

Two Dogs Aviation



Private Pilot Syllabus

Version 1.5
As of: 8 Nov 2008

Summary

Lesson	Title	Brief	Sortie	Debrief
1	Introduction to Flight	1.5	1.0	0.3
2	Four Fundamentals of Flight	1.0	1.0	0.3
3	Basic Instrument Maneuvers	1.0	1.0	0.3
4	Slow Flight and Stalls	0.5	1.2	0.3
5	Emergency Operations	0.5	1.0	0.3
6	Steep Turns and Ground Reference Maneuvers	1.0	1.2	0.3
7	Landing Patterns	0.5	2.0	0.3
8	Crosswind Landings	0.5	2.0	0.3
9	Patterns at a Tower-Controlled Airport	0.5	1.5	0.3
10	Pre-Solo Stage Check	0.3	2.0	0.3
11	Supervised Solo	0.5	1.3	0.3
12	Second Supervised Solo	0.3	1.5	0.2
13	Short-Field and Soft-Field Takeoffs and Landings	0.5	1.5	0.3
14	Navigation Systems	0.7	1.0	0.3
15	Local Practice Area Solo	0.0	1.5	0.0
16	Dual Cross Country	1.5	2.5	0.3
17	Second Dual Cross Country	1.0	2.0	0.3
18	Local Night Flight	0.7	1.0	0.3
19	Night Cross Country	1.0	2.5	0.3
20	Solo Cross Country	0.4	2.5	0.0
21	Long Solo Cross Country	0.4	3.0	0.0
22	Solo Practice	0.0	2.0	0.0
23	Maneuvers Review	0.3	2.0	0.3
24	Pre-Checkride Stage Check	0.3	2.0	0.3
25	Pre-Checkride Practice	0.3	1.5	0.3
	Totals	15.2	41.7	6.2

* Briefings, flights, and debriefs may be longer or shorter than the times listed depending on the student's needs and desires. This is for planning purposes only, your results may vary.

Guidance:

1. All Two Dogs Aviation instructors will use this syllabus. Annotate lessons completed in the student's logbook and training record.
2. Lessons need not be done in order, as long as prerequisites are met. Instructors can feel free to accomplish any lesson due to weather, student proficiency, etc.
3. Lessons may be combined or repeated, as student proficiency dictates.
4. Sortie durations are guidelines. Students may use them as estimates for planning.
5. Once students are cleared solo, they can repeat any dual lesson they have previously accomplished as a solo lesson.
6. All solo students must check in with an instructor NET 24 hours prior and NLT 30 minutes prior to takeoff on a solo mission. The instructor will review the weather, solo endorsement, and the particulars of the sortie and will clear the student to fly.

Study References:

- Airplane Flying Handbook (AFH)
- Liberty Pilot Information Handbook (PIM)
- Title 14, Code of Federal Regulations; Federal Aviation Regulations (FAR)
- Airman's Information Manual (AIM)
- Liberty Maneuvers Guide (LMG)

Changes:

- 8 Nov 08: Removed lesson: Short-Field and Soft-Field Takeoffs and Landing Practical. Added *Parking and securing the airplane* and *Airplane servicing* review to cross country rides. Airplane damage has occurred due to improper securing of flight controls when the airplane is tied down.
- 1 Oct 08: Added two lessons: Lesson 15, Local Practice Area Solo; Lesson 25 Pre-Checkride Practice. Added supervision in the title of each lesson (i.e., Dual, Solo).
- 12 Apr 08: Added brief/debrief times and modified sortie duration times.

Flight Lesson 1: Introduction to Flight (Dual)

Objective:

To familiarize the student with the training airplane, its operating characteristics, cockpit controls, instruments and systems. The student will be introduced to preflight and postflight procedures, the use of checklists, and safety precautions to be followed. The student will be introduced to the use of the flight controls, the local practice area and the airport.

Sortie Duration: 0.7

Content:

1. Preflight Briefing
2. New Items

- Certificates and Documents
 - Airplane logbooks
 - Airworthiness requirements
- Use of Checklists
- Preflight Inspection
- Airplane servicing
- Location of emergency equipment and survival gear
- Airplane systems

- Taxiing
 - Before takeoff check
 - Normal and crosswind takeoff and climb
 - Use of primary flight controls and trim
 - Practice area familiarization
 - Collision avoidance procedures
 - Normal and crosswind approach
 - After landing procedures
 - Parking and securing the airplane

Engine starting

Completion Standards:

The lesson is complete when the student displays an understanding of the airplane's systems, the use of checklists, preflight procedures, and postflight procedures. The student will also be familiar with the use of controls, the local practice area and the airport.

Profile:

- Demo Preflight, Engine Start, Checklists, Taxi
- Student Taxi
- IP takeoff
- straight and level flight
- turns
- IP rudder effectiveness demo
- use of trim
- IP landing

Study References:

- AFH Chapter 1, 2
- PIM, pages 4-4 through 4-20 and 4-23 through 4-24

Flight Lesson 2: Four Fundamentals of Flight (Dual)

Objective:

Develop the student's skill in the four basic flight maneuvers (straight-and-level, turns, climbs and descents). The student will be introduced to radio communication, airport markings, and traffic patterns.

Sortie Duration: 0.7

Content:

1. Preflight Briefing

2. Review Items

Certificates and Documents

Use of Checklists

Preflight Inspection

Engine starting

Taxiing

Before takeoff check

Normal and crosswind takeoff and climb

Collision avoidance procedures

Normal and crosswind approach

After landing procedures

Parking and securing the airplane

3. New Items

Cockpit management

Radio communications

Airport and runway markings

Traffic patterns

Straight and level flight

Climbs and climbing turns

Cruise climb

Best rate of climb

Best angle of climb

Turns to headings

Descents and descending turns

Cruise descent

Traffic pattern descent

Power-off glide

Level Off from climbs and descents

Torque effects

Weight and balance calculations

Completion Standards:

The lesson is complete when the student can, with instructor assistance, conduct a preflight inspection, properly use checklists, taxi, perform a before takeoff check, and make a normal and crosswind takeoff. The student will also display an understanding of the four fundamentals of flight and the various climb and descent attitudes.

Notes:

- Student takeoff (IP assist)
- student pattern (IP land)

Study References:

- AFH Chapter 3

Flight Lesson 3: Basic Instrument Maneuvers (Dual)

Objective:

Develop the student's proficiency in the four fundamentals of flight and to introduce the student to basic instrument maneuvers.

Sortie Duration: 1.0

Content:

1. Preflight Briefing

2. Review Items

Certificates and Documents
Radio communications
Use of Checklists
Preflight Inspection
Engine starting
Taxiing
Before takeoff check
Normal and crosswind takeoff and climb

Straight and level flight
Climbs
Turns to headings
Descents
Collision avoidance procedures
Traffic patterns
Normal and crosswind approach
Postflight procedures

3. New Items

Taxiing in a crosswind
Attitude instrument flying
Straight-and-level flight (IR)

Constant airspeed climbs (IR)
Constant airspeed descents (IR)
Turns to a heading (IR)

Completion Standards:

The lesson is complete when the student demonstrates an increased understanding of the four fundamentals of flight. The student will demonstrate understanding of basic instrument maneuvers.

Study References:

- AFH Chapter 3

Flight Lesson 4: Slow Flight and Stalls (Dual)

Objective:

Improve the student's proficiency in the four fundamentals of flight and to introduce the student to maneuvering during slow flight, stalls and spin awareness.

Sortie Duration: 1.0

Content:

1. Preflight Briefing

2. Review Items

Radio communications

Use of Checklists

Preflight Inspection

Engine starting

Taxiing

Before takeoff check

Normal and crosswind takeoff and climb

Straight and level flight

Climbs

Turns to headings

Descents

Collision avoidance procedures

Traffic patterns

Normal and crosswind approach

Postflight procedures

3. New Items

Maneuvering during slow flight

Power off stalls

Power on stalls

Spin awareness maneuvers

Demo items: cross-controlled stalls, secondary stalls, elevator trim stalls

Completion Standards:

The lesson is complete when the student demonstrates proficiency in the fundamentals of flight by maintaining altitude +/- 200', airspeed +/- 20 kts, heading +/- 20 degrees. During this and all subsequent lessons, the student should maintain proficiency in preflight inspection, engine start, use of checklists, taxiing and postflight procedures. The student should continue to improve in traffic pattern procedures with the instructor performing the landing. Finally, the student will demonstrate understanding of maneuvering during slow flight, stalls and spin awareness.

Study References:

- AFH Chapter 4
- LMG pages 14, 21-23
- PIM page 5-7

Flight Lesson 5: Emergency Operations (Dual)

Objective:

Improve the student's proficiency in maneuvering during slow flight, stalls and spin awareness. Additionally, the student will be introduced to emergency operations and normal landings.

Sortie Duration: 1.0

Content:

1. Preflight Briefing

2. Review Items

Maneuvering during slow flight
Power off stalls
Power on stalls

Spin awareness maneuvers
Traffic patterns
Normal and crosswind approach

3. New Items

Emergency descent
Emergency approach and landing
Systems and equipment malfunctions
Emergency equipment and survival gear

Takeoff emergencies
Recovery from bouncing or ballooning during landing

Completion Standards:

The lesson will be complete when the student shows an understanding of various emergency operations. The student should be able to make a normal landing with instructor assistance.

Study References:

- AFH pages 8-25 – 8-26, Chapter 16
- LMG page 24
- PIM Chapter 3
- AIM Sections 6-1 thru 6-2

Flight Lesson 6: Steep Turns and Ground Reference Maneuvers (Dual)

Objective:

Review previous lessons and introduce the student to steep turns and ground reference maneuvers.

Sortie Duration: 1.0

Content:

1. Preflight Briefing

2. Review Items

Emergency descent

Emergency approach and landing

Systems and equipment malfunctions

Normal and crosswind takeoff, approach and landing

3. New Items

Steep turns

Rectangular course

S-turns

Turns around a point

Wake turbulence avoidance

Completion Standards:

The lesson will be complete when the student demonstrates proper entry procedures for the maneuvers and properly corrects for the wind while flying in reference to the ground. The student should be able to make a normal landing with instructor assistance.

Study References:

- AFH page 9-1; Chapter 6
- LMG pages 14-20;

Flight Lesson 7: Landing Patterns (Dual)

Objective:

Introduce the student to go-around procedures and forward slips to a landing.

Sortie Duration: 1.5

Content:

1. Preflight Briefing

2. Review Items

Traffic patterns

Normal and crosswind takeoff,
approach and landing

Recovery from bouncing or ballooning
during landing

3. New Items

Go around

Forward slip to a landing

Wind shear avoidance

Completion Standards:

The lesson will be complete when the student can demonstrate a proper go-around and can accomplish a forward slip. In the traffic pattern, the student will be able to maintain altitude +/- 200', airspeed +/- 10 kts, heading +/- 20 degrees.

Prerequisites:

- All tasks from lessons 1-6 must be complete.

Notes:

- This sortie will be flown to Wilson Industrial Airport (W03) if crosswinds exist at Goldsboro-Wayne.

Study References:

- AFH Chapters 7 & 8
- LMG pages 3-4; 9-10
- PIM pages 4-17 thru 4-18

Flight Lesson 8: Crosswind Landings (Dual)

Objective:

Practice crosswind landing procedures.

Sortie Duration: 1.5

Content:

1. Preflight Briefing

2. Review Items

Traffic patterns

Normal and crosswind takeoff,
approach and landing

Recovery from bouncing or
ballooning during landing

Go around

Forward slip to a landing

3. New Items

Crosswind landings

Wing-low method

Crab method

Completion Standards:

The lesson will be complete when the student can maintain the proper ground track on final and can land the aircraft in a crosswind. In the traffic pattern, the student will be able to maintain altitude +/- 200', airspeed +/- 10 kts, heading +/- 20 degrees.

Prerequisites:

- All tasks from lessons 1-6 must be complete. This lesson may be accomplished prior to lesson 7.

Notes:

- This sortie will be flown to Wilson Industrial Airport (W03) if crosswinds are not available at Goldsboro-Wayne.

Study References:

- AFH Chapters 7 & 8
- LMG pages 3-4; 9-10
- PIM pages 4-17 thru 4-18

Flight Lesson 9: Patterns at a Tower-Controlled Airport (Dual)

Objective:

Practice landing procedures at a towered airport. Additionally, the student will practice communications with ATC.

Sortie Duration: 1.5

Content:

1. Preflight Briefing

2. Review Items

Traffic patterns

Normal and crosswind takeoff,
approach and landing

Recovery from bouncing or
ballooning during landing

Go around

Forward slip to a landing

3. New Items

Communications with a control
tower

Right-hand patterns

ATC light gun signals

Requesting flight following from an
approach facility

Landing illusions

Completion Standards:

The lesson will be complete when the student has practiced ATC communications and accomplished traffic patterns at a tower controlled field. In the traffic pattern, the student will be able to maintain altitude +/- 100', airspeed +/- 5 kts, heading +/- 10 degrees.

Prerequisites:

- All tasks from lessons 1-6 must be complete.

Notes:

- This sortie will normally be flown to Kinston Regional Airport (ISO).

Study References:

- AIM Chapter 2 & Sections 4-1-2, 4-2-1 thru 4-2-8, 4-2-13 thru 4-2-14, all of Section 4-3

Flight Lesson 10: Pre-Solo Check (Dual)

Objective:

Practice all procedures learned up to this point.

Sortie Duration: 1.7

Content:

1. Preflight Briefing

2. Review Items

Certificates and Documents

Use of Checklists

Preflight Inspection

Engine starting

Taxiing

Maneuvering during slow flight

Power off stalls

Power on stalls

Normal and crosswind takeoff, approach and landing

Emergency approach and landing

Forward slip to a landing Recovery from

bouncing or ballooning during landing

Go around

3. New Items

None.

Completion Standards:

The lesson will be complete when the student displays the ability to perform all of the maneuvers safely, without instructor assistance, in preparation for a supervised solo flight. At no time will the successful outcome of each task be in doubt.

Prerequisites:

- All tasks from lessons 1-9 must be complete.

Study References:

- FAR Parts 61.81-61.89

Flight Lesson 11: Supervised Solo (Dual/Solo)

Objective:

Practice solo operations in the traffic pattern.

Sortie Duration: 1.3

Content:

1. Preflight Briefing

2. Review Items

Use of Checklists

Preflight Inspection

Engine starting

Taxiing

Normal and crosswind takeoff,
approach and landing

Emergency approach and landing

Forward slip to a landing Recovery from
bouncing or ballooning during landing

Go around

3. New Items

None.

Completion Standards:

The lesson will be complete when the student safely flies the airplane solo.

Prerequisites:

- Lesson 10

Notes:

- The first part of this sortie will be dual, remaining in the pattern. The IP will evaluate the student's ability to fly solo.
- If the student is able to fly solo, the IP will direct the student to taxi to the ramp where the IP will endorse the student's logbook and medical.
- The student will perform no more than 3 patterns and landings. Touch and goes may be performed at the IP's discretion.

Flight Lesson 12: Second Supervised Solo (Dual/Solo)

Objective:

Practice solo operations in the traffic pattern.

Sortie Duration: 1.0

Content:

1. Preflight Briefing

2. Review Items

Use of Checklists

Preflight Inspection

Engine starting

Taxiing

Normal and crosswind takeoff,
approach and landing

Emergency approach and landing

Forward slip to a landing Recovery from
bouncing or ballooning during landing

Go around

3. New Items

None.

Completion Standards:

The lesson will be complete when the student flies the airplane solo in the pattern.

Prerequisites:

- Lesson 11

Notes:

- The student will perform patterns and landings with the IP present and monitoring the flight throughout the sortie. Touch and goes may be performed at the IP's discretion.
- This sortie may start off as a dual sortie, at the IP's discretion.

Flight Lesson 13: Short-Field and Soft-Field Takeoffs and Landings (Dual)

Objective:

Introduce the student to techniques required for short and soft field takeoffs and landings.

Sortie Duration: 1.0

Content:

1. Preflight Briefing

2. Review Items

All previous instruction to this point

3. New Items

Short field takeoff and climb

Soft field takeoff and climb

Short field approach and landing

Soft field approach and landing

Completion Standards:

The lesson will be complete when the student understands when a short or soft field landing would be necessary, and the student should be able to perform these procedures.

Prerequisites:

- Lessons 1-8. Solo lessons are not required prior to this lesson.

Notes:

- This flight will be performed at a local hard-surfaced runway

Study References:

- AFH pages 5-7 thru 5-11
- LMG pages 5-9
- PIM pages 4-17 thru 4-18

Flight Lesson 14: Navigation Systems (Dual)

Objective:

Introduce the student to navigation systems installed in the aircraft. Additionally, the student will practice simulated instrument flight.

Sortie Duration: 1.3

Content:

1. Preflight Briefing

2. Review Items

Straight-and-level flight (IR)

Constant airspeed climbs (IR)

Constant airspeed descents (IR)

Turns to a heading (IR)

3. New Items

VOR orientation and tracking

GPS orientation and tracking

Flying direct to a VOR station

Intercepting a VOR radial

Position fixing with two VOR cross radials

Maneuvering during slow flight (IR)

Power off stalls (IR)

Power on stalls (IR)

Completion Standards:

The lesson will be complete when the student understands basic VOR navigation. The student should be able to tune and identify a VOR station, should be able to determine his radial from a VOR, and be able to track directly to a VOR. He should also be able to use the GPS for basic navigation functions – fly direct to a point, determine groundspeed and current track. Additionally, the student should know how to use the “nearest airport” function.

Prerequisites:

- Lessons 1-8. Solo lessons are not required prior to this lesson.

Profile:

- Slow flight and stalls under simulated instrument conditions
- VOR orientation
- Position fix with two VORs
- Fly direct to a VOR
- Intercept a radial
- Fly GPS direct to a point
- Practice diversion, backed up with GPS “nearest” function

Study References:

- AFH pages 16-12 thru 16-16
- LMG page 38
- PIM Section 9 (GNS-430 supplement)
- AIM Sections 1-1-1 thru 1-1-8; 1-1-19 thru 1-1-20

Flight Lesson 15: Local Solo Practice (Solo)

Objective:

Practice maneuvers in the local area, away from the pattern, while solo.

Sortie Duration: 1.5

Content:

1. Preflight Briefing

2. Review Items

Maneuvering during slow flight

Power off stalls

Power on stalls

Steep Turns

VOR/GPS use

Rectangular course

S-turns

Turns around a point

Forward slip to landing

Go around

Normal/crosswind approach and landing

3. New Items

Completion Standards:

The lesson will be complete when the student flies listed maneuvers while solo.

Prerequisites:

- Lessons 1-12 and 14. Students must have a current solo endorsement and be familiar with the XL-2's avionics.

Notes:

- Local sortie
- This sortie may be repeated

Flight Lesson 16: Dual Cross Country (Dual)

Objective:

Introduce the student to cross country procedures including flight planning, pilotage, dead reckoning, navigation procedures, diversion to an alternate airport and lost procedures.

Sortie Duration: 2.2

Content:

1. Preflight Briefing

2. Review Items

Navigation systems

Emergency procedures

Parking and securing the airplane

Airplane servicing

Wind shear avoidance

Wake turbulence avoidance

Weight and balance calculations

3. New Items

Aeronautical charts

National Airspace system

Navigation log

Cockpit management

Obtaining weather info

Filing/Opening a VFR flight plan

Pilotage/Dead reckoning

VFR radar services

Cruise power settings

Computing groundspeed, ETA and fuel consumption

Obtaining inflight weather info

Unfamiliar airport operations

Lost procedures

Diversion to alternate airport

Closing a VFR flight plan

Completion Standards:

The lesson will be complete when the student, with instructor assistance, is able to perform cross country flight planning and fly the planned course. The student will primarily navigate via pilotage and dead reckoning. Finally, the student will understand lost and diversion procedures.

Prerequisites:

- Lessons 1-8 and 14. Solo lessons are not required prior to this lesson.

Notes:

- Plan to fly to Edenton (EDE), or other airport with instructor concurrence
- Legs should be between 10-20 miles long, with visually identifiable checkpoints
- Navigation on outbound leg will be via dead reckoning; return trip via pilotage
- Accomplish a diversion on the return leg and consider accomplishing a “deteriorating weather” scenario, with a “lowering ceiling”

Study References:

- AIM Section 3
- Cross Country Planning Guide

Flight Lesson 17: Second Dual Cross Country (Dual)

Objective:

The student will practice cross country procedures including flight planning, pilotage, dead reckoning, VOR navigation procedures, diversion to an alternate airport and lost procedures.

Sortie Duration: 2.0

Content:

1. Preflight Briefing

2. Review Items

Aeronautical charts	Computing groundspeed, ETA and fuel consumption
National Airspace system	Obtaining inflight weather info
Navigation log	Unfamiliar airport operations
Cockpit management	Lost procedures
Obtaining weather info	Diversion to alternate airport
Filing/Opening a VFR flight plan	Closing a VFR flight plan
Pilotage/Dead reckoning	Communications with a control tower
VFR radar services	Parking and securing the airplane
Cruise power settings	Airplane servicing

Completion Standards:

The lesson will be complete when the student, is able to perform cross country flight planning and fly the planned course. The student will primarily navigate via pilotage and dead reckoning on the outbound leg and via VOR navigation on the return trip. Finally, the student will understand lost and diversion procedures.

Prerequisites:

- Lesson 16

Profile:

- Plan to fly to New Bern (EWN). Other options include Burlington/Alamance (BUY) and Ahoskie (ASJ). Designated examiners are based there; Zenda Liess is at BUY and Henry Joyner is at ASJ.
- Legs should be between 10-20 miles long, with visually identifiable checkpoints
- Outbound leg will be accomplished by dead reckoning and pilotage
- Return trip should be mostly accomplished via VOR

Flight Lesson 18: Local Night Flight (Dual)

Objective:

Introduce the student to night flying preparation and night flying operations.

Sortie Duration: 1.0

Content:

1. Preflight Briefing

2. Review Items

Maneuvering during slow flight

Power off stalls

Power on stalls

Steep Turns

3. New Items

Airport lighting

Emergencies at night

Night preflight and airport operations

Night collision avoidance

Night cockpit management

Night patterns and landings

Completion Standards:

The lesson will be complete when the student is able to maintain orientation in the local practice area and airport traffic pattern, and can accurately interpret aircraft and airport lighting.

Prerequisites:

- Lessons 1-8. Solo lessons are not required prior to this lesson.

Profile:

- Slow flight and stalls at night
- Steep turns at night
- Night patterns and landings; approximately five stop and go's

Study References:

- AFH Chapter 10
- AIM Sections 2-1 thru 2-2

Flight Lesson 19: Night Cross Country (Dual)

Objective:

Introduce the student to night flying preparation and night flying operations.

Sortie Duration: 2.2

Content:

1. Preflight Briefing

2. Review Items

Airport lighting

Emergencies at night

Night preflight and airport operations

Night collision avoidance

Night cockpit management

Night patterns and landings

3. New Items

Night fuel requirements

Night route selection

Airport diagrams

Class C airspace procedures

Completion Standards:

The lesson will be complete when the student demonstrates proficiency in cross country flights. Additionally, the student will complete at least 10 night landings by the end of this sortie.

Prerequisites:

- Lessons 1-8, 14, 16 and 18. Solo lessons are not required prior to this lesson.

Profile:

- Plan to fly from GWW to Fayetteville (FAY) to Raleigh-Durham (RDU) and back
- Accomplish additional patterns at FAY, under tower control
- Plan a full stop landing at RDU, with an immediate taxi for departure (use airport diagram)
- Return to GWW
- Most navigation will be via VOR, but pick visually significant checkpoints for night, where able
- Plan to fly at least one leg under simulated instrument conditions

Flight Lesson 20: Solo Cross Country (Solo)

Objective:

Practice cross country procedures solo.

Sortie Duration: 2.2

Content:

1. Preflight Briefing

2. Review Items

National Airspace system

Navigation log

Cockpit management

Obtaining weather info

Filing/Opening a VFR flight plan

Pilotage/Dead reckoning

VFR radar services

Cruise power settings

Computing groundspeed, ETA and fuel consumption

Obtaining inflight weather info

Lost procedures

Closing a VFR flight plan

Parking and securing the airplane

Airplane servicing

3. New Items

Completion Standards:

The lesson will be complete when the student can properly plan and conduct a solo cross country flight using pilotage, dead reckoning, and navigation systems.

Prerequisites:

- Lessons 1-17. Night lessons are not required prior to this lesson.

Notes:

- Plan to fly to Edenton (EDE), or other airport with instructor concurrence
- Student may fly a touch and go or full stop at out base

Flight Lesson 21: Long Solo Cross Country (Solo)

Objective:

Practice cross country procedures solo.

Sortie Duration: 3.0

Content:

1. Preflight Briefing

2. Review Items

National Airspace system

Navigation log

Cockpit management

Obtaining weather info

Filing/Opening a VFR flight plan

Pilotage/Dead reckoning

VFR radar services

Cruise power settings

Computing groundspeed, ETA and fuel consumption

Obtaining inflight weather info

Lost procedures

Closing a VFR flight plan

Parking and securing the airplane

Airplane servicing

3. New Items

Completion Standards:

The lesson will be complete when the student can properly plan and conduct a long solo cross country flight using pilotage, dead reckoning, and navigation systems.

Prerequisites:

- Lessons 1-17 and 20. Night lessons are not required prior to this lesson.

Notes:

- Plan to fly to three airports (including the departure airport), with landings at each airport
- Minimum distance from departure airport will be 50 nm, with a minimum total distance of 150 nm
- Suggested profile is GWW – FAY – Florence, SC (FLO) – GWW, other fields at instructor discretion
- Ensure the student has at least 5 hours of solo cross country time at the end of this lesson

Flight Lesson 22: Solo Practice (Solo)

Objective:

Practice maneuvers to Practical Test Standards in preparation for the Private Pilot checkride while solo.

Sortie Duration: 1.5

Content:

1. Preflight Briefing

2. Review Items

Maneuvering during slow flight
Power off stalls
Power on stalls
Steep Turns
Emergency descent
VOR orientation and tracking
GPS orientation and tracking
Flying direct to a VOR station
Intercepting a VOR radial
Rectangular course

S-turns
Turns around a point
Normal and crosswind approach
Forward slip to landing
Go around
Short field takeoff and climb
Short field approach and landing
Soft field takeoff and climb
Soft field approach and landing
Emergency approach and landing

3. New Items

Completion Standards:

The lesson will be complete when the student flies all listed maneuvers while solo.

Prerequisites:

- Lessons 1-21. All previous lessons are required prior to this lesson.

Notes:

- Local sortie
- This sortie will be repeated enough to ensure 10 hour solo minimum requirement

Flight Lesson 23: Maneuvers Review (Dual)

Objective:

Practice maneuvers to Practical Test Standards in preparation for the Private Pilot checkride.

Sortie Duration: 1.5

Content:

1. Preflight Briefing

2. Review Items

Straight and level flight	Intercepting a VOR radial
Climbs	Rectangular course
Turns to headings	S-turns
Descents	Turns around a point
Maneuvering during slow flight	Normal and crosswind approach
Power off stalls	Forward slip to landing
Power on stalls	Go around
Steep Turns	Short field takeoff and climb
Emergency descent	Short field approach and landing
VOR orientation and tracking	Soft field takeoff and climb
GPS orientation and tracking	Soft field approach and landing
Flying direct to a VOR station	Emergency approach and landing

3. New Items

Completion Standards:

The lesson will be complete when the student can properly fly all listed maneuvers to PTS standards.

Prerequisites:

- Lessons 1-21

Notes:

- Local sortie, or sortie to projected examiner's home airport
 - o Henry Joyner: Ahoskie (ASJ)
 - o Johnny Henley: Kinston (ISO)
- This sortie will be repeated enough to fulfill the 3 hour dual requirement for checkride preparation

Flight Lesson 24: Pre-Checkride Stage Check (Dual)

Objective:

Demonstrate proficiency in maneuvers to Practical Test Standards in preparation for the Private Pilot checkride.

Sortie Duration: 1.7

Content:

1. Preflight Briefing

2. Review Items

Straight and level flight	Intercepting a VOR radial
Climbs	Rectangular course
Turns to headings	S-turns
Descents	Turns around a point
Maneuvering during slow flight	Normal and crosswind approach
Power off stalls	Forward slip to landing
Power on stalls	Go around
Steep Turns	Short field takeoff and climb
Emergency descent	Short field approach and landing
VOR orientation and tracking	Soft field takeoff and climb
GPS orientation and tracking	Soft field approach and landing
Flying direct to a VOR station	Emergency approach and landing

3. New Items

Completion Standards:

The lesson will be complete when the student can properly fly all listed maneuvers to PTS standards.

Prerequisites:

- All previous lessons are required prior to this lesson.

Notes:

- Local sortie
- If the sortie is not complete to standards, additional training will be assigned

Flight Lesson 25: Pre-Checkride Practice (Dual/Solo)

Objective:

Demonstrate proficiency in maneuvers to Practical Test Standards in preparation for the Private Pilot checkride.

Sortie Duration: 1.5

Content:

1. Preflight Briefing

2. Review Items

Straight and level flight	Intercepting a VOR radial
Climbs	Rectangular course
Turns to headings	S-turns
Descents	Turns around a point
Maneuvering during slow flight	Normal and crosswind approach
Power off stalls	Forward slip to landing
Power on stalls	Go around
Steep Turns	Short field takeoff and climb
Emergency descent	Short field approach and landing
VOR orientation and tracking	Soft field takeoff and climb
GPS orientation and tracking	Soft field approach and landing
Flying direct to a VOR station	Emergency approach and landing

3. New Items

Completion Standards:

The lesson will be complete when the student can properly fly all listed maneuvers to PTS standards.

Prerequisites:

- All previous lessons are required prior to this lesson.

Notes:

- Local sortie
- This sortie may be flown dual or solo, at the discretion of the endorsing instructor.
- This sortie is intended for the student to “clean up” those elements found deficient in the Stage Check
- This sortie can be repeated as often as required
- At the conclusion of this sortie the student should be able to be endorsed for his/her checkride