

SPORTY'S®

***WHAT YOU SHOULD KNOW®* SERIES**

PRIVATE PILOT TRAINING COURSE OUTLINE

(FLIGHT TRAINING SYLLABUS)

**Sporty's Academy, Inc.
Clermont County/Sporty's Airport
Batavia, OH 45103**

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sportys.com

STUDENT INFORMATION

Name _____
LAST FIRST MIDDLE
Address _____
City _____ State _____ ZIP _____
Telephone _____
HOME WORK MOBILE
Email _____
Pilot Cert. _____
TYPE CERT # DATE ISSUED
Emergency Contact _____
Phone _____ Relationship _____

ENROLLMENT INFORMATION

Course Title _____
Enrollment Date _____ Approved School Cert # _____
Medical Certificate _____
CLASS DATE ISSUED
Previous School _____ Course Title _____
Training Credit _____
FLIGHT GROUND
Approval of Training Credit _____
CHIEF INSTRUCTOR
Remarks _____

STAGE CHECK / KNOWLEDGE TEST COMPLETION RECORD

Date _____ Stage _____ Ck Pilot _____ Date _____ Stage _____ Ck Pilot _____
Date _____ Stage _____ Ck Pilot _____
Date of Presolo Written _____ Grade _____ Inst. Int. _____
Date of Knowledge Test _____ Grade _____

ENDORSEMENT RECORD

Pre-Training U.S. Citizenship Confirmation or TSA Alien Flight Training Requirements
Completed with Records Date _____ Type _____ Inst. Int. _____
Initial Solo Date _____ A/C Type _____ Inst. Int. _____
90 Day Solo
Date _____ A/C Type _____ Inst. Int. _____
Date _____ A/C Type _____ Inst. Int. _____
Solo Cross-Country
Date _____ A/C Type _____ Inst. Int. _____
Date _____ A/C Type _____ Inst. Int. _____
Date _____ A/C Type _____ Inst. Int. _____
Complex / High Performance Airplane
Date _____ A/C Type _____ Inst. Int. _____

COMPLETION INFORMATION

Completion _____ Transfer _____ Terminated _____
DATE DATE DATE
Records Certified Correct _____
CHIEF INSTRUCTOR
Remarks _____

TRAINING COURSE OUTLINE PRIVATE PILOT - AIRPLANE

COURSE INTRODUCTION

The Private Pilot Training Course Outline is the syllabus portion of the Sporty's Academy 14 CFR part 141* Approved Private Pilot Certification Course. This outline provides a logical, structured sequence that maximizes learning and meets 14 CFR part 141 training time requirements. Training times must be increased slightly to meet 14 CFR part 61* requirements for students training under those rules. This Training Course Outline also contains ground lessons appropriate to the Private Pilot certificate and supplemental lessons for additional training as necessary.

COURSE CONCEPT

The Private Pilot Training Course Outline utilizes the building-block theory of learning, which recognizes that each item taught must be presented on the basis of previously learned knowledge and skills.

For optimum effectiveness, the ground lessons and viewing of the associated videos should be completed prior to the respective flight lessons. If a considerable length of time has elapsed between the ground lesson and the associated flight, the instructor may wish to conduct a short review of essential material.

INFORMATION FOR FLIGHT SCHOOLS AND FLIGHT INSTRUCTORS USING THIS TRAINING COURSE OUTLINE (TCO)

Sporty's Private Training Course Outline integrates content from Sporty's online Learn to Fly Course training content applicable to 14 CFR Part 141 Appendix B (3)(b) - Private Pilot Certification Course, Aeronautical Knowledge Training.

The video-based lessons in Sporty's Learn to Fly Course cover all of the aeronautical knowledge areas in 14 CFR Part 141 Appendix B (3)(b) and can be used to satisfy up to 20 of the 35 required ground training hours. The applicable online training content is noted by "ADDITIONAL STUDY" at the end of the ground lesson where appropriate.

Sporty's Learn to Fly Course provides electronic tracking of the student's time spent on each topic which is viewable by the flight instructor. The additional ground training portion may be presented to the student as a formal classroom program or individually by the instructor.

COURSE ELEMENTS

The course includes the latest FAA pilot certification requirements and a maximum of student-oriented instruction. The syllabus and support materials not only provide necessary information, but also guide the student through the course in a logical manner.

*14 CFR part 141 and 14 CFR part 61 refer to the appropriate parts of Title 14 of the Code of Federal Regulations. Title 14 covers aeronautics and space. The regulations in this title are often referred to as the Federal Aviation Regulations or FARs.

STUDENT VIDEO PREPARATION

The Sporty's Private Pilot Training Course Outline is based on Sporty's *Complete Learn To Fly* Course, Private Pilot path, online and via apps (iOS, Apple TV, Android, Roku). It is important that the student view all six volumes in the Private Pilot path. For each lesson, there is additional study of specific video sections and this should be accomplished as part of a self-study program. Additional topics may also be assigned by the instructor. To maximize the learning benefit of the videos, the student should also review the additional study sections after completion of the lesson. This is particularly true of any subject areas where the student encountered difficulty.

PREFLIGHT ORIENTATION

Prior to each dual lesson, the instructor must provide the student with a thorough overview of the subject matter to be covered during the lesson. The instructor should select a quiet, private place to brief the student and explain the lesson material. It is important that the instructor define unfamiliar terms and explain the maneuvers and objectives of each lesson.

AIRPLANE PRACTICE

Airplane practice must be conducted so that the student obtains the maximum benefit from each flight. Each flight, where applicable, should begin with a review of previously practiced maneuvers, as deemed necessary by the instructor, before any new maneuvers are introduced.

POSTFLIGHT EVALUATION

The postflight evaluation is equally as important as the preflight orientation. During each postflight session, the student must be thoroughly debriefed. Noticeable advancement should be apparent and recommendations should be made for improvement, where appropriate. This action is a valuable instructional technique because it increases retention. The instructor must also discuss the elements of the next lesson. This prepares the student for the video assignment and will enhance the student's understanding.

LESSON TIMES

Lesson times are specified as a guide to meeting the 14 CFR part 141 training requirements for the Private Pilot. Under the building block concept, however, the student must achieve a specific level of proficiency before starting the next lesson. Lessons may be combined or repeated as needed based on the progress made by the student. It is imperative that the instructor and student periodically review the student's overall progress and determine that the training requirements are consistently being met.

STUDENT STAGE CHECKS AND END-OF-COURSE TESTS

Stage checks measure the student's accomplishments during each stage of training. This procedure provides close supervision of training and another opinion on the student's progress. An examination of the building-block theory of learning will show that it is extremely important for progress and proficiency to be satisfactory before the student enters a new

stage of training. Therefore, the next stage should not begin until the student successfully completes the current stage. Failure to follow this progression may defeat the purpose of the stage check and lead to overall course breakdown.

GRADING INSTRUCTIONAL LESSONS

Evaluation is an essential part of the teaching process. The student must be apprised of his or her progress. All instructional flights must be graded in accordance with the following criteria.

Each pilot operation or task will be evaluated at the completion of each instructional lesson.

1 = EXCELLENT	The student demonstrates knowledge or skills with no procedural or mechanical errors and the flight instructor does not provide any assistance
2 = ABOVE AVERAGE	The student demonstrates knowledge or skills that exceed standards. Occasional procedural or mechanical errors are quickly recognized and corrected.
3 = AVERAGE	The student consistently demonstrates knowledge and skills that meet standards with timely recognition of procedural or mechanical errors.
4 = BELOW AVERAGE	The student demonstrates knowledge and skills with difficulty, is slow in recognizing and correcting procedural or mechanical errors.
5 = BELOW ACCEPTABLE STANDARDS	The student does not demonstrate adequate knowledge or skills, is unable to recognize and correct procedural or mechanical errors.
I = INCOMPLETE	The student has not completed the pilot operation listed.

Each instructional lesson will be assigned an overall grade based on the following criteria.

S = SATIS- FACTORY	The content of the lesson has been completed to the standards outlined in the individual lesson Completion Standards.
U = UNSATIS- FACTORY	Indicates that all or part of the lesson content was not completed to the standards outlined in the individual lesson Completion Standards. One or more pilot operations graded as a "5" will require an overall grade of unsatisfactory.
I = INCOMPLETE	Indicates the content of the lesson was not completed, but the pilot operations covered were satisfactory. Pilot operations not completed must be indicated with an "I".

RECORDING SOLO LESSONS

The student will indicate each pilot operation performed on the solo lesson sheet with a check mark. Any pilot operation performed that is not listed must be noted in the remarks section. Cross-country routes shall also be recorded in the remarks section.

The overall solo lesson will be assigned a “grade” based on the following criteria.

SP = STUDENT PRACTICE	All completed solo lessons should be graded as Student Practice.
I = INCOMPLETE	The student did not complete all the pilot operations listed on the lesson sheet.

GRADING NOTES

1. When an instructional lesson is graded unsatisfactory, only those pilot operations graded as “5” must be repeated to standards during the next lesson.
2. When any lesson is graded incomplete, the pilot operations not performed must be completed prior to attempting the pilot operations for the next lesson.
3. Use the “TOTAL IN COURSE: (D/S/G)” lines within the grading box to total the student’s dual, solo, and ground instruction times in the course after each lesson.

TSA ALIEN FLIGHT STUDENT PROGRAM RECORDS

The TSA mandated Alien Flight Student Program (AFSP) has a number of compliance and record keeping requirements. Refer to the TSA website for details. The student information page of this document has a place to record that you have completed the requirements. That line is there to serve as a reminder to complete the TSA mandates but does not meet the documentation requirements.

Per the TSA, an instructor may elect to use an endorsement in the Student’s *and* the Instructor’s logbooks to document confirmation of a Student’s U.S. Citizenship (not allowed for aliens). The Instructor’s copy of the record must be kept for at least 5 years. The recommended text of the endorsement is as follows:

“I certify that [insert student’s name] has presented me a [insert type of document presented, such as a U.S. birth certificate or U.S. passport, and the relevant control or sequential number on the document, if any] establishing that [he or she] is a U.S. citizen or national in accordance with 49 CFR 1552.3(h). [Insert date and instructor’s signature and CFI number.]”

For details or clarification, refer to the TSA’s website.

INTEGRATION OF REDBIRD'S GIFT FOR PRIVATE PILOT

Redbird's Guided Independent Flight Training (GIFT) for Private Pilot is a simulator-based maneuvers training supplement designed to help you achieve your goals faster and for less money. GIFT allows you to learn, practice, and get feedback on every maneuver required for your pilot's license, at your own pace, using cutting edge educational techniques that push you to reach your best performance level. Each GIFT lesson focuses on a specific flight maneuver or skill required to earn your Private Pilot Certificate and includes:

- A video and written pre-flight briefing
- A simulator mission with an AI-powered flight instructor that provides real-time coaching and corrections on your performance
- A post-flight debrief with objective scoring based on the FAA Airmen Certification Standards
- In-depth post-flight review and trend tracking by uploading your lesson history to Redbird Landing

All delivered in an FAA approved, Redbird Advanced Aviation Training Device.

Sporty's Academy has worked with Redbird to integrate their GIFT Modules into our Private Pilot TCO. The table below will assist in this integration.

TCO Lesson	GIFT Module(s)
2	1 Introduction Flight
	2 Straight and Level Flight
	4 Normal Turns
	5 Normal Climb
	8 Descent
	10 Taxi
5	13 Slow Flight
	4 Normal Turns
	5 Normal Climb
	11 Normal Takeoff
7	3 Changing A/S in Straight and Level Flight
	6 Best Rate of Climb
	7 Best Angle of Climb
	13 Slow Flight
9	17 Power Off (Landing) Stall
	18 Power On (Takeoff) Stall
	9 Steep Turns
11	17 Power Off (Landing) Stall
	18 Power On (Takeoff) Stall
	11 Normal Takeoff
	20 Normal Landing
	9 Steep Turns
13	14 Rectangular Course
	15 Turns Around a Point
	16 S-Turns
	11 Normal Takeoff
	20 Normal Landing

TCO Lesson	GIFT Module(s)
15	14 Rectangular Course
	15 Turns Around a Point
	16 S-Turns
	22 Traffic Pattern Operations
	11 Normal Takeoff
	20 Normal Landing
17	22 Traffic Pattern Operations
	23 Go Around
	24 Rejected Takeoff
	25 Emergency Approach and Landing
19	12 Crosswind Takeoff
	21 Crosswind Landing
	23 Go Around
	24 Rejected Takeoff
	25 Emergency Approach and Landing
21	13 Slow Flight
	17 Power Off (Landing) Stall
	18 Power On (Takeoff) Stall
	11 Normal Takeoff
	20 Normal Landing
	12 Crosswind Takeoff
	21 Crosswind Landing
23	GIFT Modules as Needed
25	GIFT Modules as Needed
27	GIFT Modules as Needed
29	GIFT Modules as Needed
31	GIFT Modules as Needed

TCO Lesson	GIFT Module(s)
32	GIFT Modules as Needed
34	26 Short Field Takeoff
	27 Short Field Landing
	28 Soft Field Takeoff
	29 Soft Field Landing
36	26 Short Field Takeoff
	27 Short Field Landing
	28 Soft Field Takeoff
	29 Soft Field Landing
38	GIFT Modules as Needed
40	32 Cross Country 1 (Short)
42	30 Lost Procedures
	34 Cross Country 3 (Diversion)
44	GIFT Modules as Needed
46	33 Cross Country 2 (Long)
48	19 Basic Instrument Flight
	31 Instrument Climb, Descent, Turns to a Heading
50	19 Basic Instrument Flight
	31 Instrument Climb, Descent, Turns to a Heading
51	GIFT Modules as Needed
52	GIFT Modules as Needed
53	GIFT Modules as Needed
54	GIFT Modules as Needed
56	GIFT Modules as Needed
58	GIFT Modules as Needed
59	GIFT Modules as Needed

PRIVATE PILOT - AIRPLANE TRAINING COURSE OUTLINE

COURSE OBJECTIVES

The student will obtain the aeronautical skill and experience necessary to meet the requirements for a Private Pilot Certificate for Airplane Single-Engine Land (ASEL).

COURSE COMPLETION STANDARDS

The student must demonstrate through flight tests and school records that the aeronautical knowledge, skill, and experience requirements necessary to obtain a Private Pilot Certificate (ASEL) are accomplished.

Course Time Allocation Table

STAGE		FLIGHT TIME						GROUND TIME
	LESSON	DUAL	SOLO	INST	DUAL X-C	SOLO X-C	NIGHT	DISCUSSION /LMS
I	1							1.2
I	2	1.2						0.2
I	3							1.2
I	4							1.2
I	5	1.2						0.2
I	6							1.2
I	7	1.2						0.2
I	8							1.2
I	9	1.2						0.2
I	10							1.2
I	11	1.2						0.2
I	12							1.2
I	13	1.2						0.2
I	14							1.2
I	15	1.2						0.2
I	16							1.2
I	17	1.2						0.2
I	18							1.2
I	19	1.2						0.2
I	20							1.2
I	21	1.2						0.2
I	22							1.2
I	23	1.2						0.2
I	24							1.2
I	25	1.2						0.5
I	26							1.2
I - Stage Check	27	1.5						1.5
I	28							1.2
I	29	1.2						0.2
I	30							1.2
I	31	1.2						0.2
I	32	1.0	0.6					0.2
Stage I Totals		19.3	0.6					24.0
II	33							1.2
II	34	1.2						0.2
II	35							1.2
II	36	1.2						0.2
II	37							1.2
II	38		1.0					
II	39							1.2
II	40	1.5						0.2
II	41							1.2
II	42	1.8						0.2
II	43							1.2
II	44		1.5					
II	45							1.2
II	46	1.0						0.2
II - Stage Check	47	1.2						1.5
Stage II Totals		7.9	2.5					10.9
III	48							1.2
III	49							1.2
III	50	1.5		0.5	1.5			0.2
III	51	1.5		0.5	1.5			0.2
III	52		2.0			2.0		
III	53							1.2
III	54	1.0		0.5			1.0	0.2
III	55	2.0		0.5	2.0		2.0	0.2
III	56	1.5		0.5				0.2
III	57							1.2
III	58	1.5		0.5				0.2
III - Stage Check	59	1.2		0.3				1.5
Stage III Totals		10.2	2.0	3.3	5.0	2.0	3.0	7.5
COURSE TOTALS		37.4	5.1	3.3	5.0	2.0	3.0	42.4
FAA 141 REQUIREMENTS		20.0	5.0	3.0	3.0		3.0	35.0
		35 TOTAL						

STAGE I

STAGE OBJECTIVE:

During this stage, the student becomes familiar with the training airplane and learns how the airplane controls are used to establish and maintain specific flight attitudes. The student will gain the proficiency necessary to solo the training airplane in the traffic pattern and practice area.

STAGE COMPLETION STANDARDS:

At the completion of this stage, the student will have demonstrated proficiency in the maneuvers required for solo flight. Also, the student will have successfully soloed in the local practice area.

STAGE I
LESSON 1
DUAL - GROUND
TRAINING AIRCRAFT

DATE _____ GRADE (Circle One) S U I
STUDENT NAME _____ STUDENT SIGNATURE _____
INSTRUCTOR # _____ INSTRUCTOR SIGNATURE _____
DISCUSSION: (1.2) _____
TOTAL IN COURSE: (D/S/G) ____ / ____ / ____

LESSON OBJECTIVE:

During this lesson, the instructor will introduce the student to the training aircraft and the associated preflight procedures. The student will also be introduced to the basic flight and engine controls.

CONTENT:

Lesson Introduction

_____ Dispatch Procedures
 _____ Use of Checklists
 _____ Certificates and Documents Location and Use
 _____ Aircraft Preflight
 _____ Aeronautical Decision Making & Judgment

Lesson Introduction

_____ Recovery / Postflight Procedures
 _____ Engine Controls
 _____ Flight Controls
 _____ Emergency Equipment & Survival Gear
 _____ Aircraft Servicing
 _____ Fuel Grades

COMPLETION STANDARDS:

At the completion of this lesson, the student will have a basic knowledge of the training aircraft preflight. The student will be aware of the decision making process and its critical relevance to flight safety. The student will also be able to complete the dispatch procedures to obtain a training aircraft for a flight lesson.

ADDITIONAL STUDY:

Airplane Flying Handbook

[Chapter 2](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapter 9](#)

Airman Certification Standards (ACS)

[Sporty's Private Pilot Airman Certification Standards](#)

Sporty's Learn to Fly Course

Volume 1

[Segments 1-13](#)

STAGE I
LESSON 2
DUAL - LOCAL

DATE _____	ACFT ID _____	GRADE (Circle One) S U I	
STUDENT NAME _____		STUDENT SIGNATURE _____	
INSTRUCTOR # _____		INSTRUCTOR SIGNATURE _____	
FLIGHT TIME: (1.2) _____		DISCUSSION: (0.2) _____	
TOTAL IN COURSE: (D/S/G) ____ / ____ / ____			

LESSON OBJECTIVE:

During this lesson, the student will become familiar with the engine start procedures, aircraft taxi, the before takeoff checklist, normal takeoffs, normal landings, and proper postflight securing of the aircraft. The student will also be introduced to the functioning of the basic aircraft controls.

CONTENT:**Lesson Introduction**Preflight Orientation

- _____ Dispatch Procedures
- _____ Preflight Inspection

Flight Orientation

- _____ Passenger Briefing
- _____ Flight Deck Management
- _____ Engine Starting
- _____ Radio Communications
- _____ Taxiing / Brake Check
- _____ Before Takeoff Check
- _____ Normal Takeoff & Climb

Lesson IntroductionFlight Orientation

- _____ Aircraft Flight Instruments
- _____ Climb / Level Off
- _____ Straight & Level Flight / Use of Trim
- _____ Pitch / Power Coordination
- _____ Shallow Banked Turns
- _____ Descents / Level Off
- _____ Traffic Pattern Operations
- _____ Collision Avoidance
- _____ Normal Approach & Landing
- _____ After Landing Checks
- _____ Parking, Securing, & Proper Tie Down
- _____ Recovery / Postflight Procedures

COMPLETION STANDARDS:

At the completion of this lesson, the student will be able to perform an aircraft preflight, an engine start, and be able to taxi the aircraft to the run-up area and perform the before takeoff checks. The student will perform the aircraft control functions with assistance from the instructor.

ADDITIONAL STUDY:**Airplane Flying Handbook**

[Chapters 2, 3, 6, 8, 9](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapters 6, 8, 9, 14](#)

Airman Certification Standards (ACS)

[Sporty's Private Pilot Airman Certification Standards](#)

Sporty's Learn to Fly Course

Volume 1

[Segments 12-22](#)

Sporty's Learn to Fly Course (cont.)

[Flight Maneuver Guide](#)

[Normal Takeoff and Climb](#)

[Normal Approach and Landing](#)

STAGE I
LESSON 3
DUAL - GROUND
AIRPORTS

DATE _____ GRADE (Circle One) S U I
STUDENT NAME _____ STUDENT SIGNATURE _____
INSTRUCTOR # _____ INSTRUCTOR SIGNATURE _____
DISCUSSION: (1.2) _____
TOTAL IN COURSE: (D/S/G) _____ / _____ / _____

LESSON OBJECTIVE:

During this lesson, the student will be introduced to wind direction indicators, airport operations, runway incursion avoidance, and traffic avoidance.

CONTENT:

Lesson Introduction

- _____ Wind Direction Indicators
- _____ Airport, Runway, and Taxiway Signs
- _____ Airport, Runway, and Taxiway Markings
- _____ Airport, Runway, and Taxiway Lighting
- _____ Radio Calls and Checks
- _____ CTAF
- _____ Obtaining Airport Advisories

Lesson Introduction

- _____ Runway Incursion Avoidance
- _____ Use of Aircraft Lighting during Taxi and
- _____ Traffic Pattern Operations
- _____ Collision Avoidance
- _____ Scanning for Traffic
- _____ Traffic Pattern Operations
- _____ Practice Area Operations

COMPLETION STANDARDS:

At the completion of this lesson, the student will have a knowledge of wind indicators, airport operations, and traffic avoidance.

ADDITIONAL STUDY:

Advisory Circulars

[AC 91-73 Flight School Procedures During Taxi Operations](#)

Airplane Flying Handbook

[Chapters 1, 2, 6, 8, 9](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapter 13](#)

[Chapter 14](#)

Federal Aviation Regulations

[14 CFR Aviation Regulations](#)

Aeronautical Information Manual

[Chapter 2](#)

Sporty's Learn to Fly Course

Volume 1

[Segments 3-20](#)

Volume 2

[Segment 14 - Nontowered Airport Communications](#)

Volume 3

[Segment 15 - Runway Safety](#)

Volume 5

[Segment 7 - Flying to a Towered Airport](#)

Volume 6

[Segment 3 - Class C and B Airport Operations](#)

[Segment 6 - Closer Look: Runway Markings](#)

[Flight Maneuver Guide](#)

[Traffic Pattern Operations - Departure Procedures](#)

[Traffic Pattern Operations - Entry Procedures](#)

STAGE I
LESSON 4
DUAL - GROUND
AERODYNAMICS

DATE _____ GRADE (Circle One) S U I
 STUDENT NAME _____ STUDENT SIGNATURE _____
 INSTRUCTOR # _____ INSTRUCTOR SIGNATURE _____
 DISCUSSION: (1.2) _____

LESSON OBJECTIVE:

During this lesson, the student will be introduced to the four forces of flight, forces occurring on an aircraft not in straight and level flight, and the effects of flaps.

CONTENT:

Lesson Introduction

_____ 4 Forces of Flight
 _____ Airframe Construction (Components)
 _____ Three Axes of Flight
 _____ Forces Acting on a Climbing Airplane
 _____ Angle of Attack

Lesson Introduction

_____ Forces Acting on a Descending Airplane
 _____ Forces Acting on a Turning Airplane
 _____ Effects of Flaps
 _____ Critical Angle of Attack / Stalls
 _____ Spin Awareness

COMPLETION STANDARDS:

At the completion of this lesson, the student will have a knowledge of the four forces of flight, the basic components of aircraft construction, forces acting on aircraft when not in straight and level flight, and the effect of flaps. The student's understanding of spin awareness will include stall awareness, spin entry, spins, and spin recovery techniques

ADDITIONAL STUDY:

Airplane Flying Handbook:

[Chapter 5](#)

Pilots Handbook of Aeronautical Knowledge:

[Chapter 4](#)

[Chapter 5](#)

[Chapter 6](#)

Sporty's Learn to Fly Course

Volume 1

[Segments 21-26](#)

Volume 2

[Segment 5 - Aerodynamics](#)

[Segment 6 - Closer Look: Angle of Attack](#)

STAGE I
LESSON 5
DUAL - LOCAL

DATE _____	ACFT ID _____	GRADE (Circle One) S U I	
STUDENT NAME _____		STUDENT SIGNATURE _____	
INSTRUCTOR # _____		INSTRUCTOR SIGNATURE _____	
FLIGHT TIME: (1.2) _____		DISCUSSION: (0.2) _____	
TOTAL IN COURSE: (D/S/G) ____ / ____ / ____			

LESSON OBJECTIVE:

During this lesson, the student will be introduced to flying the aircraft at various airspeeds and performing imminent stalls and recoveries.

CONTENT:

Lesson Review

- _____ Normal Takeoff & Climb
- _____ Normal Approach & Landing
- _____ Flight Deck Management

Lesson Introduction

- _____ Maneuvering during Slow Flight
- _____ Power-Off Stalls (Imminent)
- _____ Power-On Stalls (Imminent)
- _____ Stall Awareness
- _____ Spin Awareness
- _____ Use of Flaps
- _____ Traffic Pattern Operations
- _____ Practice Area Operations

COMPLETION STANDARDS:

The student should be able to perform slow flight, imminent stalls, and stall recoveries with the instructor's assistance.

ADDITIONAL STUDY:

Airplane Flying Handbook

[Chapters 5, 6, 8, 9](#)

Pilot's Handbook of Aeronautical Knowledge:

[Chapter 5](#)

[Chapter 6](#)

Private Pilot Airman Certification Standards

[Sporty's Private Pilot Airman Certification Standards](#)

Sporty's Learn to Fly Course

Volume 1

[Segments 19-26](#)

Flight Maneuver Guide

[Normal Takeoff and Climb](#)

[Traffic Pattern Operations - Departure Procedures](#)

[Traffic Pattern Operations - Entry Procedures](#)

[Slow Flight - Cruise Configuration](#)

[Slow Flight - Landing Configuration](#)

[Power-On Stalls Imminent and Full - Specified Configuration](#)

[Power-Off Stalls Imminent and Full - Landing Configuration](#)

STAGE I
LESSON 6
DUAL - GROUND
AIRPLANE STABILITY
LOAD FACTORS
WAKE TURBULENCE

DATE _____ GRADE (Circle One) S U I
 STUDENT NAME _____ STUDENT SIGNATURE _____
 INSTRUCTOR # _____ INSTRUCTOR SIGNATURE _____
 DISCUSSION: (1.2) _____

LESSON OBJECTIVE:

During this lesson, the student will be introduced to static and dynamic stability, the dihedral effect, load factors, ground effect, wing tip vortices, and wake turbulence & avoidance procedures.

CONTENT:

Lesson Introduction

_____ Static Stability (Positive / Negative)
 _____ Dynamic Stability (Positive / Negative)
 _____ Dihedral Effect
 _____ Ground Effect

Lesson Introduction

_____ Wing Tip Vortices
 _____ Wake Turbulence & Avoidance
 _____ Load Factor & Gusts

COMPLETION STANDARDS:

At the completion of this lesson, the student will have a knowledge of static and dynamic stability, the dihedral effect, load factors, ground effect, wing tip vortices, and wake turbulence & avoidance procedures.

ADDITIONAL STUDY:

Airplane Flying Handbook

[Chapter 6](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapter 5](#)

[Chapter 6](#)

Aeronautical Information Manual

[Chapter 7](#)

Sporty's Learn to Fly Course

Volume 3

[Segment 21 - Thrust, Stability, & Center of Gravity](#)

STAGE I
LESSON 7
DUAL - LOCAL

DATE _____	ACFT ID _____	GRADE (Circle One) S U I
STUDENT NAME _____		STUDENT SIGNATURE _____
INSTRUCTOR # _____		INSTRUCTOR SIGNATURE _____
FLIGHT TIME: (1.2) _____		DISCUSSION: (0.2) _____
TOTAL IN COURSE: (D/S/G) ____ / ____ / ____		

LESSON OBJECTIVE:

During this lesson, the student will be introduced to constant airspeed climbs and descents and airspeed transitions.

CONTENT:

Lesson Review

- _____ Maneuvering during Slow Flight
- _____ Power-Off Stalls (Imminent)
- _____ Power-On Stalls (Imminent)
- _____ Practice Area Operations
- _____ Flight Deck Management

Lesson Introduction

- _____ Constant Airspeed Climbs
- _____ Constant Airspeed Descents
- _____ Airspeed Transitions
- _____ Climbs to Altitudes
- _____ Descents to Altitudes
- _____ Turns to Headings (Medium Bank)
- _____ Flight at Low Cruise Airspeeds

COMPLETION STANDARDS:

At the completion of this lesson, the student will be able to execute straight and level flight, climbs, descents, and turns without assistance from the flight instructor. The student will hold assigned altitudes ± 150 feet, heading $\pm 20^\circ$, and airspeeds ± 15 knots. Slow flight will be performed at an airspeed at which any further increase in angle of attack, increase in load factor, or reduction in power, would result in a stall warning (e.g., aircraft buffet, stall horn, etc.) and will be maintained $+20$, -0 knots. Stalls will be performed in both straight and level and turning flight. The student will have an awareness of the need for proper aircraft trimming during airspeed transitions.

ADDITIONAL STUDY:

Airplane Flying Handbook

[Chapter 5](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapter 5](#)

[Chapter 6](#)

[Chapter 11](#)

Sporty's Learn to Fly Course

Volume 1

[Segment 24 - Four Fundamentals \(Part 2\)](#)

[Segment 25 - Air Facts: The Proper Attitude](#)

[Segment 26 - Conclusion](#)

Volume 2

[Segments 1-7](#)

Flight Maneuver Guide

[Slow Flight - Cruise Configuration](#)

[Slow Flight - Landing Configuration](#)

[Power-On Stalls Imminent and Full - Specified Configuration](#)

[Power-Off Stalls Imminent and Full - Landing Configuration](#)

STAGE I
LESSON 8
DUAL - GROUND
AIRCRAFT
PERFORMANCE

DATE _____ GRADE (Circle One) S U I
 STUDENT NAME _____ STUDENT SIGNATURE _____
 INSTRUCTOR # _____ INSTRUCTOR SIGNATURE _____
 DISCUSSION: (1.2) _____

LESSON OBJECTIVE:

During this lesson, the student will be introduced to the takeoff data card, factors that affect performance, airplane weight and balance, basic performance charts, and wind calculations.

CONTENT:

Lesson Introduction

_____ Factors Affecting Performance
 _____ Takeoff Data Card
 _____ Airplane Weight and Balance

Lesson Introduction

_____ Basic Performance Charts
 _____ Headwind / Crosswind Calculations

COMPLETION STANDARDS:

At the completion of this lesson, the student will have a knowledge of the takeoff data card, factors that affect performance, how to calculate and interpret an airplane weight and balance, how to use basic performance charts, and how to do headwind / crosswind calculations.

ADDITIONAL STUDY:

Airplane Flying Handbook

[Chapter 3](#)
[Chapter 6](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapter 4](#)
[Chapter 5](#)
[Chapter 10](#)
[Chapter 11](#)

Airplane Flight Manual / Pilot Operating Handbook

Sporty's Learn to Fly Course

Volume 3
[Segments 10, 19-21](#)

Volume 5
[Segment 5 - Performance Charts](#)

Volume 6
[Segment 7 - Weight and Balance](#)

STAGE I
LESSON 9
DUAL - LOCAL

DATE _____	ACFT ID _____	GRADE (Circle One) S U I
STUDENT NAME _____		STUDENT SIGNATURE _____
INSTRUCTOR # _____		INSTRUCTOR SIGNATURE _____
FLIGHT TIME: (1.2) _____		DISCUSSION: (0.2) _____
TOTAL IN COURSE: (D/S/G) _____ / _____ / _____		

LESSON OBJECTIVE:

During this lesson, the student will be introduced to power-off and power-on full stalls as well as steep turns.

CONTENT:

Lesson Review

- _____ Constant Airspeed Climbs
- _____ Constant Airspeed Descents
- _____ Stall Awareness
- _____ Spin Awareness

Lesson Introduction

- _____ Power-Off Stalls (Full) w/ & w/o Flaps
- _____ Power-On Stalls (Full) w/o Flaps
- _____ Steep Turns

COMPLETION STANDARDS

The student will perform power-off and power-on full stalls and recoveries, as well as steep turns with minimal instructor assistance. The student shall maintain the assigned heading $\pm 15^\circ$ and the required airspeed ± 10 knots during the constant airspeed climbs and descents.

ADDITIONAL STUDY:

Airplane Flying Handbook

[Chapter 5](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapter 5](#)

Airman Certification Standards (ACS)

[Sporty's Private Pilot Airman Certification Standards](#)

Sporty's Learn to Fly Course

[Volume 1: Review segments as needed](#)

Volume 2

[Segments 7-10](#)

Volume 3

[Segment 3 - Steep Turns](#)

Flight Maneuver Guide

[Power-On Stalls Imminent and Full - Cruise Configuration](#)
[Power-On Stalls Imminent and Full - Specified Configuration](#)
[Power-Off Stalls Imminent and Full - Cruise Configuration](#)
[Power-Off Stalls Imminent and Full - Landing Configuration](#)
[Steep Turns](#)

STAGE I
LESSON 10
DUAL - GROUND
WEATHER

DATE _____ GRADE (Circle One) S U I
 STUDENT NAME _____ STUDENT SIGNATURE _____
 INSTRUCTOR # _____ INSTRUCTOR SIGNATURE _____
 DISCUSSION: (1.2) _____

LESSON OBJECTIVE:

During this lesson, the student will be introduced to the atmosphere and factors influencing aviation weather.

CONTENT:

Lesson Introduction

_____ The Atmosphere
 _____ Pressure
 _____ Wind
 _____ Moisture
 _____ Humidity
 _____ Stability

Lesson Introduction

_____ Clouds
 _____ Air Masses
 _____ Fronts
 _____ Frontal Weather
 _____ Thunderstorms
 _____ Other Hazardous Weather Conditions

COMPLETION STANDARDS:

At the completion of this lesson, the student will have a knowledge of basic atmospheric processes.

ADDITIONAL STUDY:

Aviation Weather Handbook

[Chapters 4-14, 18-20, 22](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapter 4](#)

[Chapter 12](#)

Sporty's Learn to Fly Course

Volume 3

[Segments 7, 8, 17, 18](#)

Volume 4

[Segment 16 - Weather Forecasts and PIREPs](#)

Volume 5

[Segment 11 - Cloud Formations](#)

[Segment 12 - Atmospheric Stability](#)

STAGE I
LESSON 11
DUAL - LOCAL

DATE _____	ACFT ID _____	GRADE (Circle One) S U I	
STUDENT NAME _____		STUDENT SIGNATURE _____	
INSTRUCTOR # _____		INSTRUCTOR SIGNATURE _____	
FLIGHT TIME: (1.2) _____		DISCUSSION: (0.2) _____	
TOTAL IN COURSE: (D/S/G) _____ / _____ / _____			

LESSON OBJECTIVE:

During this lesson, the student will be introduced to constant rate climbs and descents.

CONTENT:

Lesson Review

- _____ Maneuvering during Slow Flight
- _____ Normal Takeoffs & Landings
- _____ Steep Turns
- _____ Power-Off Stalls (Full)
- _____ Power-On Stalls (Full)

Lesson Introduction

- _____ Constant Rate Climbs
- _____ Constant Rate Descents

COMPLETION STANDARDS:

The student will perform constant rate climbs and descents with minimal assistance from the instructor. Slow flight will be performed at an airspeed at which any further increase in angle of attack, increase in load factor, or reduction in power, would result in a stall warning, and will be maintained +20, -0 knots. Stalls will be performed in both straight and level and turning flight.

ADDITIONAL STUDY:

Airplane Flying Handbook

[Chapter 5](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapter 5](#)

Airman Certification Standards (ACS)

[Sporty's Private Pilot Airman Certification Standards](#)

Sporty's Learn to Fly Course

Volume 1

[Segment 19 - Takeoff](#)

[\(review other segments as needed\)](#)

Volume 2

[Segments 1-11](#)

Volume 3

[Segment 3 - Steep Turns](#)

Flight Maneuver Guide

[Normal Takeoff and Climb](#)

[Normal Approach and Landing](#)

[Slow Flight - Cruise Configuration](#)

[Slow Flight - Landing Configuration](#)

[Power-On Stalls Imminent and Full - Cruise Configuration](#)

[Power-On Stalls Imminent and Full - Specified](#)

[Configuration](#)

[Power-Off Stalls Imminent and Full - Cruise Configuration](#)

[Power-Off Stalls Imminent and Full - Landing Configuration](#)

[Steep Turns](#)

STAGE I
LESSON 12
DUAL - GROUND
WEATHER REPORTS
& FORECASTS

DATE _____ GRADE (Circle One) S U I
 STUDENT NAME _____ STUDENT SIGNATURE _____
 INSTRUCTOR # _____ INSTRUCTOR SIGNATURE _____
 DISCUSSION: (1.2) _____

LESSON OBJECTIVE:

During this lesson, the student will be introduced to aviation weather charts and reports, and how to obtain a weather briefing.

CONTENT:

Lesson Introduction

_____ Surface Analysis Charts
 _____ Low-Level Prognostic Charts
 _____ Graphical Forecasts for Aviation
 _____ TAFs
 _____ METARs

Lesson Introduction

_____ Winds and Temperatures Aloft
 _____ Pilot Reports
 _____ Obtaining a Weather Briefing FSS / Online
 _____ Standard / Abbreviated / Outlook Briefings
 _____ AWOS / ASOS Reports

COMPLETION STANDARDS:

At the completion of this lesson, the student will have a knowledge of aviation weather charts and reports, and the proper way to obtain a weather briefing.

ADDITIONAL STUDY:

Pilot's Handbook of Aeronautical Knowledge

[Chapter 13](#)

Aviation Weather Handbook

[Chapters 3, 24-25, 27-28](#)

Sporty's Learn to Fly Course Videos:

[Volume 3](#)

[Segments 11-13, 22, 23](#)

[Volume 4](#)

[Segment 18 - Weather Forecasts and PIREPS](#)

[Volume 5](#)

[Segment 14 - Winds Aloft, AIRMETs and SIGMETs](#)

[Segment 19 - Closer Look: ASOS Behind the Scenes](#)

[Segment 21 - ForeFlight Weather Imagery](#)

STAGE I
LESSON 13
DUAL - LOCAL

DATE _____	ACFT ID _____	GRADE (Circle One) S U I
STUDENT NAME _____		STUDENT SIGNATURE _____
INSTRUCTOR # _____		INSTRUCTOR SIGNATURE _____
FLIGHT TIME: (1.2) _____		DISCUSSION: (0.2) _____
TOTAL IN COURSE: (D/S/G) ____ / ____ / ____		

LESSON OBJECTIVE:

During this lesson, the student will be introduced to ground reference maneuvers.

CONTENT:

Lesson Review

- _____ Traffic Pattern Operations
- _____ Normal Takeoffs & Landings

Lesson Introduction

- _____ Runway Incursion Avoidance
- _____ Wind Effect on Ground Track
- _____ Rectangular Course
- _____ S-Turns (across a Road)
- _____ Turns around a Point

COMPLETION STANDARDS:

The student will be able to fly specific ground tracks while maintaining airspeed ± 10 knots and altitude ± 150 feet. Airspeed will be maintained at $V_y +15$, -10 knots during the climb after a normal takeoff. Recommended approach airspeed will be maintained $+10$, -5 knots and the touchdown will be beyond and within 750 feet of a designated point of landing.

ADDITIONAL STUDY:

Airplane Flying Handbook

[Airplane Flying Handbook - Chapters 1, 6-9](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapter 14](#)

Private Pilot Airman Certification Standards

[Private Pilot Airman Certification Standards](#)

Sporty's Learn to Fly Course

Volume 2

[Segment 1 - Ground Reference Maneuvers](#)

[Review Segments As Needed](#)

Volume 3

[Segment 1 - Pre-Solo Maneuvers](#)

Flight Maneuver Guide

[Normal Takeoff and Climb](#)

[Normal Approach and Landing](#)

[Traffic Pattern Operations - Departure Procedures](#)

[Traffic Pattern Operations - Entry Procedures](#)

[Rectangular Course](#)

[Turns Around a Point](#)

[S-Turns Across a Road](#)

STAGE I
LESSON 14
DUAL - GROUND
WEATHER REPORTS
& FORECASTS

DATE _____ GRADE (Circle One) S U I
 STUDENT NAME _____ STUDENT SIGNATURE _____
 INSTRUCTOR # _____ INSTRUCTOR SIGNATURE _____
 DISCUSSION: (1.2) _____

LESSON OBJECTIVE:

During this lesson, the student will be introduced to radar reports, severe weather reports and forecasts, NOTAMs, AIRMETs, and SIGMETs. The student will also be introduced to proper decision making relative to obtaining and analyzing weather data.

CONTENT:

Lesson Introduction

_____ Radar Wx Reports
 _____ Severe Wx Reports and Forecasts
 _____ AIRMETs
 _____ SIGMETs / Convective SIGMETs
 _____ NOTAMs

Lesson Introduction

_____ Wind Shear Reports
 _____ Wind Shear Recognition and Avoidance
 _____ Weather Related Aeronautical Decision
 Making & Judgment

COMPLETION STANDARDS:

At the completion of this lesson, the student will have a knowledge of radar weather reports, severe weather reports and forecasts, NOTAMs, AIRMETs, and SIGMETs, and be able to make an appropriate decision regarding a flight based upon the relevant weather data.

ADDITIONAL STUDY:

Pilot's Handbook of Aeronautical Knowledge

[Chapter 13](#)

Aviation Weather Handbook

[Chapters 24, 26-27](#)

Aeronautical Information Manual

[Chapter 7](#)

Sporty's Learn to Fly Course

Volume 3

[Segment 17 - Thunderstorms and Convective Forecasts](#)

[Segment 18 - Radar Imagery](#)

Volume 4

[Segment 18 - Weather Forecasts and PIREPs](#)

Volume 5

[Segment 12 - Atmospheric Stability](#)

[Segment 14 - Winds Aloft, Airmets and Sigmet](#)

[Segment 21 - ForeFlight Weather Imagery](#)

STAGE I
LESSON 15
DUAL - LOCAL

DATE _____	ACFT ID _____	GRADE (Circle One) S U I	
STUDENT NAME _____		STUDENT SIGNATURE _____	
INSTRUCTOR # _____		INSTRUCTOR SIGNATURE _____	
FLIGHT TIME: (1.2) _____		DISCUSSION: (0.2) _____	
TOTAL IN COURSE: (D/S/G) ____ / ____ / ____			

LESSON OBJECTIVE:

During this lesson, the student will review ground reference maneuvers, maneuvering during slow flight, stalls, and steep turns.

CONTENT:

Lesson Review

- _____ Rectangular Course
- _____ S-Turns
- _____ Turns around a Point
- _____ Maneuvering during Slow Flight
- _____ Power-On & Power-Off Stalls

Lesson Review

- _____ Steep Turns
- _____ Traffic Pattern Operations
- _____ Runway Incursion Avoidance
- _____ Normal Takeoffs & Landings

COMPLETION STANDARDS:

The student will be able to fly specific ground tracks while maintaining airspeed ± 10 knots and altitude ± 150 feet. The student will be able to perform slow flight, stalls, constant altitude turns, and normal and crosswind takeoffs and landings without instructor assistance. Slow flight will be performed at an airspeed at which any further increase in angle of attack, increase in load factor, or reduction in power, would result in a stall warning, and will be maintained $+20$, -0 knots. Stalls will be performed in both straight and level and turning flight. Steep turns will be performed at 45° of bank $\pm 5^\circ$, while maintaining altitude ± 200 feet and with the roll out on the assigned heading $\pm 15^\circ$. Airspeed will be maintained at $V_y + 15$, -10 knots during the climb after a normal takeoff. Recommended approach airspeed will be maintained $+10$, -5 knots and the touchdown will be beyond and within 750 feet of a designated point of landing.

ADDITIONAL STUDY:

Airplane Flying Handbook

[Chapter 7](#)
[Chapter 8](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapter 14](#)

Private Pilot Airman Certification Standards

[Private Pilot Airman Certification Standards](#)

Sporty's Learn to Fly Course

[Volume 2: Review Segments as Needed](#)

Volume 3

[Segment 3 - Steep Turns](#)

[Segment 15 - Runway Safety](#)

Flight Maneuver Guide

[Rectangular Course](#)

[Turns Around a Point](#)

[S-Turns](#)

[Steep Turns](#)

[Slow Flight - Cruise Configuration](#)

[Slow Flight - Landing Configuration](#)

[Power-On Stalls Imminent and Full - Cruise Configuration](#)

[Power-On Stalls Imminent and Full - Specified](#)

[Configuration](#)

[Power-Off Stalls Imminent and Full - Cruise Configuration](#)

[Power-Off Stalls Imminent and Full - Landing Configuration](#)

[Normal Takeoff and Climb](#)

[Normal Approach and Landing](#)

**STAGE I
LESSON 16
DUAL - GROUND
EMERGENCIES**

DATE _____	GRADE (Circle One) S U I
STUDENT NAME _____	STUDENT SIGNATURE _____
INSTRUCTOR # _____	INSTRUCTOR SIGNATURE _____
DISCUSSION: (1.2) _____	
TOTAL IN COURSE: (D/S/G) ____ / ____ / ____	

LESSON OBJECTIVE:

During this lesson, the student will be introduced to emergency procedures.

CONTENT:**Lesson Introduction**

_____ Emergency Procedures (AFM/POH)

COMPLETION STANDARDS:

At the completion of this lesson, the student will have a knowledge of the emergency procedures listed in the appropriate AFM/POH.

ADDITIONAL STUDY:**Airplane Flying Handbook**

[Chapter 18](#)

Airplane Flight Manual / Pilot Operating Handbook**Federal Aviation Regulations**

[14 CFR Aviation Regulations](#)

Aeronautical Information Manual

[Chapter 6](#)

Sporty's Learn to Fly Course

Volume 3

[Segment 5 - Emergencies](#)

[Segment 6 - Air Facts: Emergencies](#)

Flight Maneuver Guide

[Rejected Takeoff](#)

[Emergency Approach and Landing](#)

STAGE I
LESSON 17
DUAL - LOCAL

DATE _____	ACFT ID _____	GRADE (Circle One) S U I	
STUDENT NAME _____		STUDENT SIGNATURE _____	
INSTRUCTOR # _____		INSTRUCTOR SIGNATURE _____	
FLIGHT TIME: (1.2) _____		DISCUSSION: (0.2) _____	
TOTAL IN COURSE: (D/S/G) ____ / ____ / ____			

LESSON OBJECTIVE:

During this lesson, the student will be introduced to rejected takeoffs and go-around procedures.

CONTENT:

Lesson Review

- _____ Runway Incursion Avoidance
- _____ Traffic Pattern Operations
- _____ Normal Takeoff & Climb
- _____ Normal Approach & Landing

Lesson Introduction

- _____ Wake Turbulence Avoidance
- _____ Systems & Equipment Malfunctions
- _____ Rejected Takeoffs
- _____ Go-Around / Rejected Landing
- _____ Emergency Approach & Landing

COMPLETION STANDARDS:

The student will be familiar with the procedures used during system & equipment malfunctions, wake turbulence avoidance, rejected takeoffs, go-arounds, and emergency approaches and landings. The student will be able to perform rejected takeoffs and go-arounds with the instructor's assistance. Airspeed will be maintained at $V_y + 15$, -5 knots during the climb after a normal takeoff. Recommended approach airspeed will be maintained +10, -5 knots and the touchdown will be beyond and within 750 feet of a designated point of landing.

ADDITIONAL STUDY:

Airplane Flying Handbook

[Airplane Flying Handbook - Chapters 1, 6, 9, 18](#)

Pilot's Handbook of Aeronautical Knowledge

[Pilot's Handbook of Aeronautical Knowledge - Chapters 2, 5, 14](#)

Aeronautical Information Manual

[Chapter 7](#)

Private Pilot Airman Certification Standards

[Private Pilot Airman Certification Standards](#)

Sporty's Learn to Fly Course

Volume 2

[Volume 2: Segments 11-15](#)

Volume 3

[Segment 4 - Closer Look: Touch and Go](#)

[Segment 15 - Runway Safety](#)

Flight Maneuver Guide

[Normal Takeoff and Climb](#)

[Normal Approach and Landing](#)

[Rejected Takeoff](#)

[Go-Around](#)

[Emergency Approach and Landing](#)

[Rectangular Course](#)

STAGE I
LESSON 18
DUAL - GROUND
FAR / AIM
NTSB 830 / ACS
LOGBOOKS

DATE _____ GRADE (Circle One) S U I
 STUDENT NAME _____ STUDENT SIGNATURE _____
 INSTRUCTOR # _____ INSTRUCTOR SIGNATURE _____
 DISCUSSION: (1.2) _____

LESSON OBJECTIVE:

During this lesson, the student will be introduced to single-pilot resource management, proper decision-making, FARs, NTSB 830, the use of the AIM, pilot and aircraft logbooks, and other publications.

CONTENT:

Lesson Introduction

_____ 14 CFR Part 1
 _____ 14 CFR Part 61 Pvt/Student Limitations
 _____ 14 CFR Part 67
 _____ 14 CFR Part 91
 _____ 14 CFR Part 141
 _____ NTSB 830
 _____ AIM
 _____ Pilot Logbooks / Aircraft Logbooks
 _____ Airman Certification Standards

Lesson Introduction

_____ FAA Advisory Circulars
 _____ Single-Pilot Resource Management
 _____ Aeronautical Decision Making & Judgment
 _____ Risk Management
 _____ Task Management
 _____ Situational Awareness
 _____ Controlled Flight into Terrain Awareness
 _____ Automation Management

COMPLETION STANDARDS:

At the completion of this lesson, the student will have a knowledge of single-pilot resource management, proper decision making, FARs applicable to student and private pilots in a 61 or 141 program, NTSB 830, the use of the AIM, pilot and aircraft logbooks, and other publications.

ADDITIONAL STUDY:

Airplane Flying Handbook

[Chapter 2](#)
[Chapter 5](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapter 2](#)

Federal Aviation Regulations

[14 CFR Aviation Regulations](#)

Aeronautical Information Manual

[Intro](#)

Private Pilot Airman Certification Standards

[Private Pilot Airman Certification Standards](#)

Sporty's Learn to Fly Course

Volume 1

[Segment 1 - Intro/The Flight](#)

[Segment 2 - When Should You Fly?](#)

Volume 3

[Segment 24 - Federal Aviation Regulations \(FARs\)](#)

[Segment 25 - Air Facts: Eye to the Sky](#)

Volume 4

[Segment 3 - Publications and Charts](#)

Volume 5

[Segment 10 - Federal Aviation Regulations](#)

Volume 6

[Segment 1 - Rules to Fly By](#)

STAGE I
LESSON 19
DUAL - LOCAL

DATE _____	ACFT ID _____	GRADE (Circle One) S U I
STUDENT NAME _____		STUDENT SIGNATURE _____
INSTRUCTOR # _____		INSTRUCTOR SIGNATURE _____
FLIGHT TIME: (1.2) _____		DISCUSSION: (0.2) _____
TOTAL IN COURSE: (D/S/G) _____ / _____ / _____		

LESSON OBJECTIVE:

The student will be introduced to slips and crosswind takeoffs and landings. The effect of wind on ground track will be reviewed.

CONTENT:

Lesson Review

- _____ Normal Takeoffs & Landings
- _____ Rejected Takeoff
- _____ Go-Around / Rejected Landing
- _____ Traffic Pattern Operations
- _____ Wind Effect on Ground Track

Lesson Introduction

- _____ Aeronautical Decision Making & Judgment
- _____ Crosswind Takeoff & Climb
- _____ Side Slip
- _____ Forward Slip
- _____ Side Slip to a Landing
- _____ Crosswind Approach & Landing
- _____ Forward Slip to a Landing
- _____ No Flap Landing

COMPLETION STANDARDS:

The student will be able to perform slips, crosswind takeoffs and landings, and correct for wind effects with minimal instructor assistance. Airspeed will be maintained at $V_y + 15$, -5 knots during the climb after a normal takeoff or go-around. Recommended approach airspeed will be maintained +10, -5 knots and the touchdown will be beyond and within 750 feet of a designated point of landing.

ADDITIONAL STUDY:

Airplane Flying Handbook

[Chapter 6](#)
[Chapter 8](#)
[Chapter 9](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapter 2](#)

Private Pilot Airman Certification Standards

[Private Pilot Airman Certification Standards](#)

Volume 2

[Segment 13 - Takeoff and Landing Variations](#)

Volume 3

[Segments 1-4](#)

Flight Maneuver Guide

[Normal Takeoff and Climb](#)
[Normal Approach and Landing](#)
[Rejected Takeoff](#)
[Go-Around](#)
[Traffic Pattern Operations - Departure Procedures](#)
[Traffic Pattern Operations - Entry Procedures](#)
[Crosswind Takeoff and Climb](#)
[Crosswind Approach and Landing](#)
[Forward Slip to a Landing](#)

STAGE I
LESSON 20
DUAL - GROUND
AIRCRAFT SYSTEMS

DATE _____ GRADE (Circle One) S U I
 STUDENT NAME _____ STUDENT SIGNATURE _____
 INSTRUCTOR # _____ INSTRUCTOR SIGNATURE _____
 DISCUSSION: (1.2) _____

LESSON OBJECTIVE:

During this lesson, the student will be introduced to fuel, electrical, environmental, and wing flap systems.

CONTENT:

Lesson Introduction

_____ Fuel System
 _____ Electrical System
 _____ Environmental System

Lesson Introduction

_____ Primary Flight Controls & Trim Systems
 _____ Leading Edge Devices & Spoilers
 _____ Wing Flap System

COMPLETION STANDARDS:

At the completion of this lesson, the student will have a knowledge of fuel, electrical, environmental, and wing flap systems.

ADDITIONAL STUDY:

Pilot's Handbook of Aeronautical Knowledge

[Chapter 11](#)

[Chapter 14](#)

Airplane Flight Manual / Pilot Operating Handbook

Unique to your airplane

Sporty's Learn to Fly Course

Volume 1

[Segment 4 - Introduction to the Airplane](#)

[Segment 10 - Propeller, Fuel, and Electrical System](#)

Volume 3

[Segment 26 - Student Pilot & Medical Certificate](#)

STAGE I
LESSON 21
DUAL - LOCAL

DATE _____	ACFT ID _____	GRADE (Circle One) S U I	
STUDENT NAME _____		STUDENT SIGNATURE _____	
INSTRUCTOR # _____		INSTRUCTOR SIGNATURE _____	
FLIGHT TIME: (1.2) _____		DISCUSSION: (0.2) _____	
TOTAL IN COURSE: (D/S/G) ____ / ____ / ____			

LESSON OBJECTIVE:

During this lesson, slow flight, stalls, and normal and crosswind takeoffs and landings will be reviewed.

CONTENT:

Lesson Review

_____ Maneuvering during Slow Flight
 _____ Power-Off Stalls
 _____ Power-On Stalls

Lesson Review

_____ Traffic Pattern Operations
 _____ Normal Takeoffs & Landings
 _____ Crosswind Takeoffs & Landings

COMPLETION STANDARDS:

The student will be able to perform slow flight, stalls, stall recoveries, and crosswind takeoffs and landings with minimal assistance from the instructor. Slow flight will be performed at an airspeed at which any further increase in angle of attack, increase in load factor, or reduction in power, would result in a stall warning, and will be maintained +15, -0 knots. Stalls will be performed in both straight and level and turning flight. Airspeed will be maintained at $V_Y + 15$, -5 knots during the climb after a normal takeoff. Recommended approach airspeed will be maintained +10, -5 knots and the touchdown will be beyond and within 750 feet of a designated point of landing.

ADDITIONAL STUDY:

Airplane Flying Handbook

[Chapter 5](#)
[Chapter 6](#)
[Chapter 9](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapter 5](#)
[Chapter 14](#)

Aeronautical Information Manual

[Chapter 4](#)

Private Pilot Airman Certification Standards

[Private Pilot Airman Certification Standards](#)

Sporty's Learn to Fly Course

Volume 1
[Review Segments As Needed](#)

Volume 2
[Review Segments As Needed](#)

Flight Maneuver Guide

[Slow Flight - Cruise Configuration](#)
[Slow Flight - Landing Configuration](#)
[Power-On Stalls Imminent and Full - Cruise Configuration](#)
[Power-On Stalls Imminent and Full - Specified Configuration](#)
[Power-Off Stalls Imminent and Full - Cruise Configuration](#)
[Power-Off Stalls Imminent and Full - Landing Configuration](#)
[Traffic Pattern Operations - Departure Procedures](#)
[Traffic Pattern Operations - Entry Procedures](#)
[Normal Takeoff and Climb](#)
[Normal Approach and Landing](#)
[Crosswind Approach and Landing](#)

STAGE I
LESSON 22
DUAL - GROUND
AIRCRAFT SYSTEMS

DATE _____ GRADE (Circle One) S U I
 STUDENT NAME _____ STUDENT SIGNATURE _____
 INSTRUCTOR # _____ INSTRUCTOR SIGNATURE _____
 DISCUSSION: (1.2) _____

LESSON OBJECTIVE:

During this lesson, the student will be introduced to additional aircraft systems, the aircraft equipment list, and dealing with inoperative equipment.

CONTENT:

Lesson Introduction

_____ Powerplant
 _____ Oil System
 _____ Ignition System
 _____ Carburetor Heat / Air Induction System
 _____ Propeller

Lesson Introduction

_____ Hydraulic System
 _____ Landing Gear System
 _____ Aircraft Equipment List
 _____ VFR Required Equipment
 _____ Inoperative Equipment

COMPLETION STANDARDS:

At the completion of this lesson, the student will have a knowledge of aircraft systems, the aircraft equipment list, and dealing with inoperative equipment.

ADDITIONAL STUDY:

Pilot's Handbook of Aeronautical Knowledge

[Chapter 3](#)

[Chapter 7](#)

Airplane Flight Manual / Pilot Operating Handbook

Unique to your airplane

Federal Aviation Regulations

[14 CFR Aviation Regulations](#)

Sporty's Learn to Fly Course

Volume 1

[Segment 8 - Introduction to Airplane Engines](#)

[Segment 9 - Air Facts: Engine TLC](#)

Volume 2

[Segment 3 - Engines](#)

[Segment 4 - Air Facts: Engine Suspicion](#)

Volume 6

[Segment 13 - High Performance and Complex Airplane](#)

STAGE I
LESSON 23
DUAL - LOCAL

DATE _____	ACFT ID _____	GRADE (Circle One) S U I	
STUDENT NAME _____		STUDENT SIGNATURE _____	
INSTRUCTOR # _____		INSTRUCTOR SIGNATURE _____	
FLIGHT TIME: (1.2) _____		DISCUSSION: (0.2) _____	
TOTAL IN COURSE: (D/S/G) ____ / ____ / ____			

LESSON OBJECTIVE:

During this lesson, the instructor will review takeoffs and landings in preparation for solo flight.

CONTENT:

Lesson Review

- _____ Runway Incursion Avoidance
- _____ Crosswind Takeoff & Climb
- _____ Normal Takeoff & Climb
- _____ Traffic Pattern Operations
- _____ Engine Starting
- _____ Radio Communications
- _____ Taxiing
- _____ Before Takeoff Check

Lesson Review

- _____ Normal Approach & Landing
- _____ Side Slip to a Landing
- _____ Crosswind Approach & Landing
- _____ Forward Slip to a Landing
- _____ No Flap Landing
- _____ Go-Around / Rejected Landing
- _____ After Landing Checks
- _____ Parking, Securing, & Proper Tie Down

COMPLETION STANDARDS:

Takeoffs, landings, and go-arounds should be performed without instructor assistance. Airspeed will be maintained at $V_y +15$, -5 knots during the climb after a normal takeoff. Recommended approach airspeed will be maintained +10, -5 knots and the touchdown will be beyond and within 750 feet of a designated point of landing.

ADDITIONAL STUDY:

Airplane Flying Handbook

[Airplane Flying Handbook - Chapters 2, 6, 8, 9](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapter 14](#)

Aeronautical Information Manual

[Chapter 4](#)

Private Pilot Airman Certification Standards

[Private Pilot Airman Certification Standards](#)

Sporty's Learn to Fly Course

Volume 1

[Review Segments As Needed](#)

Volume 2

[Review Segments As Needed](#)

Volume 3

[Review Segments As Needed](#)

Flight Maneuver Guide

[Slow Flight - Cruise Configuration](#)
[Slow Flight - Landing Configuration](#)
[Power-On Stalls Imminent and Full - Cruise Configuration](#)
[Power-On Stalls Imminent and Full - Specified Configuration](#)
[Power-Off Stalls Imminent and Full - Cruise Configuration](#)
[Power-Off Stalls Imminent and Full - Landing Configuration](#)
[Traffic Pattern Operations - Departure Procedures](#)
[Traffic Pattern Operations - Entry Procedures](#)
[Normal Takeoff and Climb](#)
[Normal Approach and Landing](#)
[Crosswind Approach and Landing](#)
[Go-Around](#)
[Forward Slip to a Landing](#)
[Rejected Takeoff](#)

STAGE I
LESSON 24
DUAL - GROUND
AIRCRAFT SYSTEMS
MAINTENANCE

DATE _____ GRADE (Circle One) S U I
 STUDENT NAME _____ STUDENT SIGNATURE _____
 INSTRUCTOR # _____ INSTRUCTOR SIGNATURE _____
 DISCUSSION: (1.2) _____

LESSON OBJECTIVE:

During this lesson, the student will be introduced to aircraft flight instruments and systems, and aircraft maintenance requirements.

CONTENT:

Lesson Introduction

_____ Vacuum System
 _____ Gyroscopic Instruments
 _____ Pitot-Static System
 _____ Pitot-Static Instruments
 _____ Electric Instruments

Lesson Introduction

_____ Avionics Systems
 _____ Deicing and Anti-icing Systems
 _____ Magnetic Compass and Associated Errors
 _____ Maintenance Requirements
 _____ Service Bulletins / Airworthiness Directives

COMPLETION STANDARDS:

At the completion of this lesson, the student will have a knowledge of the aircraft flight instruments and systems, and aircraft maintenance requirements.

ADDITIONAL STUDY:

Pilot's Handbook of Aeronautical Knowledge

[Chapter 7](#)

[Chapter 8](#)

Airplane Flight Manual / Pilot Operating Handbook

Unique to your airplane

Sporty's Learn to Fly Course

Volume 1

[Segment 6 - Introduction to the Cockpit](#)

Volume 3

[Segment 9 - The Pitot Static System](#)

[Segment 14 - Intro to Glass Cockpit Systems](#)

Volume 5

[Segment 3 - Magnetic Compass](#)

STAGE I
LESSON 25
DUAL - LOCAL

DATE _____	ACFT ID _____	GRADE (Circle One) S U I	
STUDENT NAME _____		STUDENT SIGNATURE _____	
INSTRUCTOR # _____		INSTRUCTOR SIGNATURE _____	
FLIGHT TIME: (1.2) _____		DISCUSSION: (0.5) _____	
TOTAL IN COURSE: (D/S/G) _____ / _____ / _____			

LESSON OBJECTIVE:

Prior to this flight, the instructor will administer and grade a presolo written exam. **Prior to the flight**, the instructor will review all incorrect answers with the student. During this lesson, the student will review correct operating procedures prior to the stage check.

CONTENT:
Lesson Review

- _____ Engine Starting
- _____ Radio Communications
- _____ Taxiing
- _____ Before Takeoff Check
- _____ Runway Incursion Avoidance
- _____ Normal and/or Crosswind Takeoff & Climb
- _____ Traffic Pattern Operations
- _____ Side Slip to a Landing
- _____ Forward Slip to a Landing
- _____ Go-Around / Rejected Landing
- _____ Emergency Approach & Landing
- _____ Maneuvering during Slow Flight

Lesson Review

- _____ Straight and Level Flight
- _____ Turns to Headings
- _____ Constant Airspeed Climbs
- _____ Constant Airspeed Descents
- _____ Steep Turns
- _____ Systems and Equipment Malfunctions
- _____ Normal and/or Crosswind Approach & Landing
- _____ Power-Off Stalls
- _____ Power-On Stalls
- _____ Aeronautical Decision Making & Judgment
- _____ Practice Area Operations

COMPLETION STANDARDS:

This lesson is complete when the student satisfactorily completes a presolo written exam and the student demonstrates correct procedures for preflight duties and all other tasks to a level that allows the safe conduct of solo flight in the local area. The student shall maintain or level-off at assigned altitude ± 150 feet, maintain or roll out on headings $\pm 15^\circ$, and maintain airspeed ± 10 knots while performing climbs, descents, turns, straight and level, and traffic pattern operations unless otherwise specified. Slow flight will be performed at an airspeed at which any further increase in angle of attack, increase in load factor, or reduction in power, would result in a stall warning, and will be maintained $+15$, -0 knots. Stalls will be performed in both straight and level and turning flight. Steep turns will be performed at 45° of bank $\pm 5^\circ$, while maintaining altitude ± 150 feet and with the roll out on the assigned heading $\pm 10^\circ$. Airspeed will be maintained at $V_y + 10$, -5 knots during the climb after takeoff. Recommended approach airspeed will be maintained $+10$, -5 knots and the touchdown will be beyond and within 500 feet of a designated point of landing.

ADDITIONAL STUDY:
Airplane Flying Handbook

[Airplane Flying Handbook - Chapters 2, 5, 6, 9](#)

Pilot's Handbook of Aeronautical Knowledge

[Pilot's Handbook of Aeronautical Knowledge - Chapters 2, 5, 14](#)

Aeronautical Information Manual

[Chapter 4](#)

Private Pilot Airman Certification Standards

[Private Pilot Airman Certification Standards](#)

Sporty's Learn to Fly Course

Volume 1

[Review Segments As Needed](#)

Volume 2

[Review Segments As Needed](#)

Volume 3

[Segments 26-28, Review Segments As Needed](#)

[Flight Maneuver Guide - Review As Needed](#)

STAGE I
LESSON 26
DUAL - GROUND
AIRSPACE

DATE _____ GRADE (Circle One) S U I
STUDENT NAME _____ STUDENT SIGNATURE _____
INSTRUCTOR # _____ INSTRUCTOR SIGNATURE _____
DISCUSSION: (1.2) _____

LESSON OBJECTIVE:

During this lesson, the student will be introduced to controlled and uncontrolled airspace, the classes of airspace, special use airspace, and cloud clearances.

CONTENT:**Lesson Introduction**

_____ Uncontrolled Airspace
_____ Controlled Airspace
_____ Class A
_____ Class B
_____ Class C
_____ Class D

Lesson Introduction

_____ Class E
_____ Class G
_____ Special Use Airspace
_____ Other Airspace Areas
_____ Cloud Clearance & Visibility Requirements

COMPLETION STANDARDS:

At the completion of this lesson, the student will have a knowledge of controlled and uncontrolled airspace, the classes of airspace, special use airspace, and cloud clearances.

ADDITIONAL STUDY:**Federal Aviation Regulations**

[14 CFR Aviation Regulations](#)

Aeronautical Information Manual

[Chapter 3](#)

Sporty's Learn to Fly Course

Volume 4

[Segment 22 - Normal Airspace](#)

[Segment 23 - Special Use Airspace](#)

[Segment 24 - Airspace Preflight Planning](#)

PRE-STAGE CHECK – TIME SUMMARY

This page is intended to be used by the student's flight instructor to summarize the times accumulated through this course of instruction and determine that the times are sufficient for the stage requirements. The check instructor should verify that these times are acceptable for completion of the stage.

DATE _____ STUDENT NAME _____ STUDENT SIGNATURE _____

INSTRUCTOR # _____ INSTRUCTOR SIGNATURE _____

STAGE TOTALS

FLIGHT TIME (DUAL): _____

FLIGHT TIME (SOLO): _____

FLIGHT TIME (DUAL CROSS-COUNTRY): _____

FLIGHT TIME (SOLO CROSS-COUNTRY): _____

FLIGHT TIME (NIGHT): _____

ATD/FTD/SIM: _____

INSTRUMENT: _____ (In flight only.)

GROUND/DISCUSSION: _____ (Be sure to include the Ground Lesson times.)

STAGE I
LESSON 27
STAGE I CHECK

DATE _____	ACFT ID _____	GRADE (Circle One) S U I	
STUDENT NAME _____		STUDENT SIGNATURE _____	
INSTRUCTOR # _____		INSTRUCTOR SIGNATURE _____	
FLIGHT TIME: (1.5) _____		DISCUSSION: (1.5) _____	
TOTAL IN COURSE: (D/S/G) ____ / ____ / ____			

LESSON OBJECTIVE:

This stage check will determine that the student has accomplished the objectives of Stage I.

CONTENT:

Lesson Review

ORAL

- _____ Operation of Systems
- _____ Certificates & Documents
- _____ Aircraft Logbooks
- _____ Use of Checklists
- _____ Preflight Inspection
- _____ Airplane Servicing
- _____ Weather Information
- _____ Performance & Limitations

FLIGHT

- _____ Dispatch Procedures
- _____ Preflight Inspection
- _____ Engine Starting
- _____ Radio Communications
- _____ Taxiing
- _____ Before Takeoff Check

Lesson Review

FLIGHT (CONTINUED)

- _____ Normal Takeoff & Climb
- _____ Crosswind Takeoff & Climb
- _____ Traffic Pattern Operations
- _____ Collision Avoidance Precautions
- _____ Maneuvering during Slow Flight
- _____ Power-Off Stalls
- _____ Power-On Stalls
- _____ Normal Approach & Landing
- _____ Crosswind Approach & Landing
- _____ Emergency Approach & Landing
- _____ Go-Around / Rejected Landing
- _____ Systems & Equipment Malfunctions
- _____ Practice Area Operations
- _____ Aeronautical Decision Making & Judgment
- _____ After Landing Checks
- _____ Parking, Securing, & Proper Tie Down
- _____ Recovery Procedures

COMPLETION STANDARDS:

This lesson is complete when the student can competently perform preflight duties and all other procedures necessary for the safe conduct of a solo flight in the local training area. The student shall maintain or level-off at assigned altitudes ± 150 feet, maintain or roll out on headings $\pm 15^\circ$, and maintain airspeeds ± 10 knots while performing climbs, descents, turns, straight and level, and traffic pattern operations unless otherwise specified. Slow flight will be performed at an airspeed at which any further increase in angle of attack, increase in load factor, or reduction in power, would result in a stall warning, and will be maintained $+15$, -0 knots. Stalls will be performed in both straight and level and turning flight. Airspeed will be maintained at $V_y + 10$, -5 knots during the climb after takeoff or a go-around. Recommended approach airspeed will be maintained $+10$, -5 knots and the touchdown will be beyond and within 500 feet of a designated point of landing.

ADDITIONAL STUDY:

Flight Maneuver Guide - [Review pertinent sections](#)

STAGE I
LESSON 28
DUAL - GROUND
CHARTS & PUBLICATIONS

DATE _____	GRADE (Circle One) S U I
STUDENT NAME _____	STUDENT SIGNATURE _____
INSTRUCTOR # _____	INSTRUCTOR SIGNATURE _____
DISCUSSION: (1.2) _____	
TOTAL IN COURSE: (D/S/G) ____ / ____ / ____	

LESSON OBJECTIVE:

During this lesson, the student will be introduced to VFR sectional charts and the Chart Supplements.

CONTENT:

Lesson Introduction

- _____ VFR Sectional Charts
- _____ Chart Supplements
- _____ Planning for Alternatives

COMPLETION STANDARDS:

At the completion of this lesson, the student will have a knowledge of VFR sectional charts and the Chart Supplements, and planning for alternatives if the planned flight cannot be completed or delays are encountered. The student's understanding of the charts and supplements will include obtaining information on runway lengths at airports of intended use and data on takeoff and landing distances.

ADDITIONAL STUDY:

Chart Supplements

Available in both Paper and Digital formats

VFR Sectional Charts

Available in both Paper and Digital formats

Sporty's Learn to Fly Course

Volume 4

[Segment 3 - Flight Information Publications](#)

[Segment 5 - Reading Sectional Charts](#)

[Segment 6 - Air Facts: Where Is It Really](#)

[Segment 7 - Sporty's E6B: Flight Planning and FAA Test Prep](#)

STAGE I
LESSON 29
DUAL - LOCAL

DATE _____	ACFT ID _____	GRADE (Circle One) S U I	
STUDENT NAME _____		STUDENT SIGNATURE _____	
INSTRUCTOR # _____		INSTRUCTOR SIGNATURE _____	
FLIGHT TIME: (1.2) _____		DISCUSSION: (0.2) _____	
TOTAL IN COURSE: (D/S/G) ____ / ____ / ____			

LESSON OBJECTIVE:

During this lesson, the instructor will review takeoffs and landings to refine the student's level of proficiency for solo flight.

CONTENT:**Lesson Review**

- _____ Runway Incursion Avoidance
- _____ Crosswind Takeoff & Climb
- _____ Normal Takeoff & Climb
- _____ Traffic Pattern Operations
- _____ Normal Approach & Landing

Lesson Review

- _____ Crosswind Approach & Landing
- _____ Aeronautical Decision Making & Judgment
- _____ Go-Around / Rejected Landing
- _____ After Landing Checks
- _____ Parking & Securing

COMPLETION STANDARDS:

Takeoffs, landings, and go-arounds should be performed without instructor intervention and with minimal coaching. The student should demonstrate safe and effective technique during all traffic pattern operations, accomplishing all takeoffs, landings, and go-arounds to a proficiency level required for solo flight. Airspeed will be maintained at $V_Y +10$, -5 knots during the climb after takeoff or a go-around. Recommended approach airspeed will be maintained +10, -5 knots and the touchdown will be beyond and within 500 feet of a designated point of landing.

ADDITIONAL STUDY:**Airplane Flying Handbook**

[Airplane Flying Handbook - Chapters 2, 6, 8, 9](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapter 2](#)
[Chapter 14](#)

Aeronautical Information Manual

[Chapter 4](#)

Private Pilot Airman Certification Standards

[Private Pilot Airman Certification Standards](#)

Sporty's Learn to Fly Course

Volume 2

[Review Segments As Needed](#)

Volume 3

[Review Segments As Needed](#)

Flight Maneuver Guide

[Crosswind Approach and Landing](#)
[Crosswind Takeoff and Climb](#)
[Normal Takeoff and Climb](#)
[Normal Approach and Landing](#)
[Traffic Pattern Operations - Departure Procedures](#)
[Traffic Pattern Operations - Entry Procedures](#)
[Go-Around](#)

STAGE I
LESSON 30
DUAL - GROUND
AEROMEDICAL

DATE_____ GRADE (Circle One) S U I
STUDENT NAME _____ STUDENT SIGNATURE_____
INSTRUCTOR # _____ INSTRUCTOR SIGNATURE_____
DISCUSSION: (1.2) _____
TOTAL IN COURSE: (D/S/G) ____ / ____ / ____

LESSON OBJECTIVE:

During this lesson, the student will be introduced to aeromedical and human factors.

CONTENT:

Lesson Introduction

- _____ 14 CFR Part 67
- _____ The Inner Ear
- _____ Middle Ear and Sinus Problems
- _____ Spatial Disorientation
- _____ The Eye
- _____ Visual Illusions / Landing Illusions

Lesson Introduction

- _____ Hypoxia
- _____ Carbon Monoxide Poisoning
- _____ Hyperventilation
- _____ Alcohol and Drugs
- _____ Stress and Fatigue
- _____ Dehydration

COMPLETION STANDARDS:

At the completion of this lesson, the student will have a knowledge of aeromedical and human factors and how they relate to flying activities.

ADDITIONAL STUDY:

Pilot's Handbook of Aeronautical Knowledge

[Chapter 17](#)

Federal Aviation Regulations

[14 CFR Aviation Regulations](#)

Aeronautical Information Manual

[Chapter 8](#)

Sporty's Learn to Fly Course

Volume 3

[Segment 26 - Student Pilot & Medical Certificate](#)

[Segment 27 - Air Facts: Fit for Flight](#)

STAGE I
LESSON 31
DUAL - LOCAL

DATE _____	ACFT ID _____	GRADE (Circle One) S U I	
STUDENT NAME _____		STUDENT SIGNATURE _____	
INSTRUCTOR # _____		INSTRUCTOR SIGNATURE _____	
FLIGHT TIME: (1.2) _____		DISCUSSION: (0.2) _____	
TOTAL IN COURSE: (D/S/G) ____ / ____ / ____			

LESSON OBJECTIVE:

During this lesson, the instructor will review takeoffs and landings to refine the student's level of proficiency for solo flight.

CONTENT:**Lesson Review**

- _____ Taxiing
- _____ Before Takeoff Check
- _____ Runway Incursion Avoidance
- _____ Normal and/or Crosswind Takeoff & Climb
- _____ Traffic Pattern Operations
- _____ Systems and Equipment Malfunctions

Lesson Review

- _____ Aeronautical Decision Making & Judgment
- _____ Go-Around / Rejected Landing
- _____ Normal and/or Crosswind Approach & Landing
- _____ Emergency Approach & Landing

COMPLETION STANDARDS:

The student will demonstrate the safe completion of the tasks associated with traffic pattern operations, with the outcome never seriously in doubt. The student should accomplish this without assistance and coaching from the instructor. Airspeed will be maintained at $V_y +10$, -5 knots during the climb after takeoff or a go-around. Recommended approach airspeed will be maintained +10, -5 knots and the touchdown will be beyond and within 500 feet of a designated point of landing.

ADDITIONAL STUDY:**Airplane Flying Handbook**

[Airplane Flying Handbook - Chapters 2, 6, 8 ,9, 18](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapter 2](#)
[Chapter 14](#)

Aeronautical Information Manual

[Chapter 4](#)
[Chapter 6](#)

Sporty's Learn to Fly Course

Volume 1

[Review Segments As Needed](#)

Volume 2

[Review Segments As Needed](#)

Volume 3

[Review Segments As Needed](#)

Private Pilot Airman Certification Standards

[Private Pilot Airman Certification Standards](#)

Flight Maneuver Guide

[Crosswind Approach and Landing](#)
[Crosswind Takeoff and Climb](#)
[Normal Takeoff and Climb](#)
[Normal Approach and Landing](#)
[Traffic Pattern Operations - Departure Procedures](#)
[Traffic Pattern Operations - Entry Procedures](#)
[Go-Around](#)
[Emergency Approach and Landing](#)

STAGE I
LESSON 32
DUAL AND SOLO - LOCAL

DATE _____	ACFT ID _____	GRADE (Circle One) S U I
STUDENT NAME _____		STUDENT SIGNATURE _____
INSTRUCTOR # _____		INSTRUCTOR SIGNATURE _____
FLIGHT TIME DUAL: (1.0) _____ SOLO: (0.6) _____		
DISCUSSION: (0.2) _____ TOTAL IN COURSE: (D/S/G) _____ / _____ / _____		

LESSON OBJECTIVE:

During the dual portion of the lesson, the instructor will review takeoff and landing procedures to determine that the student is proficient and competent for solo flight. During the lesson, **after being properly endorsed by the flight instructor**, the student will fly a supervised solo flight in the traffic pattern.

CONTENT:

Lesson Review

- _____ Review Student Handbook / Operations Manual Concerning Solo Requirements
- _____ Runway Incursion Avoidance
- _____ Traffic Pattern Operations
- _____ Normal Takeoffs and Landings

Supervised Solo

- _____ Radio Communications
- _____ Taxiing
- _____ Before Takeoff Check
- _____ Runway Incursion Avoidance
- _____ Normal Takeoff & Climb
- _____ Traffic Pattern Operations
- _____ Normal Approach & Landing
- _____ Postflight Procedures

COMPLETION STANDARDS:

This lesson and Stage I are complete when the student accomplishes a solo flight supervised by the instructor. The student will adhere to established traffic pattern procedures and demonstrate that solo flight in the traffic pattern can be accomplished safely.

ADDITIONAL STUDY:

Airplane Flying Handbook

[Airplane Flying Handbook - Chapters 2, 6, 8, 9, 18](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapter 2](#)
[Chapter 14](#)

Aeronautical Information Manual

[Chapter 4](#)
[Chapter 6](#)

Private Pilot Airman Certification Standards

[Private Pilot Airman Certification Standards](#)

Sporty's Learn to Fly Course

[Flight Maneuver Guide](#)

[Traffic Pattern Operations - Departure Procedures](#)

[Traffic Pattern Operations - Entry Procedures](#)

[Normal Takeoff and Climb](#)

[Normal Approach and Landing](#)

STAGE II

STAGE OBJECTIVE:

This stage introduces the student to navigating to nearby airports by use of pilotage. The student will also be introduced to diversion, lost procedures, and planning for alternatives if the planned flight cannot be completed. The student will also be introduced to maximum performance takeoffs and landings.

STAGE COMPLETION STANDARDS:

The student will demonstrate performance to a standard that meets performance criteria for a Private Pilot Certificate (ASEL).

STAGE II
LESSON 33
DUAL - GROUND
PRINCIPLES OF
NAVIGATION

DATE_____ GRADE (Circle One) S U I
STUDENT NAME _____ STUDENT SIGNATURE_____
INSTRUCTOR # _____ INSTRUCTOR SIGNATURE_____
DISCUSSION: (1.2) _____
TOTAL IN COURSE: (D/S/G) ____ / ____ / ____

LESSON OBJECTIVE:

During this lesson, the student will be introduced to principles of navigation.

CONTENT:

Lesson Introduction

_____ Effect of Wind in (1) Hour
 _____ Drift and Drift Correction
 _____ Various Types of Aircraft Speeds
 _____ Latitude and Longitude

Lesson Introduction

_____ Earth's Magnetism
 _____ Variation - Isogonic and Agonic Lines
 _____ Magnetic Compass
 _____ Magnetic Compass Errors

COMPLETION STANDARDS:

At the completion of this lesson, the student will have a knowledge of the principles of navigation.

ADDITIONAL STUDY:

Airplane Flying Handbook

[Chapter 7](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapter 16](#)

Sporty's Learn to Fly Course

Volume 4

[Segments 3-9](#)

Volume 5

[Segment 3 - Magnetic Compass](#)

STAGE II
LESSON 34
DUAL - LOCAL

DATE _____	ACFT ID _____	GRADE (Circle One) S U I	
STUDENT NAME _____		STUDENT SIGNATURE _____	
INSTRUCTOR # _____		INSTRUCTOR SIGNATURE _____	
FLIGHT TIME: (1.2) _____		DISCUSSION: (0.2) _____	
TOTAL IN COURSE: (D/S/G) ____ / ____ / ____			

LESSON OBJECTIVE:

During this lesson, the student will be introduced to the maximum takeoff and landing performance of the training airplane. The student shall develop an understanding of the maximum performance capabilities of the aircraft.

CONTENT:**Lesson Review**

- _____ Passenger Briefing
- _____ Normal and/or Crosswind Takeoff & Climb
- _____ Normal and/or Crosswind Approach & Landing

Lesson Introduction

- _____ Single-Pilot Resource Management
- _____ Short-Field Takeoff & Maximum Performance Climb
- _____ Soft-Field Takeoff & Climb
- _____ Short-Field Approach & Landing
- _____ Soft-Field Approach & Landing

COMPLETION STANDARDS:

The student will be able to explain what runway conditions necessitate the use of short and soft-field takeoff and landing techniques. In addition, the student will be able to demonstrate the correct procedure to be used under these conditions. The maximum performance takeoffs and landings will be performed with minimal assistance from the instructor. Airspeed will be maintained at $V_y + 10$, -5 knots during the climb after a normal or crosswind takeoff. Recommended approach airspeed will be maintained +10, -5 knots and the touchdown will be beyond and within 400 feet of a designated point of landing for normal or crosswind landings.

ADDITIONAL STUDY:**Airplane Flying Handbook**

[Chapter 6](#)
[Chapter 9](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapter 11](#)

Private Pilot Airman Certification Standards

[Private Pilot Airman Certification Standards](#)

Sporty's Learn to Fly Course

Volume 5

[Segments 5-8](#)

Flight Maneuver Guide

[Short-Field Takeoff and Climb](#)
[Soft-Field Takeoff and Climb](#)
[Normal Takeoff and Climb](#)
[Normal Approach and Landing](#)
[Short-Field Approach and Landing](#)
[Soft-Field Approach and Landing](#)

STAGE II
LESSON 35
DUAL - GROUND
PUBLICATIONS &
EQUIPMENT

DATE_____ GRADE (Circle One) S U I
STUDENT NAME _____ STUDENT SIGNATURE_____
INSTRUCTOR # _____ INSTRUCTOR SIGNATURE_____
DISCUSSION: (1.2) _____
TOTAL IN COURSE: (D/S/G) ____ / ____ / ____

LESSON OBJECTIVE:

During this lesson, the student will be introduced to various aeronautical publications and cross-country flight planning equipment. The minimum equipment list (MEL) will be introduced as well.

CONTENT:

Lesson Review

- _____ Aircraft Equipment List
- _____ VFR Sectional Chart
- _____ Chart Supplements

Lesson Introduction

- _____ VFR Terminal Area Chart
- _____ Plotter
- _____ Flight Computer
- _____ Flight Deck Management
- _____ Minimum Equipment List
- _____ Supplemental Oxygen

COMPLETION STANDARDS:

At the completion of this lesson, the student will have a knowledge of aeronautical publications, cross-country flight planning equipment, and the MEL concept.

ADDITIONAL STUDY:

Pilot's Handbook of Aeronautical Knowledge

[Chapters 2, 7, 9, 14, 16](#)

Federal Aviation Regulations

[14 CFR Aviation Regulations](#)

Aeronautical Information Manual

[Chapter 9](#)

Sporty's Learn to Fly Course

Volume 4

[Segments 3-10, 19](#)

Chart Supplements

Available in both Paper and Digital formats

VFR Sectional Charts

Available in both Paper and Digital formats

VFR Terminal Charts

Available in both Paper and Digital formats

STAGE II
LESSON 36
DUAL - LOCAL

DATE _____	ACFT ID _____	GRADE (Circle One) S U I	
STUDENT NAME _____		STUDENT SIGNATURE _____	
INSTRUCTOR # _____		INSTRUCTOR SIGNATURE _____	
FLIGHT TIME: (1.2) _____		DISCUSSION: (0.2) _____	
TOTAL IN COURSE: (D/S/G) ____ / ____ / ____			

LESSON OBJECTIVE:

During this lesson, the student will practice maneuvers to gain proficiency and confidence in his or her ability to obtain the maximum performance from the aircraft.

CONTENT:**Lesson Review**

- _____ Passenger Briefing
- _____ Maneuvering during Slow Flight
- _____ Power-Off Stalls (Full)
- _____ Power-On Stalls (Full)
- _____ Forward Slip to a Landing

Lesson Review

- _____ Short-Field Takeoff & Maximum Performance Climb
- _____ Soft-Field Takeoff & Climb
- _____ Short-Field Approach & Landing
- _____ Soft-Field Approach & Landing

COMPLETION STANDARDS:

The student will perform takeoffs and landings smoothly, while maintaining good directional control. Slow flight will be performed at an airspeed at which any further increase in angle of attack, increase in load factor, or reduction in power, would result in a stall warning, and will be maintained +10, -0 knots. During short and soft-field takeoffs, airspeed should be maintained at $V_x + 10$, -5 knots until obstacles are cleared, and $V_y + 10$, -5 knots after that. All approaches will be stabilized and desired airspeed will be maintained +10, -5 knots for all landings. The touchdown will be beyond and within 400 feet of a designated point of landing for short-field landings.

ADDITIONAL STUDY:**Airplane Flying Handbook**

[Chapter 5](#)
[Chapter 6](#)
[Chapter 9](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapter 11](#)

Private Pilot Airman Certification Standards

[Private Pilot Airman Certification Standards](#)

Sporty's Learn to Fly Course

Volume 2

[Review Segments as needed](#)

Volume 5

[Segment 5 - Performance Charts](#)

Flight Maneuver Guide

[Power-On Stalls Imminent and Full - Cruise Configuration](#)

[Power-On Stalls Imminent and Full - Specified Configuration](#)

[Power-Off Stalls Imminent and Full - Cruise Configuration](#)

[Power-Off Stalls Imminent and Full - Landing Configuration](#)

[Slow Flight - Cruise Configuration](#)

[Slow Flight - Landing Configuration](#)

[Short-Field Approach and Landing](#)

[Soft-Field Approach and Landing](#)

STAGE II
LESSON 37
DUAL - GROUND
CROSS-COUNTRY
FLIGHT PLANNING

DATE_____ GRADE (Circle One) S U I
STUDENT NAME _____ STUDENT SIGNATURE_____
INSTRUCTOR # _____ INSTRUCTOR SIGNATURE_____
DISCUSSION: (1.2) _____
TOTAL IN COURSE: (D/S/G) ____ / ____ / ____

LESSON OBJECTIVE:

During this lesson, the student will be introduced to cross-country flight planning.

CONTENT:

Lesson Introduction

_____ Applicable FARs
 _____ Measuring True Course and Distance
 _____ Picking Checkpoints and Altitudes
 _____ Pilotage

Lesson Introduction

_____ Airplane Flight Manual / Pilots Operating Handbook (AFM/POH)
 _____ Performance Calculations

COMPLETION STANDARDS:

At the completion of this lesson, the student will have a knowledge of cross-country flight planning and cross-country performance calculations. The student's understanding of performance calculations must include data on takeoff and landing distances and fuel requirements.

ADDITIONAL STUDY:

Pilot's Handbook of Aeronautical Knowledge

[Chapter 9](#)

[Chapter 16](#)

Federal Aviation Regulations

[14 CFR Aviation Regulations](#)

Aeronautical Information Manual

[Chapter 1](#)

[Chapter 9](#)

Sporty's Learn to Fly Course

Volume 4

[Segments 4-10](#)

Volume 5

[Segment 5 - Performance Charts](#)

STAGE II
LESSON 38
SOLO - LOCAL

DATE _____	ACFT ID _____	GRADE (Circle One) SP I	
STUDENT NAME _____		STUDENT SIGNATURE _____	
FLIGHT TIME SOLO: (1.0) _____		DISCUSSION: () _____	
TOTAL IN COURSE: (D/S/G) ____ / ____ / ____			

LESSON OBJECTIVE:

During this lesson, the student will practice maneuvers to gain proficiency and confidence in his or her ability to solo an aircraft.

CONTENT:**Lesson Review**

- _____ Normal and/or Crosswind Takeoff & Climb
- _____ Short-Field Takeoff & Maximum Performance Climb
- _____ Soft-Field Takeoff & Climb
- _____ Rectangular Course
- _____ S-Turns
- _____ Turns around a Point
- _____ Steep Turns
- _____ Maneuvering during Slow Flight

Lesson Review

- _____ Power-Off Stalls
- _____ Power-On Stalls
- _____ Forward Slip to a Landing
- _____ Normal and/or Crosswind Approach & Landing
- _____ Short-Field Approach & Landing
- _____ Soft-Field Approach & Landing
- _____ Other (As Assigned by Instructor)

COMPLETION STANDARDS:

The lesson is complete when the student has safely conducted the assigned solo flight. During this lesson, the student should attempt to gain proficiency in the solo operation of the aircraft.

ADDITIONAL STUDY:**Airplane Flying Handbook**

[Airplane Flying Handbook - Chapters 5-7, 9](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapter 5](#)

Private Pilot Airman Certification Standards

[Private Pilot Airman Certification Standards](#)

Sporty's Learn to Fly Course

Volume 1

[Review Segments as Needed](#)

Volume 2

[Review Segments as Needed](#)

Volume 5

[Segment 8 - Max Performance Takeoffs and Landings](#)

Flight Maneuver Guide

[Crosswind Approach and Landing](#)
[Crosswind Takeoff and Climb](#)
[Short-Field Takeoff and Climb](#)
[Soft-Field Takeoff and Climb](#)
[Normal Takeoff and Climb](#)
[Normal Approach and Landing](#)
[Short-Field Approach and Landing](#)
[Soft-Field Approach and Landing](#)
[Forward Slip to a Landing](#)
[Power-On Stalls Imminent and Full - Cruise Configuration](#)
[Power-On Stalls Imminent and Full - Specified Configuration](#)
[Power-Off Stalls Imminent and Full - Cruise Configuration](#)
[Power-Off Stalls Imminent and Full - Landing Configuration](#)
[S-Turns](#)
[Steep Turns](#)
[Rectangular Course](#)

STAGE II
LESSON 39
DUAL - GROUND
CROSS-COUNTRY
FLIGHT PLANNING

DATE_____ GRADE (Circle One) S U I
STUDENT NAME _____ STUDENT SIGNATURE_____
INSTRUCTOR # _____ INSTRUCTOR SIGNATURE_____
DISCUSSION: (1.2) _____
TOTAL IN COURSE: (D/S/G) ____/____/____

LESSON OBJECTIVE:

During this lesson, the student will be introduced to additional concepts associated with cross-country flight planning.

CONTENT:

Lesson Introduction

- _____ The Wind Triangle
- _____ Dead Reckoning
- _____ Calculating Various Airspeeds

Lesson Introduction

- _____ Electronic E6B Flight Computer
- _____ Manual E6B

COMPLETION STANDARDS:

At the completion of this lesson, the student will have a knowledge of additional concepts associated with cross-country flight planning.

ADDITIONAL STUDY:

Pilot's Handbook of Aeronautical Knowledge

[Chapter 16](#)

Federal Aviation Regulations

[14 CFR Aviation Regulations](#)

Aeronautical Information Manual

[Chapter 1](#)

Sporty's Learn to Fly Course

Volume 4

[Segments 7-10](#)

STAGE II
LESSON 40
DUAL - PILOTAGE

DATE _____	ACFT ID _____	GRADE (Circle One) S U I	
STUDENT NAME _____		STUDENT SIGNATURE _____	
INSTRUCTOR # _____		INSTRUCTOR SIGNATURE _____	
FLIGHT TIME: (1.5) _____		DISCUSSION: (0.2) _____	
APT IDs: _____ / _____		TOTAL IN COURSE: (D/S/G) _____ / _____ / _____	

LESSON OBJECTIVE:

During this lesson, the student will determine the course and fly round-trip to an airport more than 25 nautical miles, but less than 50 nautical miles from the airport at which the instruction is given. The student will complete at least one landing at this airport, and at least one additional landing at an airport within 25 nautical miles of the airport where the student normally trains. In addition, the student will follow the course solely by visual reference to landmarks and using the magnetic compass. The instructor will introduce radio communications that may be encountered during pilotage flights.

CONTENT:**Lesson Review**

- _____ Passenger Briefing
- _____ Runway Incursion Avoidance
- _____ Single-Pilot Resource Management
- _____ Normal Takeoff & Climb
- _____ Traffic Pattern Operations
- _____ Normal Approach & Landing
- _____ Aeronautical Decision Making & Judgment
- _____ Radio Communications at Non-Towered Airports

Lesson Introduction

- _____ VFR Navigation Charts
- _____ Flight Publications
- _____ Radio Communications with Flight Service
- _____ Route Selection
- _____ Pilotage
- _____ Use of Magnetic Compass
- _____ Unfamiliar Airport Operation
- _____ Critical Weather Recognition
- _____ Estimates of Heading & Fuel Consumption

COMPLETION STANDARDS:

The student will be able to identify selected landmarks, at all times verify position within 5 nautical miles, maintain heading $\pm 15^\circ$, and maintain altitude ± 200 feet of the selected appropriate altitude. The student will also demonstrate appropriate radio communication procedures at non-towered airports and with Flight Service.

ADDITIONAL STUDY:**Airplane Flying Handbook**
[Chapters 6, 8, 9](#)
Pilot's Handbook of Aeronautical Knowledge
[Chapters 2, 14, 16](#)
Aeronautical Information Manual
[Chapter 1, 2, 4, 9](#)
Private Pilot Airman Certification Standards
[Private Pilot Airman Certification Standards](#)
Sporty's Learn to Fly Course

Volume 4

[Segments 3-10, 20](#)
Volume 5
[Segment 3 - Magnetic Compass](#)
Flight Maneuver Guide
[Normal Takeoff and Climb](#)
[Normal Approach and Landing](#)
[Traffic Pattern Operations - Departure Procedures](#)
[Traffic Pattern Operations - Entry Procedures](#)

**STAGE II
LESSON 41
DUAL - GROUND
CROSS-COUNTRY
FLIGHT PLANNING**

DATE_____	GRADE (Circle One) S U I
STUDENT NAME _____	STUDENT SIGNATURE_____
INSTRUCTOR # _____	INSTRUCTOR SIGNATURE_____
DISCUSSION: (1.2) _____	
TOTAL IN COURSE: (D/S/G) _____ / _____ / _____	

LESSON OBJECTIVE:

During this lesson, the student will be introduced to additional concepts associated with cross-country flight planning.

CONTENT:**Lesson Introduction**

- _____ Diversion Procedures
- _____ Alternate Planning
- _____ Lost Procedures

COMPLETION STANDARDS:

At the completion of this lesson, the student will have a knowledge of additional concepts associated with cross-country flight planning.

ADDITIONAL STUDY:**Pilot's Handbook of Aeronautical Knowledge**[Chapter 16](#)**Federal Aviation Regulations**[14 CFR Aviation Regulations](#)**Aeronautical Information Manual**[Chapter 1](#)[Chapter 6](#)[Chapter 9](#)**Sporty's Learn to Fly Course**

Volume 4

[Segments 8-11](#)

Volume 5

[Segment 20 - Lost and Found](#)

STAGE II
LESSON 42
DUAL - PILOTAGE

DATE _____	ACFT ID _____	GRADE (Circle One) S U I	
STUDENT NAME _____		STUDENT SIGNATURE _____	
INSTRUCTOR # _____		INSTRUCTOR SIGNATURE _____	
FLIGHT TIME: (1.8) _____		DISCUSSION: (0.2) _____	
APT ID: _____		TOTAL IN COURSE: (D/S/G) ____ / ____ / ____	

LESSON OBJECTIVE:

During this lesson, the student will determine the course to fly to an airport more than 25 nautical miles from the airport at which instruction is given. The student will follow the course solely by visual reference to landmarks and using the magnetic compass. The instructor will introduce emergency descents, planning for alternates, and lost procedures.

CONTENT:**Lesson Review**

- _____ Single-Pilot Resource Management
- _____ Aeronautical Decision Making & Judgment
- _____ Estimates of Heading & Fuel Consumption
- _____ Critical Weather Recognition
- _____ Unfamiliar Airport Operation
- _____ Route Selection
- _____ Pilotage
- _____ VFR Navigation Charts & Publications

Lesson Introduction

- _____ Emergency Descent
- _____ Planning for Alternatives
- _____ Diversion to an Alternate Airport
- _____ Lost Procedures

COMPLETION STANDARDS:

The student will be able to identify selected landmarks, at all times verify position within 3 nautical miles, maintain heading $\pm 15^\circ$, and maintain the selected appropriate altitude ± 200 feet. The student will explain the conditions and procedures for diversion to an alternate. The student will also be able to effectively communicate at non-towered airports and with Flight Service.

ADDITIONAL STUDY:**Airplane Flying Handbook**

[Chapters 6, 8, 9](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapters 2, 14, 16](#)

Aeronautical Information Manual

[Chapter 1, 2, 4, 9](#)

Private Pilot Airman Certification Standards

[Private Pilot Airman Certification Standards](#)

Sporty's Learn to Fly Course

Volume 4

[Segments 3-10, 20](#)

Volume 5

[Segment 20 - Lost and Found](#)

STAGE II
LESSON 43
DUAL - GROUND
AIRSPACE &
COMMUNICATIONS

DATE _____ GRADE (Circle One) S U I
 STUDENT NAME _____ STUDENT SIGNATURE _____
 INSTRUCTOR # _____ INSTRUCTOR SIGNATURE _____
 DISCUSSION: (1.2) _____
 TOTAL IN COURSE: (D/S/G) _____ / _____ / _____

LESSON OBJECTIVE:

During this lesson, a review of airspace and communication requirements will be conducted.

CONTENT:

Lesson Introduction

_____ Class A
 _____ Class B
 _____ Class C
 _____ Class D
 _____ Class E
 _____ Class G
 _____ TRSA Communications
 _____ FSS Communications
 _____ Approach Control
 _____ Departure Control
 _____ Clearance Delivery

Lesson Introduction

_____ Tower Communications
 _____ Ground Control
 _____ Runway and Taxiway Signs, Markings, and
 Lighting at Tower Controlled Fields
 _____ Runway Incursion Avoidance at Tower
 Controlled Fields
 _____ Readback / Hearback for Hold Short,
 Line Up and Wait, and Runway Crossing
 Instructions
 _____ ATC Light Gun Signals

COMPLETION STANDARDS:

At the completion of this lesson, the student will be familiar with various classes of airspace and their associated communication requirements.

ADDITIONAL STUDY:

Advisory Circulars

[AC 91-73 Flight School Procedures During Taxi Operations](#)

Airplane Flying Handbook

[Chapter 2](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapter 14](#)

[Chapter 15](#)

[Chapter 16](#)

Federal Aviation Regulations

[14 CFR Aviation Regulations](#)

Aeronautical Information Manual

[Chapter 1-5, 9](#)

Sporty's Learn to Fly Course

Volume 4

[Segments 21-24](#)

Volume 5

[Segments 1, 2, 7](#)

Volume 6

[Segments 3, 6](#)

STAGE II
LESSON 44
SOLO - PILOTAGE

DATE _____	ACFT ID _____	GRADE (Circle One) SP I	
STUDENT NAME _____		STUDENT SIGNATURE _____	
FLIGHT TIME SOLO: (1.5) _____		DISCUSSION: () _____	
APT ID: _____		TOTAL IN COURSE: (D/S/G) ____ / ____ / ____	

LESSON OBJECTIVE:

During this lesson, the student will complete a flight to an airport located within 25 nautical miles of the airport where the student normally trains and return to the original departure point. The student will practice takeoffs and landings in order to increase proficiency. The instructor will properly endorse the student for this flight.

CONTENT:**Lesson Review**

- _____ Normal and/or Crosswind Takeoff & Climb
- _____ Short-Field Takeoff & Maximum Performance Climb
- _____ Soft-Field Takeoff & Climb
- _____ Normal and/or Crosswind Approach & Landing

Lesson Review

- _____ Short-Field Approach & Landing
- _____ Soft-Field Approach & Landing
- _____ Other (As Assigned by the Instructor)

COMPLETION STANDARDS:

The lesson is complete when the student has conducted the assigned flight to another airport and returns. During this lesson, the student should continue to gain proficiency in each of the listed maneuvers.

ADDITIONAL STUDY:**Airplane Flying Handbook**

[Chapter 6](#)
[Chapter 9](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapter 11](#)
[Chapter 14](#)

Private Pilot Airman Certification Standards

[Private Pilot Airman Certification Standards](#)

Sporty's Learn to Fly Course

Volume 4
[Review Segments as Needed](#)

Volume 5
[Review Segments as Needed](#)

Flight Maneuver Guide

[Crosswind Approach and Landing](#)
[Crosswind Takeoff and Climb](#)
[Short-Field Takeoff and Climb](#)
[Soft-Field Takeoff and Climb](#)
[Normal Takeoff and Climb](#)
[Normal Approach and Landing](#)
[Short-Field Approach and Landing](#)
[Soft-Field Approach and Landing](#)

STAGE II
LESSON 45
DUAL - GROUND
ELECTRONIC AIDS
TO NAVIGATION

DATE _____ GRADE (Circle One) S U I
STUDENT NAME _____ STUDENT SIGNATURE _____
INSTRUCTOR # _____ INSTRUCTOR SIGNATURE _____
DISCUSSION: (1.2) _____
TOTAL IN COURSE: (D/S/G) _____ / _____ / _____

LESSON OBJECTIVE:

During this lesson, the student will be introduced to electronic aids to navigation and automation.

CONTENT:

Lesson Introduction

- _____ VOR Tuning and Identifying
- _____ VOR Intercepting and Tracking
- _____ GPS Modes of Operation
- _____ GPS Waypoints
- _____ GPS Direct-To Operations
- _____ GPS Flight Plan Operations
- _____ GPS Nearest Functions

Lesson Introduction (if equipped)

- _____ Autopilot Principles of Operation
- _____ Autopilot Errors, Irregularities, & Failure Modes
- _____ Autopilot Disconnect Options
- _____ Autopilot Limitations
- _____ Installed Autopilot Specific Procedures
- _____ ADF / NDB Tuning and Identifying
- _____ ADF / NDB Homing
- _____ ADF / NDB Intercepting and Tracking
- _____ ADF / NDB Errors

COMPLETION STANDARDS:

At the completion of this lesson, the student will have a knowledge of VOR tuning, identifying, & tracking. The student will also be aware of the basics of GPS use. If the training aircraft is equipped with an autopilot, the student should have a knowledge of its basic operation and limitations along with the ways to disconnect the autopilot. If the training aircraft is equipped with an ADF, the student should have a knowledge of NDB tuning, intercepting, & tracking along with potential NDB errors.

ADDITIONAL STUDY:

Airplane Flying Handbook

[Chapter 6](#)
[Chapter 9](#)
[Chapter 18](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapter 16](#)

Aeronautical Information Manual

[Chapter 1](#)
[Chapter 6](#)

Private Pilot Airman Certification Standards

[Private Pilot Airman Certification Standards](#)

Sporty's Learn to Fly Course

Volume 4

[Review Segments as Needed](#)

Volume 5

[Review Segments as Needed](#)

Flight Maneuver Guide

[Navigation Systems - VOR](#)
[Navigation Systems - GPS](#)

STAGE II
LESSON 46
DUAL - LOCAL

DATE _____	ACFT ID _____	GRADE (Circle One) S U I	
STUDENT NAME _____		STUDENT SIGNATURE _____	
INSTRUCTOR # _____		INSTRUCTOR SIGNATURE _____	
FLIGHT TIME: (1.0) _____		DISCUSSION: (0.2) _____	
TOTAL IN COURSE: (D/S/G) ____ / ____ / ____			

LESSON OBJECTIVE:

During this lesson, the instructor will evaluate student proficiency with respect to maximum performance takeoffs and landings and pilotage procedures as well as en route systems and equipment problems.

CONTENT:**Lesson Review**

- _____ Short-Field Takeoff & Maximum Performance Climb
- _____ Soft-Field Takeoff & Climb
- _____ Pilotage
- _____ Diversion
- _____ Lost Procedure

Lesson Review

- _____ System & Equipment Malfunctions
- _____ Emergency Approach & Landing
- _____ Radio Communications
- _____ Short-Field Approach & Landing
- _____ Soft-Field Approach & Landing
- _____ Emergency Descent

COMPLETION STANDARDS:

The student shall perform all maneuvers to the standards established by the current Private Pilot Airman Certification Standards.

ADDITIONAL STUDY:**Airplane Flying Handbook**

[Chapter 9](#)
[Chapter 18](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapter 14](#)
[Chapter 16](#)

Private Pilot Airman Certification Standards

[Private Pilot Airman Certification Standards](#)

Sporty's Learn to Fly Course

Volume 4
[Review Segments as Needed](#)

Volume 5
[Review Segments as Needed](#)

Flight Maneuver Guide

[Short-Field Takeoff and Climb](#)
[Soft-Field Takeoff and Climb](#)
[Short-Field Approach and Landing](#)
[Soft-Field Approach and Landing](#)
[Emergency Approach and Landing](#)

PRE-STAGE CHECK – TIME SUMMARY

This page is intended to be used by the student's flight instructor to summarize the times accumulated through this course of instruction and determine that the times are sufficient for the stage requirements. The check instructor should verify that these times are acceptable for completion of the stage.

DATE _____ STUDENT NAME _____ STUDENT SIGNATURE _____

INSTRUCTOR # _____ INSTRUCTOR SIGNATURE _____

STAGE TOTALS

FLIGHT TIME (DUAL): _____

FLIGHT TIME (SOLO): _____

FLIGHT TIME (DUAL CROSS-COUNTRY): _____

FLIGHT TIME (SOLO CROSS-COUNTRY): _____

FLIGHT TIME (NIGHT): _____

ATD/FTD/SIM: _____

INSTRUMENT: _____ (In flight only.)

GROUND/DISCUSSION: _____ (Be sure to include the Ground Lesson times.)

COURSE TOTALS

FLIGHT TIME (DUAL): _____

FLIGHT TIME (SOLO): _____

FLIGHT TIME (DUAL CROSS-COUNTRY): _____

FLIGHT TIME (SOLO CROSS-COUNTRY): _____

FLIGHT TIME (NIGHT): _____

ATD/FTD/SIM: _____

INSTRUMENT: _____ (In flight only.)

GROUND/DISCUSSION: _____ (Be sure to include the Ground Lesson times.)

STAGE II
LESSON 47
STAGE II CHECK

DATE _____	ACFT ID _____	GRADE (Circle One) S U I	
STUDENT NAME _____		STUDENT SIGNATURE _____	
INSTRUCTOR # _____		INSTRUCTOR SIGNATURE _____	
FLIGHT TIME: (1.2) _____		DISCUSSION: (1.5) _____	
TOTAL IN COURSE: (D/S/G) ____ / ____ / ____			

LESSON OBJECTIVE:

The student shall demonstrate the knowledge and skill of a Private Pilot in the areas listed below.

CONTENT:

Lesson Review

ORAL

Preflight Preparation

- _____ Pilot Qualifications
- _____ Airworthiness Requirements
- _____ Weather Information
- _____ National Airspace System
- _____ Performance & Limitations
- _____ Operation of Systems
- _____ Human Factors
- _____ Airport, Runway, and Taxiway Signs, Markings, & Lighting

Lesson Review

FLIGHT

Preflight Procedures

- _____ Preflight Inspection
- _____ Flight Deck Management
- _____ Engine Starting
- _____ Taxiing
- _____ Before Takeoff Check

Airport Operations

- _____ Radio Communications
- _____ Traffic Patterns
- _____ Airport, Runway, and Taxiway Signs, Markings, & Lighting

Takeoffs, Landings, and Go-Arounds

- _____ Normal Takeoff & Climb
- _____ Normal Approach & Landing
- _____ Soft-Field Takeoff & Climb
- _____ Soft-Field Approach & Landing
- _____ Short-Field Takeoff & Maximum Performance Climb
- _____ Short-Field Approach & Landing
- _____ Forward Slip to a Landing
- _____ Go-Around / Rejected Landing

Flight Continued on Next Page

FLIGHT (CONTINUED)*Navigation*

- _____ Pilotage
- _____ Diversion
- _____ Lost Procedure

Postflight Procedures

- _____ After Landing, Parking, & Securing

Emergency Operation

- _____ Emergency Descents
- _____ Emergency Approach & Landing
(Simulated)
- _____ Systems & Equipment Malfunctions
- _____ Emergency Equipment & Survival Gear

COMPLETION STANDARDS:

The student will demonstrate proficiency that meets or exceeds Private Pilot proficiency as outlined in the FAA Private Pilot Airman Certification Standards.

STAGE III

STAGE OBJECTIVE:

This stage introduces additional elements of aviation that are required of a Private Pilot. The skills of navigation, cross-country operations, night operations, and flight solely by reference to the instruments shall be developed.

STAGE COMPLETION STANDARDS:

At the completion of this stage, the student will demonstrate performance to a standard that meets the criteria for a Private Pilot.

STAGE III
LESSON 48
DUAL - GROUND
INSTRUMENT FLYING

DATE _____ GRADE (Circle One) S U I STUDENT NAME _____ STUDENT SIGNATURE _____ INSTRUCTOR # _____ INSTRUCTOR SIGNATURE _____ DISCUSSION: (1.2) _____ TOTAL IN COURSE: (D/S/G) ____ / ____ / ____
--

LESSON OBJECTIVE:

During this lesson, the student will be introduced to basic attitude instrument flying and recovery from unusual flight attitudes. Emergency use of an autopilot will also be covered.

CONTENT:

Lesson Introduction

- _____ Basic Attitude Instrument Flight
- _____ Instrument Scan and Crosscheck
- _____ Unusual Flight Attitude (Nose High)
Recovery
- _____ Unusual Flight Attitude (Nose Low)
Recovery

Lesson Introduction

- _____ Full Panel Instrument Flying
- _____ Partial Panel Instrument Flying
- _____ Emergency Autopilot Use during an
Inadvertent Encounter with Instrument
Conditions

COMPLETION STANDARDS:

At the completion of this lesson, the student will have a knowledge of basic attitude instrument flying and the theory behind unusual attitude recoveries. The student will understand how an autopilot can be useful during an emergency after encountering inadvertent instrument conditions.

ADDITIONAL STUDY:

Airplane Flying Handbook

[Chapter 3](#)

[Chapter 5](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapter 6](#)

[Chapter 8](#)

Aeronautical Information Manual

[Chapter 1](#)

[Chapter 6](#)

Sporty's Learn to Fly Course

Volume 5

[Segments 16-18](#)

STAGE III
LESSON 49
DUAL - GROUND
CROSS-COUNTRY FLIGHT
PLANNING EXERCISE

DATE _____	GRADE (Circle One) S U I
STUDENT NAME _____	STUDENT SIGNATURE _____
INSTRUCTOR # _____	INSTRUCTOR SIGNATURE _____
DISCUSSION: (1.2) _____	
TOTAL IN COURSE: (D/S/G) ____ / ____ / ____	

LESSON OBJECTIVE:

During this lesson, the student will be introduced to an actual cross-country flight planning exercise.

CONTENT:

Lesson Introduction

_____ Cross-Country Planning Exercise

COMPLETION STANDARDS:

At the completion of this lesson, the student will be able to plan a cross-country flight and determine the suitability of proceeding with the flight based upon the conditions found during the planning process.

ADDITIONAL STUDY:

Airplane Flying Handbook
[Chapter 18](#)

Pilot's Handbook of Aeronautical Knowledge
[Chapters 2, 9-17](#)

Federal Aviation Regulations
[14 CFR Aviation Regulations](#)

Aeronautical Information Manual
[Chapters 1-9](#)

Chart Supplements

VFR Sectional Charts

VFR Terminal Charts

Sporty's Learn to Fly Course
 Volume 4
[Review Segments as Needed](#)

Volume 5
[Review Segments as Needed](#)

STAGE III
LESSON 50
DUAL - CROSS-COUNTRY
DAY

DATE _____	ACFT ID _____	GRADE (Circle One) S U I
STUDENT NAME _____		STUDENT SIGNATURE _____
INSTRUCTOR # _____		INSTRUCTOR SIGNATURE _____
FLIGHT TIME: (1.5) _____	HOOD: (0.5) _____	APT IDs: _____ / _____
DISCUSSION: (0.2) _____		TOTAL IN COURSE: (D/S/G) _____ / _____ / _____

LESSON OBJECTIVE:

During this lesson, the instructor will introduce the student to basic instrument flight maneuvers, VOR navigation, and dead reckoning during a day cross-country flight. Basic autopilot operations and disconnect procedures will be introduced (if equipped).

CONTENT:

Lesson Introduction

- _____ Basic Attitude Instrument Flight - Straight and Level
- _____ Basic Attitude Instrument Flight - Turns in Level Flight
- _____ Basic Attitude Instrument Flight - Constant Airspeed Climbs and Descents

Lesson Introduction

- _____ Basic Attitude Instrument Flight - Recovery from Unusual Flight Attitudes
- _____ VOR Navigation
- _____ Dead Reckoning
- _____ Autopilot Operations (if equipped)

COMPLETION STANDARDS:

At the completion of this lesson, the student will have a basic knowledge of VOR navigation, dead reckoning procedures, and basic attitude instrument flight maneuvers. The student will have a basic understanding autopilot operations and disconnect procedures (if equipped). The student will be able to verify position within 3 nautical miles, maintain or roll out on the selected heading $\pm 15^\circ$, and maintain or level off at the selected appropriate altitude ± 200 feet.

ADDITIONAL STUDY:

Airplane Flying Handbook

[Chapter 3](#)
[Chapter 5](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapter 6](#)
[Chapter 8](#)

Private Pilot Airman Certification Standards

[Private Pilot Airman Certification Standards](#)

Sporty's Learn to Fly Course

Volume 4

[Segment 10 - VOR Navigation](#)
[Segment 12 - Glass Cockpit Flight Instruments](#)
[Segment 20 - The Dual Cross-Country Flight](#)

Volume 5

[Segment 16 - Basic Instrument Flying](#)

Flight Maneuver Guide

[Navigation Systems - VOR](#)

STAGE III
LESSON 51
DUAL - CROSS-COUNTRY
DAY

DATE _____	ACFT ID _____	GRADE (Circle One) S U I
STUDENT NAME _____		STUDENT SIGNATURE _____
INSTRUCTOR # _____		INSTRUCTOR SIGNATURE _____
FLIGHT TIME: (1.5) _____		HOOD: (0.5) _____ APT IDs: _____ / _____
DISCUSSION: (0.2) _____		TOTAL IN COURSE: (D/S/G) _____ / _____ / _____

LESSON OBJECTIVE:

During this lesson, the student will be introduced to GPS navigation, ADF homing (if equipped), and operations at airports with control towers. The instructor will also review VOR navigation, dead reckoning, and pilotage procedures while performing a day cross-country. In addition, basic instrument maneuvers and autopilot operations (if equipped) will be reviewed.

CONTENT:

Lesson Review

- _____ VOR Navigation
- _____ Dead Reckoning
- _____ Pilotage
- _____ Basic Instrument Maneuvers
- _____ Autopilot Operations (if equipped)

Lesson Introduction

- _____ Airports with Control Towers
- _____ ADF Homing (if equipped)
- _____ GPS Navigation
- _____ GPS Nearest Functions

COMPLETION STANDARDS:

At the completion of this lesson, the student will be able to home to an NDB (if ADF equipped) and use VORs and GPS for navigation during a cross-country. The student will also be familiar with dead reckoning procedures, operations at airports with control towers, as well as basic instrument maneuvers. The student will have a basic understanding autopilot operations and disconnect procedures (if equipped). The student will be able to verify position within 3 nautical miles, maintain or roll out on the selected heading $\pm 15^\circ$, and maintain or level off at the selected appropriate altitude ± 200 feet.

ADDITIONAL STUDY:

Pilot's Handbook of Aeronautical Knowledge
[Chapter 16](#)

Aeronautical Information Manual
[Chapter 1-5](#)

Private Pilot Airman Certification Standards
[Private Pilot Airman Certification Standards](#)

Sporty's Learn to Fly Course
 Volume 4
[Segment 7-15, 20-21](#)

Volume 5
[Segments 1, 7, 16, 17](#)

Volume 6
[Segment 3 - Class C and B Airport Operations](#)

Flight Maneuver Guide
[Navigation Systems - VOR](#)
[Navigation Systems - GPS](#)

STAGE III
LESSON 52
SOLO - CROSS-COUNTRY
DAY

DATE_____	ACFT ID_____	GRADE (Circle One)	SP I
STUDENT NAME _____		STUDENT SIGNATURE_____	
FLIGHT TIME: (2.0) _____		APT IDs: _____ / _____	TWR FLD LDGs: (3) _____
DISCUSSION: () _____		TOTAL IN COURSE: (D/S/G) _____ / _____ / _____	

LESSON OBJECTIVE:

During this lesson, the student will complete a solo cross-country day flight of 150 nautical miles, consisting of 3 legs with full stop landings at a minimum of 3 points, one leg of the flight being at least 50 nautical miles. In addition, 3 takeoffs and landings will be completed at a tower controlled airport.

CONTENT:

Lesson Review

_____ VOR Navigation
 _____ Dead Reckoning
 _____ Pilotage

Lesson Review

_____ Lost Procedures
 _____ Planning for Alternates
 _____ ATC Communications

COMPLETION STANDARDS

The student will perform a day cross-country that is at least 150 nautical miles, consisting of 3 legs with full stop landings at a minimum of 3 points, one leg of the flight being at least 50 nautical miles. The student will have flown to a towered field and have performed 3 takeoff and landings. **Note: At least 10 solo hours, including 5 solo cross-country hours, must be completed when following this curriculum under 14 CFR part 61. Repeat this lesson as necessary to attain the applicable requirements.**

ADDITIONAL STUDY:

Pilot's Handbook of Aeronautical Knowledge

[Chapter 16](#)

Aeronautical Information Manual

[Chapter 1-5](#)

Private Pilot Airman Certification Standards

[Private Pilot Airman Certification Standards](#)

Sporty's Learn to Fly Course

Volume 4

[Review Segments as Needed](#)

Volume 5

[Review Segments as Needed](#)

Flight Maneuver Guide

[Navigation Systems - VOR](#)

STAGE III
LESSON 53
DUAL - GROUND
NIGHT FLYING

DATE _____ GRADE (Circle One) S U I
 STUDENT NAME _____ STUDENT SIGNATURE _____
 INSTRUCTOR # _____ INSTRUCTOR SIGNATURE _____
 DISCUSSION: (1.2) _____

LESSON OBJECTIVE:

During this lesson, the student will be introduced to night flying concepts.

CONTENT:

Lesson Introduction

_____ Night Flying Overview
 _____ The Eye
 _____ Applicable FARs
 _____ Night Illusions
 _____ Night Vision
 _____ Night Scanning

Lesson Introduction

_____ Aircraft Lighting
 _____ Airport Lighting
 _____ Pilot Equipment for Night Flight
 _____ Chart Use at Night
 _____ Night Flight Preparations
 _____ Night Emergencies

COMPLETION STANDARDS:

At the completion of this lesson, the student will have a knowledge of basic night flying concepts.

ADDITIONAL STUDY:

Airplane Flying Handbook
[Chapter 11](#)

Pilot's Handbook of Aeronautical Knowledge
[Chapter 17](#)

Federal Aviation Regulations
[14 CFR Aviation Regulations](#)

Aeronautical Information Manual
[Chapter 2](#)
[Chapter 4](#)
[Chapter 7](#)

Sporty's Learn to Fly Course
 Volume 4
[Segment 1 - Night Flying](#)
[Segment 2 - Air Facts: The Night Shift](#)

STAGE III
LESSON 54
DUAL - LOCAL
NIGHT

DATE _____ ACFT ID _____ GRADE (Circle One) S U I
 STUDENT NAME _____ STUDENT SIGNATURE _____
 INSTRUCTOR # _____ INSTRUCTOR SIGNATURE _____
 FLIGHT TIME: (1.0) _____ HOOD: (0.5) _____ NIGHT T/L's: (5) _____
 DISCUSSION: (0.2) _____ TOTAL IN COURSE: (D/S/G) _____ / _____ / _____

LESSON OBJECTIVE:

During this lesson, the instructor will introduce the student to night flight operations and review basic instrument flight maneuvers. The student will also perform at least 5 takeoffs and landings at night.

CONTENT:

Lesson Review

_____ Basic Instrument Maneuvers

Lesson Introduction

_____ Night Flight Operations
 _____ Night Takeoffs and Landings
 _____ Go-Around / Rejected Landing at Night
 _____ Night Emergency Procedures

COMPLETION STANDARDS:

At the completion of this lesson, the student will have a basic knowledge of instrument flight maneuvers and night flight operations. The student will maintain or roll out on the selected heading $\pm 15^\circ$ and maintain or level off at the selected appropriate altitude ± 200 feet.

ADDITIONAL STUDY:

Airplane Flying Handbook

[Chapter 11](#)

[Chapter 18](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapter 17](#)

Federal Aviation Regulations

[14 CFR Aviation Regulations](#)

Aeronautical Information Manual

[Chapter 2](#)

[Chapter 4](#)

[Chapter 7](#)

Sporty's Learn to Fly Course

Volume 4

[Segment 1 - Night Flying](#)

[Segment 2 - Air Facts: The Night Shift](#)

STAGE III
LESSON 55
DUAL - CROSS-COUNTRY
NIGHT

DATE _____	ACFT ID _____	GRADE (Circle One) S U I
STUDENT NAME _____		STUDENT SIGNATURE _____
INSTRUCTOR # _____		INSTRUCTOR SIGNATURE _____
FLIGHT TIME: (2.0) _____		HOOD: (0.5) _____ APT IDs: ____ / ____
DISCUSSION: (0.2) _____		NIGHT T/L's: (5) _____
LESSON OBJECTIVE:		TOTAL IN COURSE: (D/S/G) ____ / ____ / ____

During this lesson, the student will review VOR and GPS Navigation, ADF homing (if equipped), dead reckoning, pilotage, basic instrument maneuvers, and autopilot operations (if equipped). The student will also perform at least 5 takeoffs and landings at night.

CONTENT:

Lesson Review

_____ Night Takeoffs & Landings
 _____ VOR Navigation
 _____ ADF Homing (if equipped)
 _____ GPS Navigation
 _____ Dead Reckoning

Lesson Review

_____ Pilotage
 _____ Basic Instrument Maneuvers
 _____ Night Emergency Procedures
 _____ Autopilot Operations (if equipped)

COMPLETION STANDARDS:

The student should be able to navigate using VORs and GPS, home to an NDB (if ADF equipped), and use dead reckoning on a night cross-country flight of at least 100 NM. The student will have a basic understanding autopilot operations and disconnect procedures (if equipped). The student shall also perform at least 5 takeoffs and landings at night. The student will be able to verify position within 3 nautical miles, maintain or roll out on the selected heading $\pm 15^\circ$, and maintain or level off at the selected appropriate altitude ± 200 feet. **At the end of this lesson, the student must have completed the required 3.0 hours of dual flight instruction and 10 takeoffs and landings at night. The student must also have logged at least 3.0 hours of dual cross-country flight training en route to airports greater than 50 nautical miles from the airport where the student normally trains.**

ADDITIONAL STUDY:

Airplane Flying Handbook

[Chapter 11](#)
[Chapter 18](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapter 16](#)
[Chapter 17](#)

Aeronautical Information Manual

[Chapters 1-5, 7](#)

Private Pilot Airman Certification Standards

[Private Pilot Airman Certification Standards](#)

Sporty's Learn to Fly Course

Volume 4
[Review Segments as Needed](#)

Volume 5
[Review Segments as Needed](#)

Flight Maneuver Guide

[Navigation Systems - VOR](#)
[Navigation Systems - GPS](#)

STAGE III
LESSON 56
DUAL - LOCAL

DATE _____ ACFT ID _____ GRADE (Circle One) S U I
STUDENT NAME _____ STUDENT SIGNATURE _____
INSTRUCTOR # _____ INSTRUCTOR SIGNATURE _____
FLIGHT TIME: (1.5) _____ HOOD: (0.5) _____
DISCUSSION: (0.2) _____ TOTAL IN COURSE: (D/S/G) _____ / _____ / _____

LESSON OBJECTIVE:

During this lesson, the student will review flight maneuvers for the Private Pilot Practical Test.

CONTENT:**Lesson Review**

_____ Private Pilot Airman Certification Standards

COMPLETION STANDARDS:

The student will perform all maneuvers to the Private Pilot Airman Certification Standards.

ADDITIONAL STUDY:**Airplane Flying Handbook**

[Chapters 3, 6-10, 18](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapter 5](#)

[Chapter 6](#)

Private Pilot Airman Certification Standards

[Private Pilot Airman Certification Standards](#)

Federal Aviation Regulations

[14 CFR Aviation Regulations](#)

**STAGE III
LESSON 57
DUAL - GROUND
KNOWLEDGE TEST**

DATE _____ GRADE (Circle One) S U I
STUDENT NAME _____ STUDENT SIGNATURE _____
INSTRUCTOR # _____ INSTRUCTOR SIGNATURE _____
DISCUSSION: (1.2) _____

LESSON OBJECTIVE:

The objective of this lesson is to evaluate the students comprehension of the material presented in the Private Pilot Training Course Outline ground lessons.

CONTENT:**Lesson Review**

_____ Private Pilot Knowledge Test
_____ Pilot Qualifications
_____ Airworthiness Requirements
_____ Weather Information
_____ Cross-Country Flight Planning

Lesson Review

_____ National Airspace System
_____ Performance & Limitations
_____ Operation of Systems
_____ Human Factors
_____ Night Preparation

COMPLETION STANDARDS:

In order to complete the ground portion of the Private Pilot Training Course, the student must score at least 70% on the Private Pilot Knowledge Test.

**STAGE III
LESSON 58
DUAL - LOCAL**

DATE _____	ACFT ID _____	GRADE (Circle One) S U I
STUDENT NAME _____	STUDENT SIGNATURE _____	
INSTRUCTOR # _____	INSTRUCTOR SIGNATURE _____	
FLIGHT TIME: (1.5) _____ HOOD: (0.5) _____		
DISCUSSION: (0.2) _____ TOTAL IN COURSE: (D/S/G) _____ / _____ / _____		

LESSON OBJECTIVE:

During this lesson, the student will review flight maneuvers for the Private Pilot Practical Test.

CONTENT:**Lesson Review**

_____ Private Pilot Airman Certification Standards

COMPLETION STANDARDS:

The student will perform all maneuvers at the Private Pilot Airman Certification Standards. The student shall also be prepared for the Private Pilot Test. **At the end of this lesson, the student must have completed the required 3.0 hours of flight instruction on control and maneuvering of the airplane solely by reference to instruments.**

ADDITIONAL STUDY:**Airplane Flying Handbook**

[Chapters 1-11, 18](#)

Pilot's Handbook of Aeronautical Knowledge

[Chapters 1-17](#)

Aeronautical Information Manual

[Chapters 1-9](#)

Private Pilot Airman Certification Standards

[Private Pilot Airman Certification Standards](#)

PRE-STAGE CHECK – TIME SUMMARY

This page is intended to be used by the student's flight instructor to summarize the times accumulated through this course of instruction and determine that the times are sufficient for the stage requirements. The check instructor should verify that these times are acceptable for completion of the stage.

DATE _____ STUDENT NAME _____ STUDENT SIGNATURE _____

INSTRUCTOR # _____ INSTRUCTOR SIGNATURE _____

STAGE TOTALS

FLIGHT TIME (DUAL): _____

FLIGHT TIME (SOLO): _____

FLIGHT TIME (DUAL CROSS-COUNTRY): _____

FLIGHT TIME (SOLO CROSS-COUNTRY): _____

FLIGHT TIME (NIGHT): _____

ATD/FTD/SIM: _____

INSTRUMENT: _____ (In flight only.)

GROUND/DISCUSSION: _____ (Be sure to include the Ground Lesson times.)

COURSE TOTALS

FLIGHT TIME (DUAL): _____

FLIGHT TIME (SOLO): _____

FLIGHT TIME (DUAL CROSS-COUNTRY): _____

FLIGHT TIME (SOLO CROSS-COUNTRY): _____

FLIGHT TIME (NIGHT): _____

ATD/FTD/SIM: _____

INSTRUMENT: _____ (In flight only.)

GROUND/DISCUSSION: _____ (Be sure to include the Ground Lesson times.)

STAGE III
LESSON 59
STAGE III CHECK

DATE _____	ACFT ID _____	GRADE (Circle One) S U I
STUDENT NAME _____		STUDENT SIGNATURE _____
INSTRUCTOR # _____		INSTRUCTOR SIGNATURE _____
FLIGHT TIME: (1.2) _____		HOOD: (0.3) _____
DISCUSSION: (1.5) _____		TOTAL IN COURSE: (D/S/G) _____ / _____ / _____

LESSON OBJECTIVE:

The student shall demonstrate the knowledge and skill of a Private Pilot.

CONTENT:

Lesson Review

Preflight Preparation

- _____ Pilot Qualifications
- _____ Airworthiness Requirements
- _____ Weather Information
- _____ Cross-Country Flight Planning
- _____ National Airspace System
- _____ Performance & Limitations
- _____ Operation of Systems
- _____ Human Factors

Night Operations

- _____ Night Preparation

Preflight Procedures

- _____ Preflight Inspection
- _____ Flight Deck Management
- _____ Engine Starting
- _____ Taxiing
- _____ Before Takeoff Check

Airport Operations

- _____ Communications & Light Signals
- _____ Traffic Patterns

Lesson Review

Takeoffs, Landings & Go-Arounds

- _____ Normal Takeoff & Climb
- _____ Normal Approach & Landing
- _____ Soft-Field Takeoff & Climb
- _____ Soft-Field Approach & Landing
- _____ Short-Field Takeoff & Maximum Performance Climb
- _____ Short-Field Approach & Landing
- _____ Forward Slip to a Landing
- _____ Go-Around / Rejected Landing

Performance & Ground Reference Maneuvers

- _____ Steep Turns
- _____ Rectangular Course
- _____ S-Turns
- _____ Turns around a Point

Slow Flight & Stalls

- _____ Maneuvering during Slow Flight
- _____ Power-Off Stalls
- _____ Power-On Stalls
- _____ Spin Awareness

Continued On Next Page

Lesson Review*Basic Instrument Maneuvers*

- _____ Straight & Level Flight
- _____ Constant Airspeed Climbs
- _____ Constant Airspeed Descents
- _____ Turns to Headings
- _____ Recovery from Unusual Flight Attitudes
- _____ Radio Communications, Navigation
- _____ Systems/Facilities, & Radar Services

Navigation

- _____ Pilotage & Dead Reckoning
- _____ Navigation Systems & Radar Services
- _____ Diversion
- _____ Lost Procedures

Lesson Review*Emergency Operations*

- _____ Emergency Descents
- _____ Emergency Approach & Landing
- _____ Systems & Equipment Malfunctions
- _____ Emergency Equipment & Survival Gear

Postflight Procedures

- _____ After Landing, Parking, & Securing

COMPLETION STANDARDS:

The stage check will be completed when the student performs all required maneuvers and tasks to the Private Pilot Airman Certification Standards. Also, the instructor and student will review the 14 CFR part 61 or part 141 requirements, as applicable, for the Private Pilot Certificate and determine that the student has met all of them. After the review of the 14 CFR part 61/141 requirements is complete, the Private Pilot flight check should be scheduled.

DATE_____ ACFT ID_____ GRADE (Circle One) S U I

STUDENT NAME _____ STUDENT SIGNATURE_____

INSTRUCTOR # _____ INSTRUCTOR SIGNATURE_____

FLIGHT TIME: _____ DISCUSSION: _____

TOTAL IN COURSE: (D/S/G) ____ / ____ / ____

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RECORD OF EXTRA TRAINING

DATE_____ ACFT ID_____ GRADE (Circle One) S U I

STUDENT NAME _____ STUDENT SIGNATURE_____

INSTRUCTOR # _____ INSTRUCTOR SIGNATURE_____

FLIGHT TIME: _____ DISCUSSION: _____

TOTAL IN COURSE: (D/S/G) ____ / ____ / ____

CONTENT:

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DATE_____ ACFT ID_____ GRADE (Circle One) S U I

STUDENT NAME _____ STUDENT SIGNATURE_____

INSTRUCTOR # _____ INSTRUCTOR SIGNATURE_____

FLIGHT TIME: _____ DISCUSSION: _____

TOTAL IN COURSE: (D/S/G) ____ / ____ / ____

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RECORD OF EXTRA TRAINING

DATE_____ ACFT ID_____ GRADE (Circle One) S U I

STUDENT NAME _____ STUDENT SIGNATURE_____

INSTRUCTOR # _____ INSTRUCTOR SIGNATURE_____

FLIGHT TIME: _____ DISCUSSION: _____

TOTAL IN COURSE: (D/S/G) ____ / ____ / ____

CONTENT:

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RECORD OF EXTRA TRAINING

DATE_____ ACFT ID_____ GRADE (Circle One) S U I

STUDENT NAME _____ STUDENT SIGNATURE_____

INSTRUCTOR # _____ INSTRUCTOR SIGNATURE_____

FLIGHT TIME: _____ DISCUSSION: _____

TOTAL IN COURSE: (D/S/G) ____ / ____ / ____

CONTENT:

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RECORD OF EXTRA TRAINING

DATE _____ ACFT ID _____ GRADE (Circle One) S U I

STUDENT NAME _____ STUDENT SIGNATURE _____

INSTRUCTOR # _____ INSTRUCTOR SIGNATURE _____

FLIGHT TIME: _____ DISCUSSION: _____

TOTAL IN COURSE: (D/S/G) _____ / _____ / _____

CONTENT:

[illegible][illegible]

RECORD OF EXTRA TRAINING

DATE_____ ACFT ID_____ GRADE (Circle One) S U I

STUDENT NAME _____ STUDENT SIGNATURE_____

INSTRUCTOR # _____ INSTRUCTOR SIGNATURE_____

FLIGHT TIME: _____ DISCUSSION: _____

TOTAL IN COURSE: (D/S/G) ____ / ____ / ____

CONTENT:

[illegible][illegible]

RECORD OF EXTRA TRAINING

DATE_____ ACFT ID_____ GRADE (Circle One) S U I

STUDENT NAME _____ STUDENT SIGNATURE_____

INSTRUCTOR # _____ INSTRUCTOR SIGNATURE_____

FLIGHT TIME: _____ DISCUSSION: _____

TOTAL IN COURSE: (D/S/G) ____ / ____ / ____

CONTENT:

[illegible][illegible]

DATE_____ ACFT ID_____ GRADE (Circle One) S U I

STUDENT NAME _____ STUDENT SIGNATURE_____

INSTRUCTOR # _____ INSTRUCTOR SIGNATURE_____

FLIGHT TIME: _____ DISCUSSION: _____

TOTAL IN COURSE: (D/S/G) ____ / ____ / ____

[illegible][illegible]