

Introduction

Welcome to the St. Pete Air private pilot syllabus. This syllabus will serve as a guide to fulfill the requirements of a part 61 private pilot certificate.

In order to qualify for a private pilot license you will need a minimum of 40 hours of flight time which this guide will cater to. This syllabus uses a traditional layout which begins with general instruction and then transitions into solo flying followed by cross country instruction and ends with checkride preparation. It is important to understand that this syllabus serves as a guide for the instructor however the instructor may certainly choose to cover any additional tasks on any given lesson. While this syllabus is set up to complete a private pilot rating in 40 hours it should be noted that certain lessons may need to be repeated or skipped and as a result completion time may vary. This is completely normal and should not be cause for concern.

Each lesson will layout several topics that will be gone over either prior to, during or after the flight. It should be noted that the in flight topics will only cover 20 to 30 minutes of each flight. The remainder of the lesson will be used as the instructor chooses, likely this will be practicing maneuvers and landings.

At the end of each lesson there will be an assignment which will either greatly assist in your required knowledge or keep you on track for completion. With the majority of these assignments there will be some listed topics that should be your main takeaway from the reading. These key topics should be reviewed with the instructor at the beginning of the next lesson to ensure understanding.

Flight 1-1: Fundamentals

<u>Duration</u>	1 Hour Flight
<u>Objective</u>	As a first lesson this time should be spent gaining familiarization with the flight controls and characteristics of the airplane. A major component of this first lesson should be a thorough walk around with the student ensuring they understand the importance. At the end of the lesson it is crucial to give the student some direction on how to begin their at home studying.
<u>Pre-Flight</u>	<ul style="list-style-type: none">___ Gather Student Information___ Overview Normal Lesson___ Overview Syllabus___ Discuss Eligibility Requirements___ Introduce Checklists___ Introduce Pre-Flight
<u>Flight</u>	<ul style="list-style-type: none">___ Checklist Utilization___ Introduce Taxiing___ Introduce Traffic Scan___ Introduce Positive Exchange of Controls___ Introduce Fundamentals<ul style="list-style-type: none">___ Climbs/Descents___ Turns___ Level Flight
<u>Post-Flight</u>	<ul style="list-style-type: none">___ Review Flight___ Introduce Logbook___ Reading/Course Recommendations___ Schedule Second Lesson
<u>Assignment</u>	<ul style="list-style-type: none">___ PHAK 3-1 to 3-10 (Principles of Flight)<ul style="list-style-type: none">___ Theories of Lift___ Bernoulli's Principle

Completion Standards: This lesson is complete when the student understands control inputs necessary to execute the fundamentals of flight.

Flight 1-2: Steep Turns

<u>Duration</u>	1 Hour Flight
<u>Objective</u>	This second lesson should be used to refresh those topics learned in the first lesson. The major addition of this lesson is the steep turn maneuver which should be reviewed on the ground prior to the lesson. Student preflight should still be supervised but they should be allowed to lead the walk around.
<u>Pre-Flight</u>	<ul style="list-style-type: none">___ Review Assigned Key Topics___ Introduce Basic Taxiway Markings___ Introduce Required Documents (ARROW)___ Overview of Steep Turns___ Assisted Preflight
<u>Flight</u>	<ul style="list-style-type: none">___ Introduce Run up___ Assisted Taxi___ Introduce Takeoff___ Introduce Clearing Turns___ Introduce Steep Turns___ Introduce Shutdown
<u>Post-Flight</u>	<ul style="list-style-type: none">___ Review Flight___ Set up flightschedulepro.com account___ Introduce Taxi Diagram
<u>Assignment</u>	<ul style="list-style-type: none">___ PHAK 5-1 to 5-12 (Flight Controls)___ Primary vs Secondary Flight Controls

Completion Standards: This lesson is complete when the student exhibits understanding of the steep turn maneuver and is able to pre flight the airplane by themselves.

Flight 1-3: Airspeed

<u>Duration</u>	1 Hour Flight
<u>Objective</u>	The main goal of this flight is to acquire an understanding of the flight characteristics at alternate airspeeds and configuring for such. Power plant operation and a general concept of engine instruments should be introduced as well. The concept of pitching for airspeed in climbs and descents should be demonstrated.
<u>Pre-Flight</u>	<ul style="list-style-type: none">___ Review Assigned Key Topics___ Cockpit Management___ Overview Slow Flight___ Introduce Maneuvering Speed
<u>Flight</u>	<ul style="list-style-type: none">___ Assisted Takeoff___ Alternate Airspeeds___ Introduce Trim___ Introduce Slow Flight___ Introduce Landings
<u>Post-Flight</u>	<ul style="list-style-type: none">___ Review Flight___ Introduce Medical<ul style="list-style-type: none">___ Classes___ Duration___ Instructions for Obtaining Med
<u>Assignment</u>	<ul style="list-style-type: none">___ Obtain Medical___ PHAK 4-1 to 4-11 (Forces of Flight)<ul style="list-style-type: none">___ Four Forces of Flight___ Parasite vs Induced Drag___ Angle of Attack___ PHAK 13-14<ul style="list-style-type: none">___ Phonetic Alphabet

Completion Standards: This lesson is complete when the student is capable of flight at alternate speeds and at this point checklists should always be remembered to be used.

Flight 1-4: Stalls

<u>Duration</u>	1 Hour Flight
<u>Objective</u>	On this lesson the student should begin taking on some of the radio calls with assistance. This lesson will also introduce stalls to the student. Assistance should be given configuring the airplane, and power on stalls should be done with ~2200 rpm initially. Emphasis should be placed on coordination.
<u>Pre-Flight</u>	<ul style="list-style-type: none">___ Review Assigned Key Topics___ Overview Radio Communications___ Overview of Power On/Off Stalls___ Spin Awareness
<u>Flight</u>	<ul style="list-style-type: none">___ Introduce Radios___ Introduce Power-Off Stall___ Introduce Power-On Stall___ Review Basic Instrument Interpretation
<u>Post-Flight</u>	<ul style="list-style-type: none">___ Review Flight___ Review Maneuvers___ Introduce Maneuvers Guide
<u>Assignment</u>	<ul style="list-style-type: none">___ PHAK 4-12 to 4-27 (Forces of Flight)<ul style="list-style-type: none">___ Stability___ Aerodynamic Forces in Turns___ Stalls___ Left Turning Tendencies___ Maneuvers Guide<ul style="list-style-type: none">___ Steep Turns___ Slow Flight___ Power On Stall___ Power Off Stall

Completion Standards: This lesson is complete when the student is capable of basic radio calls and understands fundamental stall recovery.

Flight 1-5: Weather

<u>Duration</u>	1 Hour Flight
<u>Objective</u>	Before flying on this lesson the student should be introduced to METARs and TAFs as well as shown the importance of checking the weather before flying. The rectangular course maneuver will be introduced to assist with an upcoming traffic pattern lesson.
<u>Pre-Flight</u>	<ul style="list-style-type: none">___ Review Assigned Key Topics___ Introduce METAR & TAF Decoding___ Introduce Sources for METARs and TAFs___ Overview Weather Check___ Overview of Rectangular Course
<u>Flight</u>	<ul style="list-style-type: none">___ Discuss Fouled Spark Plugs & Clearing___ Demonstrate Heading vs Ground Track___ Introduce Rectangular Course
<u>Post-Flight</u>	<ul style="list-style-type: none">___ Review Flight___ Review METAR & TAF
<u>Assignment</u>	<ul style="list-style-type: none">___ METAR & TAF Decoding___ PHAK 11-1 to 11-12 (Weather)<ul style="list-style-type: none">___ Coriolis Force___ Standard Lapse Rate___ High vs Low Pressure___ Maneuvers Guide<ul style="list-style-type: none">___ Rectangular Course

Completion Standards: This lesson is complete when the student is capable of a basic weather check and is able to account for wind drift.

Ground 1-1: Systems

Duration | 1 Hour Ground

Objective | This will be a ground only lesson on the systems and function of the airplane. System specifications, Vs speeds, VFR required equipment and POH layout should be discussed. The applicable airplane supplement may be used for this lesson which draws its information from the POH.

Discussion |
 Review Assigned Key Topics
 Introduce POH
 System Specifications
 Introduce VFR Required Equipment
Vs speeds

Assignment |
 Supplement
 PHAK 11-12 to 11-25 (Weather)
 Temperature vs Dew Point
 Thunderstorms
 Warm vs Cold Fronts
 Weather Hazards

Completion Standards: This lesson is complete when the student understands the importance of Vs speeds and grasps the concept of the POH layout.

Flight 1-6: Traffic Pattern

<u>Duration</u>	1 Hour Flight
<u>Objective</u>	This Flight will be based entirely in the traffic pattern. Although the student has done several assisted landings at this point, time should be spent to thoroughly discuss the traffic pattern. During the flight they should be making their own decisions for landing and most of the radio calls.
<u>Pre-Flight</u>	<ul style="list-style-type: none"><input type="checkbox"/> Review Assigned Key Topics<input type="checkbox"/> Breakdown Traffic Pattern<input type="checkbox"/> Overview of a Go-Around<input type="checkbox"/> Assisted Weather Check
<u>Flight</u>	<ul style="list-style-type: none"><input type="checkbox"/> Unassisted Landings<input type="checkbox"/> Assisted Traffic Pattern<input type="checkbox"/> Introduce Go-Around(s)
<u>Post-Flight</u>	<ul style="list-style-type: none"><input type="checkbox"/> Review Flight<input type="checkbox"/> Introduce FAR/AIM (layout)<ul style="list-style-type: none"><input type="checkbox"/> Part 61<input type="checkbox"/> Part 91
<u>Assignment</u>	<ul style="list-style-type: none"><input type="checkbox"/> PHAK 12-1 to 12-18 (Weather Sources)<ul style="list-style-type: none"><input type="checkbox"/> METAR & TAF<input type="checkbox"/> Flight Service<input type="checkbox"/> AIRMET & SIGMET<input type="checkbox"/> Weather Charts<input type="checkbox"/> Maneuvers Guide<ul style="list-style-type: none"><input type="checkbox"/> Traffic Pattern

Completion Standards: This lesson is complete when the student requires little assistance landing the aircraft and has begun to make decisions regarding their traffic pattern.

Flight 1-7: Ground Reference

<u>Duration</u>	1 Hour Flight
<u>Objective</u>	This flight will introduce ground reference maneuvers to the student. Focus should be placed on wind correction, ground track and desired altitude. Proper engine failure procedures should be walked through as well as landing area selection. A complete and thorough weather check should be done with the student.
<u>Pre-Flight</u>	<ul style="list-style-type: none">___ Review Key Topics___ Overview Turns Around a Point___ Overview S-turns___ Introduce Safe Altitude Concept___ Thorough Assisted Weather Check (use charts)
<u>Flight</u>	<ul style="list-style-type: none">___ Introduce Turns Around a Point___ Introduce S-turns___ Introduce Engine Failure___ Introduce Emergency Checklist
<u>Post-Flight</u>	<ul style="list-style-type: none">___ Review Flight___ Review Engine Failure Procedures___ Review Best Glide
<u>Assignment</u>	<ul style="list-style-type: none">___ PHAK 7-1 to 7-11 (Instruments)<ul style="list-style-type: none">___ Types of Altitude___ Types of Airspeed___ Maneuvers Guide<ul style="list-style-type: none">___ Turns Around a Point___ S-Turns

Completion Standards: This lesson is complete when the student is comfortable utilizing an emergency and is able to make most radio calls without assistance. An understanding of ground reference maneuvers should also exist at this time.

Flight 1-8: Malfunctions

<u>Duration</u>	1 Hour Flight
<u>Objective</u>	Before this flight time should be taken to discuss lost comm procedures and troubleshooting. This flight will also introduce the forward slip maneuver as well as forward slips to landing. After the flight it is important to discuss the topics of wake turbulence and wind shear.
<u>Pre-Flight</u>	<ul style="list-style-type: none">___ Review Assigned Key Topics___ Lost Comms___ Light Gun Signals
<u>Flight</u>	<ul style="list-style-type: none">___ Aborted Takeoff___ Lost Comms___ Introduce Forward Slips___ Forward Slips to Landing
<u>Post-Flight</u>	<ul style="list-style-type: none">___ Review Flight___ Wake Turbulence Avoidance___ Wind Shear Avoidance
<u>Assignment</u>	<ul style="list-style-type: none">___ PHAK 13-1 to 13-10 (Airports)<ul style="list-style-type: none">___ A/FD___ NOTAMs___ Airport Markings___ PHAK 13-11 to 13-18 (Airports)<ul style="list-style-type: none">___ Light Gun Signals___ Runway Incursion Avoidance___ Wake Turbulence

Completion Standards: This lesson has been completed when the student is comfortable with lost comm procedures and is capable of executed a proper forward slip

Ground 1-2: Airspace

Duration 1 Hour Ground

Objective This ground only session will be used to discuss the airspace system and introduce the sectional. A sectional should be used to show the student applicable airspace requirements locally. VFR cloud clearances and equipment requirements should be introduced as a whole but emphasis should be placed on those applicable to upcoming solo flights.

Discussion

- ___ Review Assigned Key Topics
- ___ Airspace
- ___ VFR Requirements
- ___ Equipment Requirements
- ___ Sectional

Assignment

- ___ Sectional
- ___ PHAK 14-1 to 14-10 (Airspace)
 - ___ Controlled Airspace
 - ___ Special Use Airspace
 - ___ TFRs
 - ___ VFR Cloud Clearances
 - ___ Requirements for Airspace Operations

Completion Standards: This lesson is complete when the student is able to determine local airspace boundaries and altitudes.

Flight 1-9: Crosswind

<u>Duration</u>	1 Hour Flight
<u>Objective</u>	This lesson will focus entirely on pattern work with a crosswind. Student should be shown how to execute a crosswind approach both by crabbing and with the side slip method. The importance of crosswind taxi and crosswind takeoff control inputs should also be conveyed on this flight as well.
<u>Pre-Flight</u>	<ul style="list-style-type: none">___ Review Assigned Key Topics___ Crosswind Limits___ Overview Crosswind Taxi Inputs___ Overview Crosswind Approach
<u>Flight</u>	<ul style="list-style-type: none">___ Crosswind Taxi___ Crosswind Take-off___ Crab Approach___ Side Slip Approach
<u>Post-Flight</u>	<ul style="list-style-type: none">___ Review Flight___ Discuss Max Crosswind___ Crosswind Component Calculation___ Gust Factor & Approach Speed
<u>Assignment</u>	<ul style="list-style-type: none">___ PHAK 16-1 to 16-9 (Aeromedical)<ul style="list-style-type: none">___ Hypoxia___ Hyperventilation___ Spatial Disorientation___ Optical Illusions

Completion Standards: This lesson is complete when the student is comfortable with crosswind control inputs and understands approach speed adjustments based on wind.

Flight 1-10: Abnormal Landings

<u>Duration</u>	1 Hour Flight
<u>Objective</u>	This flight will be conducted entirely in the traffic pattern using some alternate landing configurations and scenarios. Student should be introduced to 20°, 10° and no flap landings. Also the concept of a power off 180 can be shown. Power off 180s do not need to be to commercial standards, but the student should be able to return to a runway.
<u>Pre-Flight</u>	<input type="checkbox"/> Review Assigned Key Topics <input type="checkbox"/> Airspeed and Alternate Flap Settings <input type="checkbox"/> Overview of Power Off 180
<u>Flight</u>	<input type="checkbox"/> 20° Flap Landings <input type="checkbox"/> 10° Flap Landings <input type="checkbox"/> No Flap Landings <input type="checkbox"/> Power Off 180s
<u>Post-Flight</u>	<input type="checkbox"/> Review Flight <input type="checkbox"/> Discuss Endorsements <input type="checkbox"/> Discuss Alternate Flap Setting Scenarios <input type="checkbox"/> Review Alternate Approach Speed
<u>Assignment</u>	<input type="checkbox"/> PHAK 16-10 to 16-20 (Aeromedical) <input type="checkbox"/> Fatigue <input type="checkbox"/> Vision in Flight <input type="checkbox"/> IMSAFE check

Completion Standards: This lesson is complete when the student is comfortable landing with alternate flap settings and understands the necessary approach speed adjustments when doing so. Power off 180s should be able to be performed to a runway.

Flight 1-11: Emergencies

<u>Duration</u>	1 Hour Flight
<u>Objective</u>	This flight is used as a review for emergency procedures which will be presented as scenarios. Time at the end of the lesson should be taken to introduce the pre-solo written so it may be completed and studied. Review with student sources of information they may use to locate the answers on the written.
<u>Pre-Flight</u>	<ul style="list-style-type: none">___ Review Assigned Key Topics___ Review Engine Failure Procedures___ Review Electrical Failure Procedures___ Discuss Engine Fire During Start___ Discuss Engine Fire In Flight
<u>Flight</u>	<ul style="list-style-type: none">___ Simulated Engine Failure (Scenario)___ Simulated Electrical Failure (Scenario)___ Lost Comms (Scenario)
<u>Post-Flight</u>	<ul style="list-style-type: none">___ Review Flight___ Introduce Pre-Solo Written
<u>Assignment</u>	___ Pre-Solo Written

Completion Standards: This lesson has been completed when the student is comfortable handling the above mentioned scenarios.

Flight 2-1: Solo Evaluation

<u>Duration</u>	1 Hour Flight
<u>Objective</u>	This flight should evaluate the students ability for their upcoming solo. This initial evaluation should consist of stalls, emergency procedures, and full stop landings.
<u>Pre-Flight</u>	<ul style="list-style-type: none"><input type="checkbox"/> Review Pre-Solo Written<input type="checkbox"/> Review Stalls<input type="checkbox"/> Review Emergencies<input type="checkbox"/> Review Preflight Inspection
<u>Flight</u>	<ul style="list-style-type: none"><input type="checkbox"/> Maneuvers<ul style="list-style-type: none"><input type="checkbox"/> Power-On Stalls<input type="checkbox"/> Power-Off Stalls<input type="checkbox"/> Slow Flight<input type="checkbox"/> Forward Slips<input type="checkbox"/> Emergency Scenario<input type="checkbox"/> Full Stop Landings
<u>Post-Flight</u>	<ul style="list-style-type: none"><input type="checkbox"/> Review Flight<input type="checkbox"/> Review Weather Check
<u>Assignment</u>	<ul style="list-style-type: none"><input type="checkbox"/> PHAK 8-1 to 8-14 (Documents & Inspections)<ul style="list-style-type: none"><input type="checkbox"/> POH<input type="checkbox"/> Aircraft Inspections<input type="checkbox"/> Airworthiness Directives<input type="checkbox"/> Special Flight Permit

Completion Standards: This lesson is complete when the student conducts the listed maneuvers safely and is capable of making all departure and entry radio calls as well as all altitude decisions on their own.

Flight 2-2: Solo Evaluation

<u>Duration</u>	1 Hour Flight
<u>Objective</u>	This flight should evaluate the students ability for their upcoming solo. This second evaluation should take place solely in the traffic pattern unless there were any areas of concern on the previous flight. Landings should be full stop taxi backs with some variations in flap settings. A no flap landing and power off 180 should be done for review.
<u>Pre-Flight</u>	<ul style="list-style-type: none"><input type="checkbox"/> Review Assigned Key Topics<input type="checkbox"/> Review POH<input type="checkbox"/> Introduce Maintenance Logs & Inspections<ul style="list-style-type: none"><input type="checkbox"/> Annual<input type="checkbox"/> 100 Hour<input type="checkbox"/> ELT
<u>Flight</u>	<ul style="list-style-type: none"><input type="checkbox"/> Landings (Full-Stop Taxi Back)<input type="checkbox"/> Power-off 180<input type="checkbox"/> No Flap Landing
<u>Post-Flight</u>	<ul style="list-style-type: none"><input type="checkbox"/> Review Flight
<u>Assignment</u>	<ul style="list-style-type: none"><input type="checkbox"/> PHAK 17-1 to 17-10 (Aeronautical Decision Making)<ul style="list-style-type: none"><input type="checkbox"/> Hazardous Attitudes<input type="checkbox"/> PAVE Checklist

Completion Standards: This lesson is complete when the student performs all landings with zero input from the instructor and makes all radio calls.

Flight 2-3: Initial Solo

<u>Duration</u>	1 Hour Solo
<u>Objective</u>	This will be the students first solo flight and they are to remain in the traffic pattern. A few landings should be done with the instructor first to warm them up and ensure they are prepared. Ensure the student has their logbook and medical with the proper endorsements before exiting the airplane.
<u>Pre-Flight</u>	<ul style="list-style-type: none">___ Review Assigned Key Topics___ Verify Pre-Flight___ Verify Weather
<u>Flight</u>	<ul style="list-style-type: none">___ Landings (Full-Stop)___ Endorsements___ .6 Solo (Pattern)
<u>Post-Flight</u>	<ul style="list-style-type: none">___ Review Flight___ Review Limitations___ Review Crosswind Calculation___ Review Departing and Entry Procedures
<u>Assignment</u>	<ul style="list-style-type: none">___ Review Pre-Solo Written___ Review Endorsement Limitations

Completion Standards: This lesson is complete when the student performs several solo full stop taxi backs.

Flight 2-4: Repeated Solo

Duration | 1 Hour Solo

Objective | This will be the students first solo flight from start to finish. This flight should be conducted locally in the traffic pattern so they may become accustomed to their new responsibilities in a controlled environment. They will schedule, check weather, preflight and conduct the flight on their own.

Flight | Traffic Pattern
 Landings (Full-Stops)

Assignment | Review Pre-Solo Written
 Review Endorsement Limitations

Completion Standards: This lesson is complete when the student logs 1 hour of solo flight time

Flight 2-5: Repeated Solo

Duration | 1 Hour Solo

Objective | This will be the students second completely solo lesson. On this flight the student may depart the traffic pattern and fly locally at the instructors discretion. The student will schedule, check weather, preflight and conduct the flight on their own.

Flight | Landings (Full-Stop)
 Local Flying

Assignment | PHAK 15-20 to 15-27 (VORs)
 VORs
 Tracking
 Intercepting

Completion Standards: This lesson is complete when the student logs another hour of solo time, their total solo at this point should be 2.6

Flight 3-1: Simulated Instrument

<u>Duration</u>	1 Hour Flight
<u>Objective</u>	This flight will introduce simulated instrument flying, VOR tracking, short field takeoffs and short field landings to the student. Time should be taken before the flight to introduce VORs as well as a basic instrument scan. The student should also receive a quick overview of short field takeoffs and landings as well.
<u>Pre-Flight</u>	<ul style="list-style-type: none">___ Review Key Topics___ Overview VOR___ Overview Instrument Scan___ Overview Short-Field Take Off___ Overview Short-Field Landings
<u>Flight</u>	<ul style="list-style-type: none">___ .5 Simulated Instrument (fundamentals)___ VOR Tracking___ Introduce Short-Field Take Offs___ Introduce Short-Field Landings
<u>Post-Flight</u>	<ul style="list-style-type: none">___ Review Flight___ Gyroscopic vs Pitot Static Instruments___ Discuss Minimum Equipment List
<u>Assignment</u>	<ul style="list-style-type: none">___ Maneuvers Guide<ul style="list-style-type: none">___ Short-Field Take Off___ Short-Field Landing

Completion Standards: This lesson is complete when the student is able to tune in and track VORs as well as perform the fundamentals of flight under the hood.

Flight 3-2: Simulated Instrument

<u>Duration</u>	1 Hour Flight
<u>Objective</u>	This flight will allow the student some more time under the hood. In addition to the fundamentals which were learned on the last lesson, unusual attitudes should now be introduced. After hood work compass errors should be introduced by covering the directional gyro and having the student fly by the compass. At some point on this lesson soft field takeoffs and landings should also be introduced.
<u>Pre-Flight</u>	<ul style="list-style-type: none"><input type="checkbox"/> Overview GPS<input type="checkbox"/> Overview Compass Errors<input type="checkbox"/> Overview Soft-Field Take Offs<input type="checkbox"/> Overview Soft-Field Landings
<u>Flight</u>	<ul style="list-style-type: none"><input type="checkbox"/> .5 Simulated Instrument (VOR/GPS Tracking)<input type="checkbox"/> Introduce Unusual Attitudes<input type="checkbox"/> Compass Error<ul style="list-style-type: none"><input type="checkbox"/> UNOS<input type="checkbox"/> ANDS<input type="checkbox"/> Soft Field Take Offs<input type="checkbox"/> Soft Field Landings
<u>Post -Flight</u>	<ul style="list-style-type: none"><input type="checkbox"/> Review Flight
<u>Assignment</u>	<ul style="list-style-type: none"><input type="checkbox"/> Maneuvers Guide<ul style="list-style-type: none"><input type="checkbox"/> Soft-Field Take Off<input type="checkbox"/> Soft-Field Landing

Completion Standards: This lesson is complete when the student understands the fundamentals of unusual attitude recovery and can anticipate compass errors.

Ground 3-1: Weight & Balance

Duration 1 Hour Ground

Objective The purpose of this ground lesson will be to work with student on several weight and balance calculations. The concepts of manipulating CG and weight with fuel/baggage adjustments should be shown. The calculations done should be done for the make and model the student is training in as well as several scenarios based on the student's interest.

Discussion

- ___ Gross Take Off Weight
- ___ Aft CG
- ___ Forward CG
- ___ POH
- ___ Normal vs Utility Category
- ___ Calculate Sample Weight and Balance
- ___ Limitations
- ___ Discuss Future Endorsements
 - ___ High Performance
 - ___ Tail Wheel
 - ___ High Altitude
 - ___ Type Rating

Assignment

- ___ PHAK 10-1 to 10-10 (Performance)
- ___ Density vs Pressure Altitude

Completion Standards: This lesson is complete when the student is able to perform weight and balance calculations without assistance.

Flight 3-3: Non-Towered Airports

<u>Duration</u>	1.5 Hour Flight
<u>Objective</u>	On this flight you introduce the student to the procedures for traveling to other airports. Before the flight you should review with the student the sources of information required. Non-towered airports should be used. Navigation, pattern entry, radio, and departure procedures should be demonstrated. In order to keep this lesson at 1.5, hood time should be done en route to the first airport and when returning after the last airport.
<u>Pre-Flight</u>	<ul style="list-style-type: none">___ Review Assigned Key Topics___ Introduce Non-Towered Airport Operations___ Review A/FD___ Discuss LAHSO___ Discuss Hotspots___ Review Sectional
<u>Flight</u>	<ul style="list-style-type: none">___ Non Towered Airports___ .5 Simulated Instrument (VOR/GPS Tracking)___ Unusual Attitudes
<u>Post-Flight</u>	<ul style="list-style-type: none">___ Review Flight___ Discuss Accident Reporting___ Review Non-Towered Airport Operations
<u>Assignment</u>	___ PHAK 10-11 to 10-26 (Performance Charts)

Completion Standards: This lesson is complete when the student is able to enter the traffic pattern at a non towered airport and make all radio calls with little assistance

Ground 3-2: Performance

<u>Duration</u>	1 Hour Ground
<u>Objective</u>	This ground lesson should be dedicated to calculating the performance of the students aircraft. Emphasis should be placed on the effects of temperature, pressure, and weight on these numbers. The applicable POH should be used and the student should be comfortable looking up any needed information. Scenario based examples applicable to the students interests should be used. E6B should be introduced/used.
<u>Discussion</u>	<ul style="list-style-type: none">___ Review Assigned Key Topics___ Introduce E6B___ POH Usage___ Calculate Performance<ul style="list-style-type: none">___ Take off/Landing Distance___ Cruise Performance___ True Airspeed___ Calibrated Airspeed___ Indicated Airspeed
<u>Assignment</u>	<ul style="list-style-type: none">___ E6B Practice___ PHAK 15-1 to 15-12 (Navigation)<ul style="list-style-type: none">___ Variation & Deviation___ Pilotage___ Dead Reckoning

Completion Standards: This lesson is complete when the student is completely comfortable locating information in the POH and understands how to use the above listed performance charts.

Ground 3-3: Cross Country Planning

<u>Duration</u>	1 Hour Ground
<u>Objective</u>	This ground session should be used to plan an upcoming cross country flight. Ideally this nav log should be filled out completely but advise the student that they may carry over the points, distances, etc. onto their flight 3-3 flight plan. This completed example will be used by the student as a template for further cross countries. Emphasis should be placed on using the POH, A/FD, and Sectional for obtaining information. The E6B should be used heavily. At this point the student should have a substantial amount of background knowledge and should be studying for the written. Take time to go over with the student their options for studying for the test.
<u>Discussion</u>	<ul style="list-style-type: none">___ Route Selection___ Point Selection___ Discuss CFIT___ VFR Cruising Altitudes___ Safe Altitudes___ Fuel Requirements___ Discuss Selecting Alternates___ Discuss Options for Written Study
<u>Assignment</u>	<ul style="list-style-type: none">___ Flight 3-3 Flight Plan___ Begin Written Study

Completion Standards: This lesson is complete when the student is able to complete a cross country nav log on their own and has completed all assigned readings.

Flight 3-4: Short Cross Country

<u>Duration</u>	1.5 Hour Flight
<u>Objective</u>	As this is the first cross country flight with the student a heavy focus should be placed on pilotage & dead reckoning. A VFR flight plan should be used and filed. The student should navigate using the nav log alone, flight following will be used on future flights.
<u>Pre-Flight</u>	<input type="checkbox"/> Review Flight Plan <input type="checkbox"/> Introduce Flight Service <input type="checkbox"/> File Flight Plan <input type="checkbox"/> Lost Procedures
<u>Flight</u>	<input type="checkbox"/> Open Flight Plan <input type="checkbox"/> Transition Calls <input type="checkbox"/> Pilotage <input type="checkbox"/> Dead Reckoning
<u>Post-Flight</u>	<input type="checkbox"/> Review Flight <input type="checkbox"/> Close Flight Plan
<u>Assignment</u>	<input type="checkbox"/> Flight 3-4 Flight Plan <input type="checkbox"/> Written Study

Completion Standards: This lesson is complete when you have finished a cross country flight with the student.

Flight 3-5: Medium Cross Country

<u>Duration</u>	1.5 Hour Flight
<u>Objective</u>	This second cross country should add in other means of navigation such as VOR tracking and the GPS. The student should have completed a flight plan which should be followed however certain legs may be navigated using a VOR or GPS. A diversion scenario should be introduced and the student should be walked through the necessary steps. A new destination should be used.
<u>Pre-Flight</u>	<ul style="list-style-type: none"><input type="checkbox"/> Review Flight Plan<input type="checkbox"/> File Flight Plan<input type="checkbox"/> Discuss Diversion Scenarios<input type="checkbox"/> Discuss Diversion Calculation
<u>Flight</u>	<ul style="list-style-type: none"><input type="checkbox"/> Open Flight Plan<input type="checkbox"/> VOR Navigation<input type="checkbox"/> GPS Navigation<input type="checkbox"/> Diversion
<u>Post-Flight</u>	<ul style="list-style-type: none"><input type="checkbox"/> Review Flight<input type="checkbox"/> Close Flight Plan
<u>Assignment</u>	<ul style="list-style-type: none"><input type="checkbox"/> Flight 3-5 Flight Plan<input type="checkbox"/> Written Study

Completion Standards: This lesson is complete when you have finished a second cross country with the student and they are comfortable opening/closing their flight plan. The student should also be able to use the GPS with little assistance at this time.

Flight 3-6: Cross Country Evaluation

<u>Duration</u>	1.5 Hour Flight
<u>Objective</u>	This flight should serve as an evaluation for the students upcoming solo cross countries. Student should be making all flight decisions and corrected when necessary. All previous cross country skills should be reviewed with the addition of flight following. A third destination should be used. On the return leg it may be useful to have them return to a nearby non-towered airport for use on the following solo flight.
<u>Pre-Flight</u>	<input type="checkbox"/> Review Flight Plan <input type="checkbox"/> Introduce Flight Following <input type="checkbox"/> File Flight Plan
<u>Flight</u>	<input type="checkbox"/> Open Flight Plan <input type="checkbox"/> Pick Up Flight Following
<u>Post-Flight</u>	<input type="checkbox"/> Review Flight <input type="checkbox"/> Close Flight Plan <input type="checkbox"/> Review Flight Plan vs Flight Following <input type="checkbox"/> Review Entering Airspace <input type="checkbox"/> Review Applicable Airspace <input type="checkbox"/> 25nm Solo Endorsement
<u>Assignment</u>	<input type="checkbox"/> Written Study

Completion Standards: This lesson is complete when the student exhibits all necessary skills pertaining to a cross country flight and you are comfortable signing them off.

Flight 3-7: Local Solo

Duration 1.2 Hour Solo

Objective The student should conduct a local solo flight remaining within 25nm. It would be useful to have them go to another nearby airport so they can ensure they're comfortable with entry/ departure procedures. The purpose of this flight is to make them more comfortable for their upcoming solo cross country.

Flight

- Steep Turns
- VOR Tracking
- GPS usage
- Non-Towered Airport

Assignment

- Flight 3-7 Flight Plan
- Written Study

Completion Standards: This lesson is complete when the student logs a third solo flight, their total solo should be 3.8 at this time.

Flight 3-8: Solo Cross Country

<u>Duration</u>	1.5 Hour Solo
<u>Objective</u>	This will be the students first of three solo cross countries. The destination used should be close to 50nm and ideally somewhere you took them previously. The flight plan should be reviewed and the student should receive the applicable endorsements prior to leaving.
<u>Pre-Flight</u>	<ul style="list-style-type: none"><input type="checkbox"/> Review Flight Plan<input type="checkbox"/> Review Weather<input type="checkbox"/> Review Pre-Flight<input type="checkbox"/> Endorse<input type="checkbox"/> Review Limitations<input type="checkbox"/> File Flight Plan<input type="checkbox"/> Advise to Begin Written Practice Tests
<u>Flight</u>	<ul style="list-style-type: none"><input type="checkbox"/> Open Flight Plan<input type="checkbox"/> Pilotage
<u>Post-Flight</u>	<ul style="list-style-type: none"><input type="checkbox"/> Close Flight Plan
<u>Assignment</u>	<ul style="list-style-type: none"><input type="checkbox"/> Flight 3-8 Flight Plan<input type="checkbox"/> Written Practice Tests

Completion Standards: This lesson is complete when a solo cross country has been finished.

Flight 3-9: Solo Cross Country

<u>Duration</u>	1.5 Hour Solo
<u>Objective</u>	This will be the students second of three solo cross countries. The designation used should be close to 50nm and ideally somewhere you took them previously. The flight plan should be reviewed and the student should receive the applicable endorsements prior to leaving.
<u>Pre-Flight</u>	<ul style="list-style-type: none"><input type="checkbox"/> Review Flight Plan<input type="checkbox"/> Review Weather<input type="checkbox"/> Review Pre-Flight<input type="checkbox"/> Endorse<input type="checkbox"/> Review Limitations<input type="checkbox"/> File Flight Plan
<u>Flight</u>	<ul style="list-style-type: none"><input type="checkbox"/> Open Flight Plan<input type="checkbox"/> Pilotage
<u>Post-Flight</u>	<ul style="list-style-type: none"><input type="checkbox"/> Close Flight Plan
<u>Assignment</u>	<ul style="list-style-type: none"><input type="checkbox"/> Written Practice Tests

Completion Standards: This lesson is complete when the student finishes a second solo cross country.

Flight 3-10: Night Cross Country

<u>Duration</u>	1.8 Hour Flight
<u>Objective</u>	This will be the first of two night flights for the student. This flight should be used to introduce the differences in preflighting, flight planning, and flying at night. The student will come in with a flight plan for this lesson but advise them of the types of points they will want to use at night. A fourth destination should be used.
<u>Pre-Flight</u>	<input type="checkbox"/> Review Flight Plan <input type="checkbox"/> Pre-Flight
<u>Flight</u>	<input type="checkbox"/> Flight Following <input type="checkbox"/> GPS
<u>Post-Flight</u>	<input type="checkbox"/> Review Flight <input type="checkbox"/> Written Endorsement
<u>Assignment</u>	<input type="checkbox"/> Take Written

Completion Standards: This lesson is complete when the night cross country requirement has been fulfilled and the written has been taken.

Flight 3-11: Night Landings

<u>Duration</u>	1.2 Hour Flight
<u>Objective</u>	This flight should be used to review the pre-flight and night flying procedures. The types of night should be introduced as well as night illusions. The duration of this local flight should be whatever is needed to fulfill the 3 hour night flying requirement. 8 landings (full stop) should be done for a total of 10 night landings at this point.
<u>Pre-Flight</u>	<input type="checkbox"/> Night Illusions <input type="checkbox"/> Review Aeromedical <input type="checkbox"/> Pre-Flight <input type="checkbox"/> Review Hours of Operation A/FD
<u>Flight</u>	<input type="checkbox"/> Full Stop Landings
<u>Post-Flight</u>	<input type="checkbox"/> Review Flight <input type="checkbox"/> Advise Long Cross Country Destinations <input type="checkbox"/> Introduce Oral Exam Guide
<u>Assignment</u>	<input type="checkbox"/> Begin Oral Study

Completion Standards: This lesson is complete when all night requirements have been fulfilled.

Flight 3-12: Solo XC (150nm)

<u>Duration</u>	2 Hour Flight
<u>Objective</u>	This will be the students final cross country and should cover a distance of 150nm. Use a combination of the airports you have taken them to come up with this distance. Review the preflight planning weather and sign the appropriate endorsements. Ensure the student has the appropriate information before leaving (taxi diagram, A/FD, sectional, etc.).
<u>Pre-Flight</u>	<input type="checkbox"/> Review Flight Plan <input type="checkbox"/> Review Pre-Flight <input type="checkbox"/> Review Weather <input type="checkbox"/> Endorse <input type="checkbox"/> File Flight Plan
<u>Flight</u>	<input type="checkbox"/> Open Flight Plan <input type="checkbox"/> Pilotage <input type="checkbox"/> Dead Reckoning
<u>Post-Flight</u>	<input type="checkbox"/> Close Flight Plan
<u>Assignment</u>	<input type="checkbox"/> Review Maneuvers Guide <input type="checkbox"/> Oral Study

Completion Standards: This lesson is complete when the solo cross country requirement has been fulfilled.

Flight 4-1: Checkride Prep

<u>Duration</u>	1.5 Hour Flight
<u>Objective</u>	This flight should be used to review all check ride maneuvers and landings and ensure they are conducted safely. The maneuvers should be procedurally correct and safe but not necessarily within the practical test standards yet. The accelerated stall maneuver should be introduced on this flight as well demonstrating the correlation between bank angle and stall speed. After the flight advise the student which maneuvers he/she may or may not practice solo.
<u>Pre-Flight</u>	<input type="checkbox"/> Discuss Practical <input type="checkbox"/> Introduce PTS <input type="checkbox"/> Overview Accelerated Stall
<u>Flight</u>	<input type="checkbox"/> Soft Field Take-off <input type="checkbox"/> Soft Field Landing <input type="checkbox"/> Short Field Landing <input type="checkbox"/> Short Field Take-off <input type="checkbox"/> Slips to Landing <input type="checkbox"/> Steep Turns <input type="checkbox"/> Slow Flight <input type="checkbox"/> Power-On Stalls <input type="checkbox"/> Power-Off Stalls <input type="checkbox"/> Introduce Accelerated Stalls <input type="checkbox"/> S-Turns <input type="checkbox"/> Turns Around a Point <input type="checkbox"/> Rectangular Course <input type="checkbox"/> Forward Slips
<u>Post-Flight</u>	<input type="checkbox"/> Review Flight <input type="checkbox"/> Discuss Solo Maneuvers
<u>Assignment</u>	<input type="checkbox"/> Review Maneuvers Guide <input type="checkbox"/> Oral Study

Completion Standards: This lesson is complete when the student is able to conduct all maneuvers safely and procedurally correct with little assistance.

Flight 4-2: Checkride Prep

<u>Duration</u>	1 Hour Flight
<u>Objective</u>	This second checkride prep will focus on the navigational requirements of the checkride. It should serve as a review for these topics and as such assistance may be given if needed. The student should need little assistance looking up information regarding operation at non-towered airports regarding frequencies and airspace.
<u>Pre-Flight</u>	<ul style="list-style-type: none"><input type="checkbox"/> Review Applicable Airspace<input type="checkbox"/> Review Non Towered Operations<input type="checkbox"/> Review VORs<input type="checkbox"/> Review Diversion Calculation
<u>Flight</u>	<ul style="list-style-type: none"><input type="checkbox"/> .5 Simulated Instrument<input type="checkbox"/> Unusual Attitudes<input type="checkbox"/> Diversion Calculation<input type="checkbox"/> Non Towered Airport<input type="checkbox"/> VOR Tuning and Tracking
<u>Post-Flight</u>	<ul style="list-style-type: none"><input type="checkbox"/> Review Flight<input type="checkbox"/> Discuss Limitations for the Following Solo Flight<input type="checkbox"/> Ensure Current Solo Endorsements
<u>Assignment</u>	<ul style="list-style-type: none"><input type="checkbox"/> Oral Study

Completion Standards: This lesson is complete when the student is able to recover from unusual attitudes on their own and can complete diversion calculations with little assistance.

Flight 4-3: Solo Checkride Prep

Duration 1.2 Hour Solo

Objective This solo flight will be used to practice the previously cleared maneuvers solo. Only those maneuvers that have been deemed safe for solo flying should be practiced. The purpose of this flight is to fulfill the solo requirement and increase the students comfort level for the checkride. The duration of this flight should be adjusted to fulfill the solo requirement.

Flight ___ Solo Maneuvers (as approved)
___ Landings
___ Non-Towered Airport (within 25nm as approved)

Assignment ___ Oral Study

Completion Standards: This lesson is complete when the solo flight time requirement has been fulfilled.

Ground 4-1: Checkride Prep

Duration 1.5 Ground

Objective This ground lesson should be used to gauge the students preparation for the oral portion of the check ride. FAA materials should be used such as the Practical Test Standards and the Oral Exam Guide. Areas of deficiency should be pointed out and assigned to study. Emphasis should be placed on where to look answers up.

Discussion

- Practical Test Standards
- Oral Exam Guide
- Information Sources
 - Pilot Handbook of Aeronautical Knowledge
 - Airplane Flying Handbook
 - FAR/AIM
 - A/FD
 - Sectional
 - POH

Assignment

- Study Areas of Deficiency
- Schedule Checkride (1-2 weeks out)

Completion Standards: This lesson is complete when the student utilizes the appropriate source of information for locating answers.

Ground 4-2: Checkride Prep

Duration 1.5 Hour Ground

Objective This ground lesson should be conducted as a practice oral following the Practical Test Standards. Questions asked should be scenario based and cover situations the student may come in contact with

Discussion

- Practical Test Standards
- Oral Exam Guide
- Pilot Handbook of Aeronautical Knowledge
- Airplane Flying Handbook
- FAR/AIM
- Performance Calculation

Assignment Study Areas of Deficiency

Completion Standards: This lesson is complete when the student exhibits sufficient knowledge in all areas outlined in the PTS.

Flight 4-4: Simulated Checkride

<u>Duration</u>	1.5 Hour Flight
<u>Objective</u>	This flight should be conducted as a simulated practical. Maneuvers should be performed procedurally correct and in line with the PTS. Areas of deficiency should be noted but maneuvers should not be repeated unless necessary.
<u>Pre-Flight</u>	<input type="checkbox"/> Brief Student
<u>Flight</u>	<input type="checkbox"/> Diversion <input type="checkbox"/> Landings <input type="checkbox"/> .5 Sim Instrument + Unusual Attitudes <input type="checkbox"/> Maneuvers <input type="checkbox"/> Ground Ref <input type="checkbox"/> VOR Tune & Track
<u>Post-Flight</u>	<input type="checkbox"/> Review Areas of Deficiency
<u>Assignment</u>	<input type="checkbox"/> Total Logbook

Completion Standards: This lesson is complete when the tasks listed above are all completed within reason with no assistance.

Flight 4-5: Simulated Checkride

<u>Duration</u>	1.5 Hour Flight
<u>Objective</u>	This flight should be conducted as another simulated practical. Maneuvers should be performed procedurally correct and in line with the PTS. Areas of deficiency should be noted but maneuvers should not be repeated unless necessary. After the lesson ensure all items on the checkride checklist are completed and brought to checkride.
<u>Pre-Flight</u>	<input type="checkbox"/> Brief Student
<u>Flight</u>	<input type="checkbox"/> Diversion <input type="checkbox"/> Landings <input type="checkbox"/> .5 Sim Instrument + Unusual Attitudes <input type="checkbox"/> Maneuvers <input type="checkbox"/> Ground Ref
<u>Post-Flight</u>	<input type="checkbox"/> IACRA <input type="checkbox"/> Begin Checkride Packet <input type="checkbox"/> Endorsements
<u>Assignment</u>	<input type="checkbox"/> Private Pilot Checkride Checklist

Completion Standards: This lesson is complete when the student meets all requirements for the checkride and executes the tasks listed above within PTS with no assistance.

Private Pilot Checkride Checklist

- Completed Nav Log
- Completed Airworthiness & Inspections
- Written Test Results
- Medical
- Totaled Log Book
- Examiners Fee (Cash)
- View Limiting Device
- Proper Endorsements
- Completed IACRA
- Current Sectional
- Current A/FD
- Current FAR/AIM
- E6B
- Plotter

Airworthiness Checklist

Aircraft _____
Student _____
Date _____

Documents

- ___ External Data Plate
- ___ Airworthiness Certificate
- ___ Registration Certificate
- ___ Radio Station License
- ___ Operating Handbook
- ___ Weight and Balance Data
- ___ Compass Deviation Card

VFR Day

- ___ Anti-Collision Lights
- ___ Tachometer
- ___ Oil Pressure
- ___ Manifold Pressure
- ___ Airspeed Indicator
- ___ Temperature
- ___ Oil Temperature
- ___ Fuel Gauges
- ___ Landing Gear Position Light
- ___ Altimeter
- ___ Magnetic Heading Indicator
- ___ ELT
- ___ Seat belts

IFR

- ___ All VFR Day Equipment
- ___ All VFR Night Equipment
- ___ Generator/Alternator
- ___ Rate of Turn Indicator
- ___ Attitude Indicator
- ___ Ball
- ___ Clock w/ Second Hand
- ___ Altimeter (Pressure Sensitive)
- ___ Radio Equipment
- ___ Directional Gyro
- ___ DME (Above 24,000)

Inspections

- ___ Annual (12 Months)
- ___ VOR Check (30 Days)
- ___ 100 Hour
- ___ Altimeter (24 Months)
- ___ Transponder (24 Months)
- ___ ELT & Battery (12 Months)
- ___ Static & Encoder (24 Months)
- ___ Airworthiness Directives

VFR Night

- ___ All VFR Day Equipment
- ___ Fuse's
- ___ Landing Light
- ___ Anti-Collision Lights
- ___ Position Lights
- ___ Source of Power

Inop Equipment

- ___ No Inoperative Equipment
- ___ Inoperative Equipment
 - ___ Removed
 - ___ or
 - ___ Disabled
 - ___ &
 - ___ Placarded