Pattern Operations

⇒ Takeoffs And Climbs

⇒ Flight Maneuvering By Reference To Ground Objects

⇒ Emergency Operations

⇒ Approaches And Landings

⇒ Other (Specify)

⇒ Post Flight Procedures

**Introduce**

⇒ Solo Flight In The Traffic Pattern. Approximately 15 Minutes, 3 Takeoffs & Landings

⇒ Post-Flight Briefing & Preview Of Next Lesson

Completion Standards: You should display the ability to successfully perform your first supervised solo flight.

Notes:
Lesson #9d. **Additional Preparation for Solo Flight**
.5 Hours Dual, .1 Hour Solo, .5 Hours Ground.

Name________________ Date_________  TOT________
START_______ OFF_______ ON_______ IN_______
SOLO _________ OFF_______ ON_______ IN_______

Objectives: During this lesson, you will accomplish your first solo flight, if the required level of skill is displayed.

Content:

⇒ Review Technical Subject Areas during Preflight Discussion Pertaining to Today's Lesson.

⇒ Preflight

⇒ Ground Operations

⇒ Airport And Traffic Pattern Operations

⇒ Takeoffs And Clims

⇒ Flight Maneuvering By Reference To Ground Objects

⇒ Emergency Operations

⇒ Approaches And Landings

⇒ Other (Specify)

⇒ Post Flight Procedures

**Introduce**

⇒ Solo Flight In The Traffic Pattern. Approximately 15 Minutes, 3 Takeoffs & Landings

⇒ Post-Flight Briefing & Preview Of Next Lesson

Completion Standards: You should display the ability to successfully perform your first supervised solo flight.

Notes:
Lesson #9e. **Additional Preparation for Solo Flight**  
.5 Hours Dual, .1 Hour Solo, .5 Hours Ground.

Name________________ Date_________  TOT__________
START________ OFF________ ON________ IN________
SOLO ________ OFF________ ON________ IN________

Objectives: During this lesson, you will accomplish your first solo flight, if the required level of skill is displayed.

Content:

⇒ Review Technical Subject Areas during Preflight Discussion Pertaining to Today's Lesson.

⇒ Preflight

⇒ Ground Operations

⇒ Airport And Traffic Pattern Operations

⇒ Takeoffs And Climbs

⇒ Flight Maneuvering By Reference To Ground Objects

⇒ Emergency Operations

⇒ Approaches And Landings

⇒ Other (Specify)

⇒ Post Flight Procedures

**Introduce**

⇒ Solo Flight In The Traffic Pattern. Approximately 15 Minutes, 3 Takeoffs & Landings

⇒ Post-Flight Briefing & Preview Of Next Lesson

Completion Standards: You should display the ability to successfully perform your first supervised solo flight.

Notes:
STUDENT PILOT ENDORSEMENTS

1. **Presolo aeronautical knowledge**: section 61.87(b).

   I certify that _____________________ has satisfactorily completed the presolo knowledge exam of section 61.87(b) for a Cessna 210-A.

   /_________________________/[______________]
   Signature Date
   Thomas Gorski 2267082CFI Exp. 5-31-18

2. **Presolo flight training**: section 61.87(c).

   I certify that _____________________ has received the required presolo training in a Cessna 210-A. I have determined he/she has demonstrated the proficiency of section 61.87(d) and is proficient to make solo flights in Cessna 210-A.

   /_________________________/[______________]
   Signature Date
   Thomas Gorski 2267082CFI Exp. 5-31-18

3. **Presolo flight training at night**: section 61.87(c) and (o).

   I certify that _____________________ has received the required presolo training in a (make and model aircraft). I have determined he/she has demonstrated the proficiency of section 61.87(o) and is proficient to make solo flights at night in a Cessna 210-A.

   /_________________________/[______________]
   Signature Date
   Thomas Gorski 2267082CFI Exp. 5-31-18

4. **Solo flight (each additional 90-day period)**: section 61.87(p).

   I certify that _____________________ has received the required training to qualify for solo flying. I have determined he meets the applicable requirements of section 61.87(p) and is proficient to make solo flights in a Cessna 210-A.

   /_________________________/[______________]
   Signature Date
   Thomas Gorski 2267082CFI Exp. 5-31-18

4. **Solo flight (each additional 90-day period)**: section 61.87(p).

   I certify that _____________________ has received the required training to qualify for solo flying. I have determined he meets the applicable requirements of section 61.87(p) and is proficient to make solo flights in a Cessna 210-A.

   /_________________________/[______________]
   Signature Date
   Thomas Gorski 2267082CFI Exp. 5-31-18
5. **Solo takeoffs and landings at another airport within 25 nm:** section 61.93(b)(1).

I certify that _____________________ has received the required training of section 61.93(b)(1). I have determined that he is proficient to practice solo takeoffs and landings at (____________________). The takeoffs and landings at (the above names airport) are subject to the following conditions:

/_______________________________/ [_____________________
Signature Date
Thomas Gorski 2267082CFI Exp. 5-31-18

6. **Initial solo cross-country** flight: section 61.93(c)(1).

I certify that _____________________ has received the required solo cross-country training. I find he has met the applicable requirements of section 61.93, and is proficient to make solo cross-country flights in a Cessna 210-A.

/_______________________________/ [_____________________
Signature Date
Thomas Gorski 2267082CFI Exp. 5-31-18

7. **Solo cross-country** flight: section 61.93(c)(2).

I have reviewed the cross-country planning of ____________________. I find the planning and preparation to be correct to make the solo flight from (_________________________ ) to (_________________________ ) via (_________________________ ) with landings at (____________________) in a Cessna 210-A on (_________________________ ).

Conditions and Limitations appear below:

/_______________________________/ [_____________________
Signature Date
Thomas Gorski 2267082CFI Exp. 5-31-18
8. **Repeated solo cross-country** flights not more than 50 nm from the point of departure: section 61.93(b)(2).

I certify that _____________________ has received

the required training in both directions

between _____________________ and ____________________.

I have determined that he is proficient of section 61.93(b)(2) to conduct repeated solo cross-country flights over that route, subject to the following conditions:

Conditions and Limitations appear below:

(__________________________________________.)

_________________________________________/ [______________]
Signature Date

Thomas Gorski 2267082CFI Exp. 5-31-18

9. **Solo flight in Class B** airspace: section 61.95(a).

I certify that _____________________ has received

the required training of section 61.95(a).

I have determined he is proficient to conduct solo flights in (____________________) airspace.

(List any applicable conditions or limitations.)

Conditions and Limitations appear below:

(__________________________________________.)

_________________________________________/ [______________]
Signature Date

Thomas Gorski 2267082CFI Exp. 5-31-18

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**PRIVATE PILOT ENDORSEMENTS**

37. Aeronautical knowledge test: sections 61.35(a)(1), 61.103(d), and 61.105.

I certify that _____________________ has received

the required training in accordance with section 61.105. I have determined he is prepared for the (name the knowledge test).

/ ____________________________/ [______________]
Signature Date
Thomas Gorski 2267082CFI Exp. 5-31-18

38. Flight proficiency/practical test: sections 61.103(f), 61.107(b), and 61.109.

I certify that _____________________ has received

the required training in accordance with sections 61.107 and 61.109. I have determined he is prepared for the Private Pilot Practical Test.

/ ____________________________/ [______________]
Signature Date
Thomas Gorski 2267082CFI Exp. 5-31-18
ADDITIONAL ENDORSEMENTS

55. Completion of a flight review: section 61.56(a) and (c).

I certify that _____________________, ________________________________ (pilot certificate), (certificate number), has satisfactorily completed a flight review of section 61.56(a) on (date).

/_____________________________ / [_______________ ]
Signature Date
Thomas Gorski 2267082CFI Exp. 5-31-18

58. To act as PIC in a complex airplane: section 61.31(e).

I certify that _______________________, ________________________________ (pilot certificate), (certificate number), has received the required training of section 61.31(e) in a (C210-A). I have determined that he is proficient in the operation and systems of a complex airplane.

/_____________________________ / [_______________ ]
Signature Date
Thomas Gorski 2267082CFI Exp. 5-31-18

59. To act as PIC in a high performance airplane: section 61.31(f).

I certify that ________________________________ (pilot certificate), (certificate number), has received the required training of section 61.31(f) in a (make and model of high performance airplane). I have determined that he is proficient in the operation and systems of a high performance airplane.

/_____________________________ / [_______________ ]
Signature Date
Thomas Gorski 2267082CFI Exp. 5-31-18