

<h1 style="margin: 0;">Private Pilot Flight Training Syllabus and Training Log</h1> <p style="margin: 0;">Version 3.0</p>

Training Overview

Student: _____

Instructor: _____

Date training started: _____

AIRPORTS VISITED

- IQ4
- C83
- CCR
- E14
- HAF
- HWD
- LVK
- OAK
- PAO
- RHV
- SCK
- SJC
- SQL
- TCY
- WVI
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____

Progress Checklist

- Medical/student pilot certificate
- Member regulations quiz
- Ground review form
- Solo phase check written exam
- First solo
- Solo phase check
- Unsupervised solo signoff
- Cross-country phase check written exam
- Cross-country phase check
- Long solo cross-country
- Checkride written exam
- FAA knowledge test – score: _____
- Private phase check written exam
- Private phase check
- FAA checkride

Minimum FAA Requirements Met

- Night landings to full stop: 1 2 3 4 5 6 7 8 9 10
- Night dual cross-country
- 3 hours instrument reference training
- 5 hours solo cross-country
- Long solo cross-country

Document References

AFH	FAA Airplane Flying Handbook, FAA-H-8083-3
PHAK	FAA Pilot's Handbook of Aeronautical Knowledge, FAA-H-8083-25
FAR	FAA Federal Aviation Regulations
AIM	FAA Aeronautical Information Manual
POH	Appropriate aircraft Pilot's Operating Handbook
Machado	Rod Machado's Private Pilot Handbook
PTS	Private Pilot Single-Engine Land Practical Test Standards
A/FD	Airport/Facility Directory
ASF Course	AOPA Air Safety Foundation on-line course: www.aopa.org/asf

Approximate Training Order

- | | |
|---|---|
| <ul style="list-style-type: none"> <input type="checkbox"/> SG1 – Joining the flying club <input type="checkbox"/> SG2 – Buying supplies <input type="checkbox"/> SF1 – Preflight, start, taxi, runup, after landing, and securing <input type="checkbox"/> SF2 – Introduction to pitch, power, and airspeed <input type="checkbox"/> SG3 – AOPA membership <input type="checkbox"/> SF3 – Turns and coordination <input type="checkbox"/> SG4 – Airport operations <input type="checkbox"/> SF4 – Normal takeoff and climb <input type="checkbox"/> SF5 – Crosswind takeoff and climb <input type="checkbox"/> SF6 – Steep turns <input type="checkbox"/> SG5 – Local radio communications <input type="checkbox"/> SG6 – Traffic pattern <input type="checkbox"/> SF7 – Slow flight <input type="checkbox"/> SG7 – Charts and airspace introduction <input type="checkbox"/> SF8 – Power-off stalls <input type="checkbox"/> SF9 – Power-on stalls <input type="checkbox"/> SG8 – Systems: engine <input type="checkbox"/> SF10 – Go arounds <input type="checkbox"/> SG9 – Weather briefings and TFRs <input type="checkbox"/> SF11 – Ground reference maneuvers <input type="checkbox"/> SF12 – Landings <input type="checkbox"/> SF13 – Touch and go landings <input type="checkbox"/> SG10 – Uncontrolled airport operations <input type="checkbox"/> SF14 – Slips <input type="checkbox"/> SF15 – Crosswind landings <input type="checkbox"/> SG11 – Systems: electrical <input type="checkbox"/> SG12 – Systems: pitot-static <input type="checkbox"/> SG13 – Systems: gyroscopic <input type="checkbox"/> SG14 – Systems: compass and OAT <input type="checkbox"/> SF16 – Engine failure emergency procedures <input type="checkbox"/> SG15 – Performance <input type="checkbox"/> SG16 – Weight and balance <input type="checkbox"/> SF17 – Other emergencies <input type="checkbox"/> SG17 – Ground review form <input type="checkbox"/> SG18 – Wake turbulence and windshear <input type="checkbox"/> SG19 – Maintenance, airworthiness, and inoperative equipment <input type="checkbox"/> SG20 – Solo flight regulations <input type="checkbox"/> SG21 – Pre-solo written quizzes <input type="checkbox"/> SF18 – First supervised solo <input type="checkbox"/> SF19 – Solo phase check complete and reviewed <input type="checkbox"/> SF20 – First unsupervised solo | <ul style="list-style-type: none"> <input type="checkbox"/> XF1 – Radio navigation <input type="checkbox"/> XF2 – Flight by reference to instruments <input type="checkbox"/> XG1 – Cross-country flight planning <input type="checkbox"/> XF3 – Soft field takeoffs <input type="checkbox"/> XF4 – Short field takeoffs <input type="checkbox"/> XG2 – Flight plans, flight following, and survival supplies <input type="checkbox"/> XF5 – Soft field landings <input type="checkbox"/> XF6 – Short field landings <input type="checkbox"/> XG3 – Aeromedical factors <input type="checkbox"/> XG4 – Bigger airports, linemen and intercept procedures <input type="checkbox"/> XG5 – Weather theory <input type="checkbox"/> XG6 – Weather services <input type="checkbox"/> XG7 – Airspace <input type="checkbox"/> XG8 – Aeronautical decision making <input type="checkbox"/> XF7 – Dual day cross-countries <input type="checkbox"/> XF8 – Lost procedures and diversions <input type="checkbox"/> XF9 – Night training <input type="checkbox"/> XF10 – Night dual cross-country <input type="checkbox"/> XG9 – Cross-country phase check written exam <input type="checkbox"/> XF11 – Cross-country phase check complete and reviewed <input type="checkbox"/> XF12 – Solo cross-countries
 <input type="checkbox"/> CG1 – More maintenance <input type="checkbox"/> CG2 – Passenger briefing <input type="checkbox"/> CG3 – Accident reporting <input type="checkbox"/> CG4 – Private pilot privileges and limitations <input type="checkbox"/> CG5 – Private phase check written exam <input type="checkbox"/> CF1 – Private phase check complete and reviewed <input type="checkbox"/> CF2 – Checkride! |
|---|---|

Ground Training → Solo Phase Check

LESSON SG1 – Joining the Flying Club

Completed: _____

HANDOUTS

- Introduction to the Private Pilot License
- Membership packet
- Member regulations
- Member regulations quiz
- List of AMEs
- Student purchase list
- Syllabus
- Logbook

HOMEWORK

Assigned: _____

- Membership regulations quiz

GROUND

- Private pilot certificate requirements
- Medical certification
- Student purchase list
- Flying club intro and policies
- Scheduling airplanes and instructor
- Syllabus
- Ground school
- Review membership regulations quiz
- Copying logbook
- Electronic logbooks

LESSON SG2 – Buying Supplies

Completed: _____

HOMEWORK

Assigned: _____

- Buy:
 - AFH
 - PHAK
 - Machado
 - PTS
 - FAR/AIM
 - Sectional chart
 - Terminal chart
 - A/FD
 - POH
 - Kneeboard

LESSON SG3 – AOPA Membership

Completed: _____

HOMEWORK

Assigned: _____

- Send in free subscription for *Flight Training* magazine
- Join AOPA

LESSON SG4 – Airport Operations

Completed: _____

HOMEWORK

Assigned: _____

- PHAK 12 (*Airport Operation*)
- AIM 2-1-2 (*Visual Glideslope Indicators*)
- AIM 2-3 (*Airport Marking Aids and Signs*)
- AIM 4-3-23 (*Use of Aircraft Lights*)
- Machado G (*Airport Operations*)

GROUND

- Review basic airport markings

LESSON SG5 – Local Radio Communication

Completed: _____

HOMEWORK

Assigned: _____

- AIM 4-1-13 (*ATIS*)
- AIM 4-2 (*Radio Communications Phraseology and Techniques*)
- AIM 4-3-18 (*Taxiing*)
- AIM 4-3-20 (*Exiting the Runway*)
- Machado H (*Radio Operations* beginning thru *Control Tower Communications*)
- Call ATIS several times and copy

HANDOUTS

- Radio script
- ATIS copy sheet

GROUND

- ATIS
- Ground
- Tower
- Radio script

LESSON SG6 – Traffic Pattern

Completed: _____

HOMEWORK

Assigned: _____

- AFH 7 (*Airport Traffic Patterns, Approaches, and Landings* beginning thru *Final Approach*)
- AIM 4-3-1 to 4-3-6 (*Traffic Patterns*)

GROUND

- Traffic pattern elements
- Pattern entry and departure – controlled airport
- Pattern radio communications – controlled airport

LESSON SG7 – Charts and Airspace Introduction

Completed: _____

HOMEWORK

Assigned: _____

- PHAK 13 (*Airspace*)
- Machado I (*Airspace*)
- Machado J (*Aviation Maps*)
- Look at charts and A/FD

GROUND

- Chart introduction
- Practice areas and airspace avoidance

LESSON SG8 – Systems: Engine

Completed: _____

HOMEWORK

Assigned: _____

- PHAK 5 (*Aircraft Systems* beginning thru *Exhaust Systems*)
- POH Section 7 (*Airplane and Systems Descriptions* section *Engine*)
- Machado C (*Engines*)
- ASF Course: Engine and Propeller

GROUND

- Magneto principle of operation
- Ignition switch and P-leads
- Failed mag check and demo
- In-flight leaning and demo

LESSON SG9 – Weather Briefings and TFRs

Completed: _____

HOMEWORK

Assigned: _____

- Browse Machado L (*Understanding Weather*)
- Machado M (*Weather Charts and Briefings* beginning thru *The Telephone Briefing*)
- AIM 5-1-3 (*Notice to Airmen System*)
- AIM 7-1-4 (*Preflight Briefing*)

HANDOUTS

- TFR handout

GROUND

- TFRs
- NOTAMs
- Dual weather briefing
- DUATS

LESSON SG10 – Uncontrolled Airport Operations

Completed: _____

HOMEWORK

Assigned: _____

- AIM 4-1-9 (*Traffic Advisory Practices at Airports Without Operating Control Towers*)
- AIM 4-1-11 (*Designated UNICOM/MULTICOM Frequencies*)

GROUND

- Pattern entry and exit
- Radio communications

LESSON SG11 – Systems: Electrical

Completed: _____

HOMEWORK

Assigned: _____

- PHAK 5 (*Aircraft Systems* section *Electrical System*)
- POH Section 7 (*Airplane and Systems Descriptions* section *Electrical System*)
- Machado D (*Electrical Systems*)

GROUND

- Review electrical system

LESSON SG12 – Systems: Pitot-Static

Completed: _____

HOMEWORK

- Assigned: _____
- PHAK 6 (*Flight Instruments* beginning thru *Blocked Static System*)
 - POH Section 7 (*Airplane and Systems Descriptions* section *Pitot-Static System*)
 - Machado E (*Flight Instructions* beginning thru *Alternate Static Source*)

GROUND

- Review pitot-static system

LESSON SG13 – Systems: Gyroscopic

Completed: _____

HOMEWORK

- Assigned: _____
- PHAK 6 (*Flight Instruments* sections *Gyroscopic Flight Instruments* thru *Heading Indicator*)
 - POH Section 7 (*Airplane and Systems Descriptions* section *Vacuum System*)
 - Machado E (*Flight Instruments* sections *The Gyroscopic Instruments* thru *The Turn Coordinator*)

GROUND

- Review gyroscopic instruments

LESSON SG14 – Systems: Compass and OAT

Completed: _____

HOMEWORK

- Assigned: _____
- PHAK 6 (*Flight Instruments* sections *Magnetic Compass* thru end)
 - Machado E (*Flight Instruments* section *The Magnetic Compass*)

GROUND

- Review compass
- Review OAT gauge

LESSON SG15 – Performance

Completed: _____

HOMEWORK

- Assigned: _____
- POH Section 5 (*Performance*)
 - PHAK 9 (*Aircraft Performance* beginning thru *Stall Speed Performance Charts*)
 - Machado O (*Airplane Performance*)

GROUND

- Review performance charts in POH

LESSON SG16 – Weight and Balance

Completed: _____

HOMEWORK

Assigned: _____

- PHAK 3 (*Aerodynamics of Flight* section *Weight and Balance*)
- PHAK 8 (*Weight and Balance*)
- POH Section 6 (*Weight and Balance*)
- Machado P (*Weight and Balance*)

GROUND

- Effect of weight
- Effect of fore/aft CGs
- Computing W&B

LESSON SG17 – Ground Review Form

Completed: _____

HANDOUTS

- Airplane ground review form

HOMEWORK

Assigned: _____

- Complete ground review form

GROUND

- Review ground review form

LESSON SG18 – Wake Turbulence and Windshear

Completed: _____

HOMEWORK

Assigned: _____

- PHAK 12 (*Airport Operations* sections *Wake Turbulence* thru *Vortex Avoidance Procedures*)
- AIM 7-3 (*Wake Turbulence*)

GROUND

- Review wake turbulence avoidance

LESSON SG19 – Maintenance, Airworthiness, and Inoperative Equipment

Completed: _____

HANDOUTS

Airworthiness Checklist – VFR

HOMEWORK

Assigned: _____

- PHAK 7 (*Flight Manuals and Other Documents*)
- FAR 91.7 (*Civil aircraft airworthiness*)
- FAR 91.205(a)-(c) (*Instrument and equipment requirements*)
- FAR 91.207 (*Emergency locator transmitters*)
- FAR 91.213 (*Inoperative instruments and equipment*)
- FAR 91.403 (*Maintenance: General*)
- FAR 91.405 (*Maintenance required*)
- FAR 91.407 (*Operation after maintenance*)
- FAR 91.409 (*Inspections*)
- FAR 91.413 (*ATC transponder tests and inspections*)
- FAR 91.417 (*Maintenance records*)
- Machado F (Appropriate sections on above FARs)
- POH Section 6 (*Equipment List*)

GROUND

- Inoperative equipment
 - Equipment list
 - 91.205
- Analyzing maintenance logs
 - Annual
 - ELT and ELT battery
 - Transponder
 - ADs

LESSON SG20 – Solo Flight Regulations

Completed: _____

HOMEWORK

Assigned: _____

- FAR 61.3(a), (c), (l) (*Requirement for certificates, ratings, and authorizations*)
- FAR 61.15 (*Offenses involving alcohol or drugs*)
- FAR 61.16 (*Refusal to submit to an alcohol test*)
- FAR 61.19(b) (*Duration of pilot certificates*)
- FAR 61.23(a), (d) (*Medical certificates*)
- FAR 61.53 (*Prohibition on operations during medical deficiency*)
- FAR 61.89 (*Student Pilots: General limitations*)
- FAR 91.3 (*Responsibility and authority of the pilot in command*)
- FAR 91.13 (*Careless or reckless operation*)
- FAR 91.17 (*Alcohol or drugs*)
- FAR 91.103 (*Preflight action*)
- FAR 91.105 (*Flight crewmembers at stations*)
- FAR 91.111 (*Operating near other aircraft*)
- FAR 91.113 (*Right-of-way rules*)
- FAR 91.119 (*Minimum safe altitudes*)
- FAR 91.123 (*Compliance with ATC clearances and instructions*)
- FAR 91.151 (*Fuel requirements for flight in VFR conditions*)
- FAR 91.159 (*VFR cruising altitude*)
- Machado F (Appropriate sections on above FARs)

GROUND

- FAR review

LESSON SG21 – Pre-Solo Written Quizzes

Completed: _____

HOMEWORK

Assigned: _____

Club written quiz

Club addendum

GROUND

Review club written quiz

Review club addendum

Flight Training → Solo Phase Check

LESSON SF1 – Preflight, Start, Taxi, Runup, After Landing, and Securing

- Completed: _____

HANDOUTS

- Laminated checklists for aircraft

HOMEWORK

- Assigned: _____
- AFH 1 (*Introduction section Collision Avoidance*)
 - PHAK 1 (*Aircraft Structure*)
 - Machado A (*Airplane Components*)
 - PHAK 4 (*Flight Controls*)
 - AFH 2 (*Preflight, Postflight, and Ground Operations*)
 - PHAK 7 (*Flight Manuals and Other Documents thru Airworthiness Certificate*)
 - FAR 91.9 (*Civil aircraft flight manual, marking, and placard requirements*)
 - FAR 91.203 (*Certifications required*)
 - Machado F (Appropriate sections on above FARs)
 - AIM 4-4-14 (*Use of Visual Clearing Procedures*)
 - POH Section 2 (*Limitations*)
 - POH Section 4: Checklists and Expanded Procedures for *Preflight, Before Start, Start, Pre-Taxi, Taxi, Runup, Pre-Takeoff, After Landing, Shutdown, and Securing* (not all checklists are present for all airplanes)
 - POH Section 7 (*Airplane and Systems Descriptions sections Airframe and Cabin*)

GROUND

- Introduction to controls: aileron, elevator, rudder, trim, flaps, throttle
- Basic instruments and their function
- Collision avoidance: Scanning for traffic during taxi, entering the runway, in the air; role of ATC
- Propeller safety and hand-propping
- Cockpit organization
- Taxi
- Positive control switch – to/from CFI
- Use of "my plane" in emergencies

FLIGHT

- Preflight
 - Dual preflight
 - Solo supervised preflight
 - Solo preflight
 - Oil filling
 - Fueling
- Engine start
- Taxi
 - CFI throttle
 - Complete student control
 - Taxi with wind
- Runup
- After landing
- Shutdown
- Securing
- Recording aircraft time

LESSON SF2 – Introduction to Pitch, Power, and Airspeed

Completed: _____

HOMEWORK

- Assigned: _____
- PHAK 2 (*Principles of Flight*)
 - AFH 4 (*Basic Flight Maneuvers*)
 - POH Section 4: Checklists and Expanded Procedures for *Enroute Climb, Cruise, and Descent* (not all checklists are present for all airplanes)

GROUND

- Four forces
- Angle of attack
- Pitch stability
- Roll (in)stability
- Yaw stability
- Effect of power on pitch and airspeed
- Maintaining pitch visually
- Trim
- Glides
- Best glide speed with trim
- Gliding turns
- Effect of flaps
- Compensating for flaps – maintaining constant pitch
- Effect of flaps on pitch/speed during glide
- Effect of flaps on pitch/speed during powered descent
- Airspeed control in descending turns with and without flaps

FLIGHT

- Visual pitch for climb and cruise
- Trim exercise
- Glides and gliding turns
- Flaps and effect on pitch and airspeed
- Use of flaps during glides

LESSON SF3 – Turns and Coordination

Completed: _____

HOMEWORK

- Assigned: _____
- PHAK 3 (*Aerodynamics of Flight* beginning thru *Asymmetric Loading*)
 - Machado B (*Aerodynamics*)

GROUND

- Adverse yaw
- Rate of roll effects
- Coordination
- Dutch roll exercise
- Left turning tendencies and rudder compensation

FLIGHT

- Adverse yaw demo
- Dutch rolls
- Yaw-induced roll
- Compensating for yaw-induced roll
- Rudder turns
- Power-induced yaw/roll
- Power/yaw/roll exercise

LESSON SF4 – Normal Takeoff and Climb

Completed: _____

HOMEWORK

- Assigned: _____
- AFH 3 (*Takeoffs and Climbs* beginning thru *Normal Takeoff*)

GROUND

- Normal takeoff

FLIGHT

- Normal takeoff

LESSON SF5 – Crosswind Takeoff and Climb

Completed: _____

HOMEWORK

- Assigned: _____
- AFH 3 (*Takeoffs and Climbs* section *Crosswind Takeoff*)

GROUND

- Crosswind component
- Crosswind takeoff

FLIGHT

- Crosswind takeoff

LESSON SF6 – Steep Turns

Completed: _____

HOMEWORK

- Assigned: _____
- AFH 6 (*Ground Reference and Performance Maneuvers* section *Steep Turns*)
- PHAK 3 (*Aerodynamics of Flight* section *Load Factors*)

GROUND

- Load factor in turns
- Steep turns, visual reference, and pitch
- Overbanking
- Maneuver entry
- Clearing turns

FLIGHT

- Turns with different bank angles (10-45 degrees)
- Maintaining level flight during turns
- Maintaining airspeed during turns with additional power

LESSON SF7 – Slow Flight

Completed: _____

HOMEWORK

- Assigned: _____
- AFH 5 (*Slow Flight, Stalls, and Spins* section *Slow Flight*)

GROUND

- Drag curve and slow flight
- Slow flight procedure
- Use of rudder
- Holding altitude and heading

FLIGHT

- Slow flight without flaps
- Straight & turning
 - Climbs & descents
- Slow flight with flaps
- Straight & turning
 - Climbs & descents
- Flap transition during slow flight

LESSON SF8 – Power-Off Stalls

Completed: _____

HOMEWORK

Assigned: _____

AFH 5 (*Slow Flight, Stalls, and Spins* sections *Stalls* thru end)

GROUND

- Lift curve and critical angle of attack
- Stall recognition
- Stall/recovery procedure
- Spin awareness
- Spin recovery
- Accelerated stall

FLIGHT

- Power-off stall, no flaps, falling leaf demo
- Power-off stall, no flaps, no-power recovery
- Power-off stall, no flaps, full-power recovery
- Power-off stall, with flaps, no-power recovery
- Power-off stall, with flaps, falling leaf demo
- Power-off stall, with flaps, full-power recovery
- Power-off stall, with flaps, right/left turns
- (Optional) Spin training
- Accelerated stall

LESSON SF9 – Power-On Stalls

Completed: _____

GROUND

- Power-on stalls and rudder use
- Stalls with turns

FLIGHT

- Power-on stall, takeoff configuration
- Power-on stall, takeoff configuration, right/left turns

LESSON SF10 – Go Arounds

Completed: _____

HOMEWORK

Assigned: _____

AFH 7 (*Airport Traffic Patterns, Approaches, and Landings* section *Go-Arounds*)

GROUND

- Elevator trim stall
- Go around
- Go around on CFI command
- Accelerated stall

FLIGHT

- Elevator trim stall demo
- Go around without flaps
- Go around in landing configuration

LESSON SF11 – Ground Reference Maneuvers

Completed: _____

HOMEWORK

Assigned: _____

AFH 6 (*Ground Reference and Performance Maneuvers* beginning thru *Turns Around a Point*)

GROUND

- Crabbing
- Rectangular pattern
- Turns around a point
- S-turns across a road

FLIGHT

- Rectangular pattern
- Turns around a point
- S-turns across a road

LESSON SF12 – Landings

Completed: _____

HOMEWORK

- Assigned: _____
- AFH 7 (*Airport Traffic Patterns, Approaches, and Landings* section *Normal Approach and Landing*)
 - AFH 8 (*Faulty Approaches and Landings*)
 - POH Section 4: Checklists and Expanded Procedures for *Before Landing* and *Landing*
 - AIM 4-3-12 (*Low Approach*)
 - AIM 4-3-22 (*Option Approach*)

GROUND

- Landings
- Landing criteria (speed, alignment, position)
- Go around judgment
- Full-stop landings
- Braking
- No flap landing

FLIGHT

- Pattern with go-around before flare
- Pattern with go-around during various stages of flare
- Pattern with normal landing, full stop
- No flap landing

LESSON SF13 – Touch and Go Landings

Completed: _____

GROUND

- Touch and go landing procedure

FLIGHT

- Pattern with touch and go landings

LESSON SF14 – Slips

Completed: _____

GROUND

- Forward slip
- Side slip

FLIGHT

- Forward slip
- Side slip
- Slip to landing

LESSON SF15 – Crosswind Landings

Completed: _____

HOMEWORK

- Assigned: _____
- AFH 7 (*Airport Traffic Patterns, Approaches, and Landings* section *Crosswind Approach and Landings*)

GROUND

- Crosswind technique

FLIGHT

- Alignment practice during low approach
- Crosswind landing

LESSON SF16 – Engine Failure Emergency Procedures

Completed: _____

HOMEWORK

- Assigned: _____
- POH Section 3: Checklists and Expanded Procedures for *Engine Failures* and *Forced Landings*
 - AFH 12 (*Emergency Operations*)
 - AIM 6-1 to 6-3 (*Emergency Procedures*)

GROUND

- Choosing a field or airport
- Restart flow
- Calling for help
- Shutdown flow
- Dry practice in plane before flight

FLIGHT

- Power-off approach to airport
 - Normal
 - 360 degree overhead
 - Teardrop
 - From altitude to runway
- Simulated power failure in flight

LESSON SF17 – Other Emergencies

Completed: _____

HOMEWORK

- Assigned: _____
- POH Section 3 (*Emergency Procedures*)
 - AFH 3 (*Takeoffs and Climbs* section *Rejected Takeoff*)
 - AIM 4-3-13 (*Traffic Control Light Signals*)

GROUND

- Engine fire on start
- Engine fire in air
- Emergency descent procedure
- Electrical fire in air
- Engine failure on takeoff
- Communication failure and light gun signals
- Electrical failure – alternator and total
- Vacuum failure
- Partial power loss
- Pitot/static failure
- Brake failure
- Takeoff decision point
- Aborted takeoff
- Weather
- Door opening in flight

FLIGHT

- Emergency descent
- Simulated engine fire
- Simulated engine failure on takeoff
- Light gun signals
- Simulated alternator failure
- Simulated total electrical failure
- Simulated partial power loss
- Simulated pitot/static failure
- Simulated brake failure
- Aborted takeoff
- Door opening in flight

LESSON SF18 – First Supervised Solo

Completed: _____

GROUND

- Instructor endorsements
 - Student pilot certificate
 - Logbook

FLIGHT

- Warmup pattern work
- Supervised solo

LESSON SF19 – Solo Phase Check Complete and Reviewed

Completed: _____

GROUND/FLIGHT

- Get phase check CFI assigned
- Review all items to phase check standards
- Schedule phase check
- Complete phase check
- Review deficient areas

LESSON SF20 – First Unsupervised Solo

Completed: _____

FLIGHT

- Unsupervised solo

Ground Training → Cross-Country Phase Check

LESSON XG1 – Cross-Country Flight Planning

Completed: _____

HANDOUTS

Cross-country planning checklist

HOMEWORK

Assigned: _____

- PHAK 14 (*Navigation*)
- Machado N (*Flight Planning*)

GROUND

- Pilotage
- Dead reckoning
- Route planning
- Airplane performance
- Time/fuel calculations
- Navigation log
- In-flight calculations
- Weight and balance
- Airport information
- Cross-country flying procedure

LESSON XG2 – Flight Plans, Flight Following, and Survival Supplies

Completed: _____

HANDOUTS

Flight Plans and Survival Supplies

HOMEWORK

Assigned: _____

- PHAK 14 (*Navigation* section *Filing a VFR Flight Plan*)
- AIM 4-1-14 to 4-1-17, 4-1-19 (*Radar Service and Transponder Operation*)
- AIM 5-1-4, 5-1-10 to 5-1-12 (*Flight Plan*)
- Machado H (*Radio Operation* sections *Flight Service Station Frequencies* thru end)
- Machado Q (*Pilot Potpourri* section *Filing a VFR Flight Plan*)

GROUND

- Flight plans
- Contacting FSS on the ground
- Contacting FSS in the air
- Survival supplies

LESSON XG3 – Aeromedical Factors

Completed: _____

HOMEWORK

Assigned: _____

- PHAK 15 (*Aeromedical Factors* thru *SCUBA Diving*)
- AIM 8 (*Medical Facts for Pilots*)
- Machado Q (*Pilot Potpourri* beginning thru *Spatial Disorientation*)

GROUND

- Hypoxia
- Hyperventilation
- Sinus problems
- Spatial disorientation
- Motion sickness
- CO poisoning
- Stress and fatigue
- Dehydration
- Drugs
- SCUBA

LESSON XG4 – Bigger Airports, Linemen, and Intercept Procedures

Completed: _____

HOMEWORK

Assigned: _____

- AIM 4-3-10 (*Intersection Takeoffs*)
- AIM 4-3-11 (*LAHSO*)
- AIM 4-3-14 (*Communications*)
- AIM 4-3-25 (*Hand Signals*)
- AIM 5-6 (*National Security and Interception Procedures*)
- ASF Course: Runway Safety Program
- ASF Course: Know Before You Go

GROUND

- Review lineman signals
- Review intercept procedures

LESSON XG5 – Weather Theory

Completed: _____

HOMEWORK

Assigned: _____

- PHAK 10 (*Weather Theory*)
- Machado L (*Understanding Weather*)

GROUND

- Atmo sphere
- Pressure systems and wind
- Stability
- Fronts
- Fog

LESSON XG6 – Weather Services

Completed: _____

HOMEWORK

Assigned: _____

- PHAK 11 (*Weather Reports, Forecasts, and Charts*)
- Machado M (*Weather Charts and Briefings*)
- AIM 7-1 (*Meteorology*)
- ASF Course: Weather Wise
- ASF Course: SkySpotter

GROUND

- Area forecasts
- AIRMETs, SIGMETs, and CWAs
- METARs
- TAFs
- PIREPs
- Surface analysis chart
- Weather depiction chart
- Radar summary chart
- Significant weather prognostic chart
- Weather decision making
- FSS
- EFAS
- HIWAS
- TWEB

LESSON XG7 – Airspace Completed: _____**HOMEWORK** Assigned: _____

- AIM 3 (*Airspace*)
- PHAK 13 (*Airspace*)
- Machado I (*Airspace*)
- AIM 4-4-5 (*Special VFR Clearances*)
- ASF Course: Mission Possible

GROUND

- Airspace
- Communication requirements
- Cloud clearance requirements
- SVFR
- Special-use airspace
- Approach
- Center

LESSON XG8 – Aeronautical Decision Making Completed: _____**HOMEWORK** Assigned: _____

- PHAK 16 (*Aeronautical Decision Making*)
- Machado (*Pilot Potpourri section Postflight Briefing #17-2*)

GROUND

- Discuss ADM

LESSON XG9 – Cross-Country Phase Check Written Exam Completed: _____**HOMEWORK** Assigned: _____

- Cross-country phase check written exam

GROUND

- Review exam

Flight Training → Cross-Country Phase Check

LESSON XF1 – Radio Navigation

Completed: _____

HOMEWORK

Assigned: _____

- AFH 11 (*Navigation Systems*)
- AIM 1-1-1 to 1-1-8, 1-1-12 to 1-1-13 (*NDBs and VORs*)
- AIM 1-1-9(a)-(c) (*GPS*)
- PHAK 14 (*Navigation section Radio Navigation*)
- Machado K (*Radio Navigation*)

GROUND

- VOR navigation
- Morse ID
- Tracking
- Intercept
- Determining position
- DME
- ADF
- GPS

FLIGHT

- VOR radial tracking
- VOR radial intercept
- VOR lost procedures
- DME
- VOR/DME lost procedures
- ADF homing

LESSON XF2 – Flight by Reference to Instruments

Completed: _____

HOMEWORK

Assigned: _____

- AFH 9 (*Flight by Reference to Instruments*)

GROUND

- Spatial disorientation
- Instrument interpretation
- Instrument cross check
- Unusual attitude recovery

FLIGHT

- Graveyard spiral demo
- Inst – straight and level
- Inst – climbs and descents
- Inst – turns
- Inst – radio navigation
- Unusual attitude recovery

LESSON XF3 – Soft Field Takeoffs

Completed: _____

HOMEWORK

Assigned: _____

- AFH 3 (*Takeoffs and Climbs* section *Soft-Field Takeoff and Climb*)

GROUND

- Factors requiring soft field techniques
 Soft field takeoff procedure

FLIGHT

- Soft field landings

LESSON XF4 – Short Field Takeoffs

Completed: _____

HOMEWORK

Assigned: _____

- AFH 3 (*Takeoffs and Climbs* section *Short-Field Takeoff and Climb*)

GROUND

- Factors requiring short field techniques
 Takeoff performance charts – effects of wind, slope, surface, temp, altitude
 Short field takeoff procedure

FLIGHT

- Short field takeoffs

LESSON XF5 – Soft Field Landings

Completed: _____

HOMEWORK

Assigned: _____

- AFH 7 (*Airport Traffic Patterns, Approaches, and Landings* section *Soft-Field Approach and Landing*)

GROUND

- Factors requiring soft field techniques
 Soft field landing procedure

FLIGHT

- Soft field landings

LESSON XF6 – Short Field Landings

Completed: _____

HOMEWORK

Assigned: _____

- AFH 7 (*Airport Traffic Patterns, Approaches, and Landings* section *Short-Field Approach and Landing*)

GROUND

- Factors requiring short field techniques
 Landing performance charts – effects of wind, slope, surface, temp, altitude
 Short field landing procedure

FLIGHT

- Short field landings

LESSON XF7 – Dual Day Cross-Countries

Completed: _____

HOMEWORK

Flight #1
 Assigned: _____

Destination: _____

Flight #2
 Assigned: _____

Destination: _____

Flight #3
 Assigned: _____

Destination: _____

GROUND

Flight #1
 Cross-country plan review

Flight #2
 Cross-country plan review

Flight #3
 Cross-country plan review

FLIGHT

Flight #1
 Cross-country flight
 Flight plan filed/opened/closed
 Flight following
 EFAS
 PIREP filed

Flight #2
 Cross-country flight
 Flight plan filed/opened/closed
 Flight following
 EFAS
 PIREP filed

Flight #3
 Cross-country flight
 Flight plan filed/opened/closed
 Flight following
 EFAS
 PIREP filed

LESSON XF8 – Lost Procedures and Diversions

Completed: _____

HOMEWORK

Assigned: _____

PHAK 14 (*Navigation sections Lost Procedures thru end*)

GROUND

Lost procedures
 Diversion procedures

FLIGHT

Lost procedures practice
 Diversion practice

LESSON XF9 – Night Training

Completed: _____

HOMEWORK

Assigned: _____

- PHAK 15 (*Aeromedical Factors sections Vision in Flight thru end*)
- AFH 10 (*Night Operations*)
- FAR 91.209 (*Aircraft lights*)
- Machado F (Appropriate sections on above FARs)
- AIM 2-1 (*Airport Lighting Aids*)
- AIM 2-2 (*Air Navigation and Obstruction Lighting*)

GROUND (1 hour)

- Night-related physiology
- Night illusions
- Night currency regulations
- Night fuel regulations
- Cockpit equipment
- Night navigation and cross-country planning
- Airplane lighting and politeness
- Airport lighting
- Night preflight

FLIGHT

- Takeoffs and landings at 2-3 different airports
- Landing light out landing
- Simulated engine failure
- Simulated electrical failure
- Night hood work
- Unusual attitude recovery

LESSON XF10 – Night Dual Cross-Country

Completed: _____

HOMEWORK

Assigned: _____

- Prepare cross-country flight plan

GROUND

- Review flight plan
- File flight plan

FLIGHT

- Activate flight plan
- Diversion
- Close flight plan

LESSON XF11 – Cross-Country Phase Check Complete and Reviewed

Completed: _____

GROUND/FLIGHT

- Get phase check CFI assigned
- Review all items to phase check standards
- Schedule phase check
- Complete phase check
- Review deficient areas
- Instructor endorsements
 - Student pilot certificate
 - Logbook

LESSON XF12 – Solo Cross-Countries

Completed: _____

HOMEWORK

Flight #1
 Assigned: _____

Destination: _____

Flight #2
 Assigned: _____

Destination: _____

Flight #3
 Assigned: _____

Destination: _____

GROUND

Flight #1
 Cross-country plan review

Flight #2
 Cross-country plan review

Flight #3
 Cross-country plan review

FLIGHT

Flight #1
 Cross-country flight
 Flight plan filed/opened/closed
 Flight following
 Meets long cross-country requirement

Flight #2
 Cross-country flight
 Flight plan filed/opened/closed
 Flight following
 Meets long cross-country requirement

Flight #3
 Cross-country flight
 Flight plan filed/opened/closed
 Flight following
 Meets long cross-country requirement

Ground Training → Private Phase Check and Checkride

LESSON CG1 – More Maintenance

Completed: _____

HOMEWORK

- Assigned: _____
- FAR 43.3 (*Persons authorized to perform maintenance, preventive maintenance, rebuilding, and alterations*)
 - FAR 43.5 (*Approval for return to service*)
 - FAR 43.7 (*Persons authorized to approve aircraft for return to service*)
 - FAR 43.9 (*Content, form, and disposition of maintenance records*)
 - FAR 43.11 (*Content, form, and disposition of records for inspections*)
 - FAR 43.12 (*Maintenance records: Falsification, reproduction, or alteration*)
 - FAR 43.13 (*Performance rules*)
 - FAR 43.15 (*Additional performance rules for inspections*)
 - FAR 43 Appendix A(c) (*Preventive maintenance*)
 - FAR 91.407 (*Operation after maintenance*)
 - FAR 91.417 (*Maintenance records*)
 - Machado F (Appropriate sections on above FARs)

GROUND

- Minimum equipment list (MEL)
- Preventive maintenance
- Maintenance records

LESSON CG2 – Passenger Briefing

Completed: _____

HOMEWORK

- Assigned: _____
- FAR 91.107 (*Use of safety belts*)
 - Machado F (Appropriate sections on above FARs)

GROUND

- Walking in the ramp area
- Prop safety!
- Go to the bathroom
- Boarding
- Seat adjustment
- Operation of doors and windows
- Seat belts and shoulder harnesses
 - Briefing required
 - Notified to fasten for taxi/TO/ldg
 - Everyone wearing belts for taxi/TO/ldg
- Heating, cooling, and ventilation
- Headsets
- Sterile cockpit
- Don't touch the controls, including rudders
- Looking for traffic
- Oxygen use
- Motion sickness – always carry an airsickness bag
- Fire extinguishers
- Off-airport landing
 - Crash position
 - Opening door
 - Exit points
 - Survival gear
- What to expect during the flight
 - Route of flight
 - Mag check
 - Power reduction
 - Banking is more obvious
- Turbulence

LESSON CG3 – Accident Reporting and ASRS Completed: _____**HOMEWORK** Assigned: _____

- AIM 7-6 (*Safety, Accident, and Hazard Reports*)
- FAR 91.25 (*Aviation Safety Reporting Program*)
- NTSB 830

GROUND

- Definition of accident
- Notifications required
- ASRS

LESSON CG4 – Private Pilot Privileges and Limitations Completed: _____**HOMEWORK** Assigned: _____

- FAR 61.5 (*Certificates and ratings issued under this part*)
- FAR 61.17 (*Temporary certificate*)
- FAR 61.31 (*Type rating requirements, additional training, and authorization requirements*)
- FAR 61.51 (*Pilot logbooks*)
- FAR 61.56 (*Flight review*)
- FAR 61.57 (*Recent flight experience: Pilot in command*)
- FAR 61.113 (*Private pilot privileges and limitations: Pilot in command*)
- FAR 91.15 (*Dropping objects*)
- FAR 91.117 (*Aircraft speed*)
- FAR 91.211 (*Supplemental oxygen*)
- FAR 91.303 (*Aerobatic flight*)
- FAR 91.307 (*Parachutes and parachuting*)
- Machado F (Appropriate sections on above FARs)

GROUND FAR review**LESSON CG5 – Private Phase Check Written Exam** Completed: _____**HOMEWORK** Assigned: _____

- Private phase check written exam

GROUND Review exam

Flight Training → Private Phase Check and Checkride

LESSON CG1 – Private Phase Check Complete and Reviewed

Completed: _____

GROUND/FLIGHT

- Get phase check CFI assigned
- Review all areas to PTS standards
- Schedule phase check
- Complete phase check
- Review deficient areas
- Instructor endorsements
 - Logbook

LESSON CF2 – Checkride!

Completed: _____

HOMEWORK

Assigned: _____

- Schedule checkride
- Check airplane airworthiness

GROUND/FLIGHT

Pass checkride!