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Revision XIII

7/21/22

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# **PRIVATE PILOT CERTIFICATION COURSE -ASEL-**

Bridgewater State University holds Pilot School Certificate No. **LY8S311Q**

Bridgewater State University is an accredited four-year degree granting institution within the state of Massachusetts higher educational system. The base of operations/business address is 111 Harrington Hall, Bridgewater, MA 02325.

The Facilities Manual is Part 1 of the Training Course Outline and meets the requirements of 14 CFR Part 141.55 (c), subsections 1-5.

Ground and Flight Course Manuals are contained in Part 2 and meet the requirements of the Training Course Outline specified in 14 CFR 141.55 (c) 6-8.



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**RECORD OF REVISIONS**

<b>REV. #</b>	<b>DATE</b>	<b>CONTENT</b>	<b>INITIAL</b>
I	2/18/09	Updates facility briefing room locations, facility diagram, and adds Asst. Chief (Ground and Flight)	
II	6/2/09	Updates table of contents, removes Jeppesen references as required ground school course material.	
III	8/17/09	Increases level of performance on Stage I and II flight lessons to meet PTS. Increases level of performance on Stage III flight lessons to exceed PTS. Clarifies requirement for number of stall maneuvers on various lessons.	
IV	10/14/09	Lesson #4 introduces power on and power off stalls (VR/IR) and lessons #5 and #15 add review of these same tasks.	
V	9/20/10	Updates subject areas and tasks on ground lessons 1 – 3, 12, 14 – 16. Corrects grammatical errors in Stage I and Stage II lessons, lesson completion standards on lessons 8/9. Updates language throughout to reflect name change from Bridgewater State College to Bridgewater State University.	
VI	7/15/13	Moves AATD lessons from stage I to stage II. Updates lessons in all stages to increase emphasis on basic VFR airmanship, ADM.	
VII	8/5/13	Reduces number of stages in course to (2). Re-aligns ground lessons to more closely parallel flight lessons. Increases emphasis on airmanship and ADM.	
VIII	12/6/16	Converts all appropriate sections to Airman Certification Standards.	
IX	1/12/18	Change of Chief Instructor/Assistant Chief Instructor(s), addition of Redbird AATD.	
X	7/10/18	Changes to Lesson content and order, addition of CPTs, Addition of 3 mandatory ground lessons and 2 CPT/AATD lessons in Flight Course	
XI	9/17/20	Change of chief instructor, updated airport diagram, facility diagram, corrected list of affected pages, adds TAA as available training aircraft, minor grammar corrections.	
XII	6/21/21	Change of Chief and Assistant Chief Instructors, addition of distance learning capability, adds satellite location, corrected list of affected pages, minor grammar corrections.	
XIII	7/21/22	Change of Assistant Chief Instructors	

**NOTE**

After inserting a revision, enter the date the revision is to be effective, and place your initials in the appropriate column. The manual holder is responsible for maintaining current revisions

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# **PRIVATE PILOT CERTIFICATION COURSE -ASEL-**

## **PART I**

# **FACILITIES MANUAL**

The Facilities Manual is Part 1 of the Training Course Outline and meets the requirements of 14 CFR Part 141.55 (c), subsections 1-5.

# PART I

## FACILITIES MANUAL

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## **Bridgewater State University Facility**

The Bridgewater State University campus located in Bridgewater, Massachusetts, is the primary business address and administrative office for this course.

## **Academics**

The academics facilities are located on the campus of Bridgewater State University, Harrington Hall, 95 Grove Street, Bridgewater, Massachusetts. Bridgewater State University may elect to conduct the academic ground courses for students at its' flight training facility, located at New Bedford Regional Airport, New Bedford, Massachusetts.

## **Distance Learning**

Bridgewater State University may deliver ground training in accordance with 14 CFR 141.53(d) utilizing internet-based tools described below.

- All courses are delivered using the Blackboard learning management system that requires a unique login to ensure identification/authorization, confidentiality, and access control. Blackboard allows out-of-class communications, attendance tracking, in-class discussion, participation, questions and answers, assignment feedback, and assessment feedback.
- Access to Blackboard is available through (4) different internet browsers.
- Blackboard monitors attendance for record-keeping compliance. Participants will be noted in their paper records to differentiate participants in the distance learning platform.
- A secure internet proctoring resource (Respondus Lockdown Browser) ensures integrity of stage exams, end-of-course and final exams.
- The Principle Operations Inspector (POI) receives a Blackboard account to allow for remote access to each course in accordance with 14 CFR 141.53(d)(2).

## **Classrooms**

Academic classes will typically be conducted in Harrington Hall in two (2) classrooms located on the ground floor of the building. Classroom 001 measures 24' by 20' and can accommodate 24 students. Classroom 002 measures 35' by 20' and can accommodate 30 students. Both classrooms contain computerized projection equipment and dry erase boards. Other rooms may be available and assigned by the University as necessary.

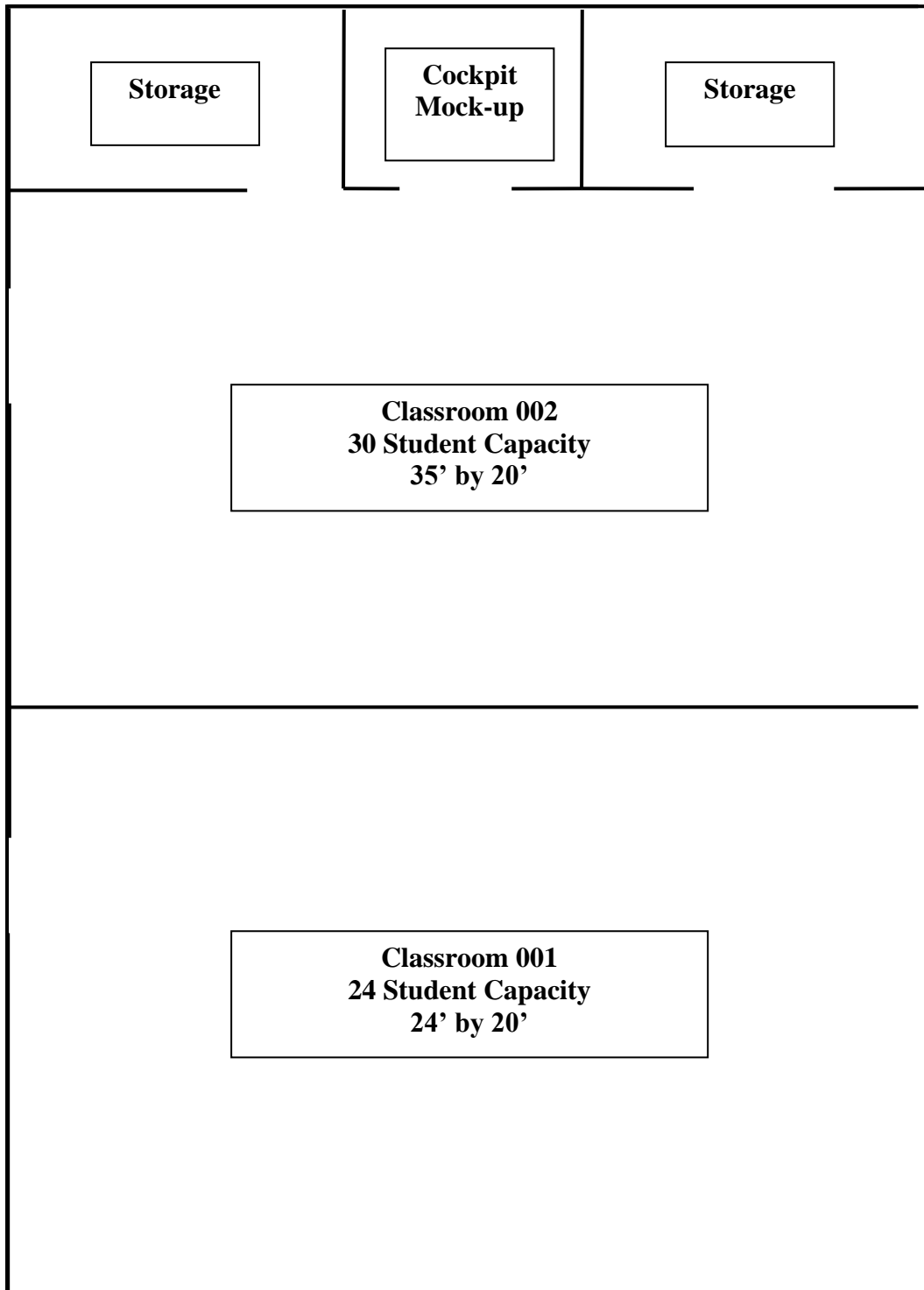
## **Ground Training Aids**

- ⊕ Overhead projector with Audio/Visual capability
- ⊕ Computer terminal including internet access
- ⊕ Video projector with DVD capability
- ⊕ Ceiling-mounted video projector unit
- ⊕ Wall-mounted dry-erase board

### **NOTE**

All classrooms and administrative areas comply with current local building, health and sanitation codes. All rooms are enclosed and easily accessible, and provide a clean instructional environment free from outside distractions.

## Bridgewater State University Classroom Diagram



## **New Bedford (KEWB) Flight Training Center**

Bridgewater State University's Aviation Training Center, located at the New Bedford Regional Airport at 1852 Shawmut Avenue, North Dartmouth, MA 02747, is the central location for all flight training activity.

### **Aircraft**

Bridgewater State University's flight training program may utilize two (2) aircraft for this course of training:

The Piper PA-28R Arrow is a four-place, single-engine, complex aircraft with dual flight controls. The aircraft is rated in the Normal category and certified for Day/Night VFR/IFR Operations. The aircraft meets the requirements of 14 CFR Part 141.39 and 141.75.

The Cessna 172 is a four-place, single-engine, non-complex aircraft with dual flight controls. The aircraft is rated in the Normal and Utility categories and is certified for Day/Night VFR/IFR Operations. The aircraft meets the requirements of 14 CFR Part 141.39 and 141.75. Two (2) of the Cessna 172 aircraft qualify as Technically Advanced Airplanes per the requirements of 14 CFR Part 61.1 and 61.129(j).

Special equipment required for the course includes a VOR receiver, LOC and GS receivers, Transponder with Mode C, and GPS.

### **AATDs**

Bridgewater State University's flight training program may utilize the following advanced aviation training devices for this course of training:

- (1) Redbird Model LD, FMX

### **CPTs**

Bridgewater State University's flight training program may utilize four (4) identical C-172R Cockpit Procedures Trainers (CPTs) for this course of training.

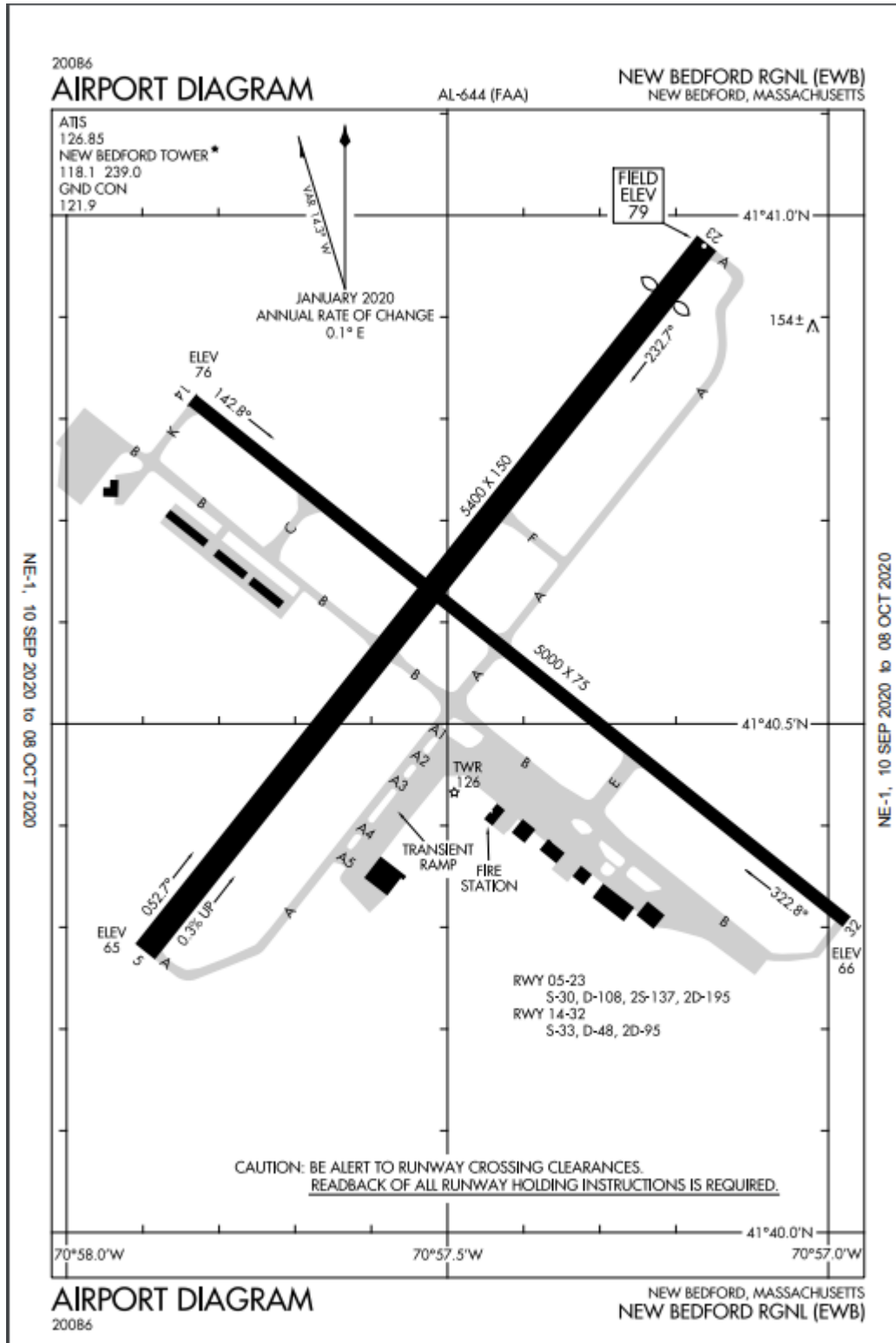
## **New Bedford Regional Airport**

The New Bedford Regional Airport (KEWB) is the main flight training center for the Bridgewater State University aviation program. KEWB contains two (2) hard-surfaced runways and meets the requirements of 14 CFR Part 141.38 for both day and night flight operations. KEWB has an operational control tower that is staffed from 0700 – 2200 local time. The airport has operable ILS, LOC, LOC/BC, and GPS approaches. Maintenance service is available from 0700 – 1700 and on call during evening and night flight operations. Fuel service is available 0700 – 2000 daily, on call at other times.

## **Training Airports**

All airports used for training operations meet the requirements of 14 CFR Part 141.38. Guidance for use of these airports is provided for flight instructors and students via the Approved Airports listing in the Bridgewater State University Aviation Operations Manual. The Chief Flight Instructor or his/her designee may approve the use of any public-use airport listed in the current Chart Supplement.

## New Bedford Regional (EWB) Airport Diagram



## **Flight Briefing Area**

The main flight briefing area is centrally located within the operations building and measures 22' by 33'. It is equipped with briefing tables, chairs, cubicles (equipped with dry erase boards), a computer-based weather information station that provides textual and graphic weather reports and forecasts, and a landline phone connecting to a FSS Briefer. The room can accommodate up to 40 persons. There is a partition between the briefing area and the AATD Rooms (described below) that when removed allows for a 44' by 33' space that can be used for large meetings.

## **AATD Room**

The Advanced Aviation Training Devices are located in a room adjacent to the Flight Briefing Area. The room measures 22' by 32'.

## **Classroom Area**

The classroom area is located at the southeast corner of the facility, and is accessible from either the main facility entrance or from the rear of the classroom on the rearward side of the building. The classroom measures 23' by 34' and accommodates up to 50 persons. The room is equipped with tables, chairs, and dry erase boards.

## **Administrative Offices**

The facility contains multiple administrative offices. Measuring 9' by 11', 9' by 14', 12' by 18', 14' by 24', 16' by 22' or 18' by 24', each can accommodate (5) to (10) persons, respectively.

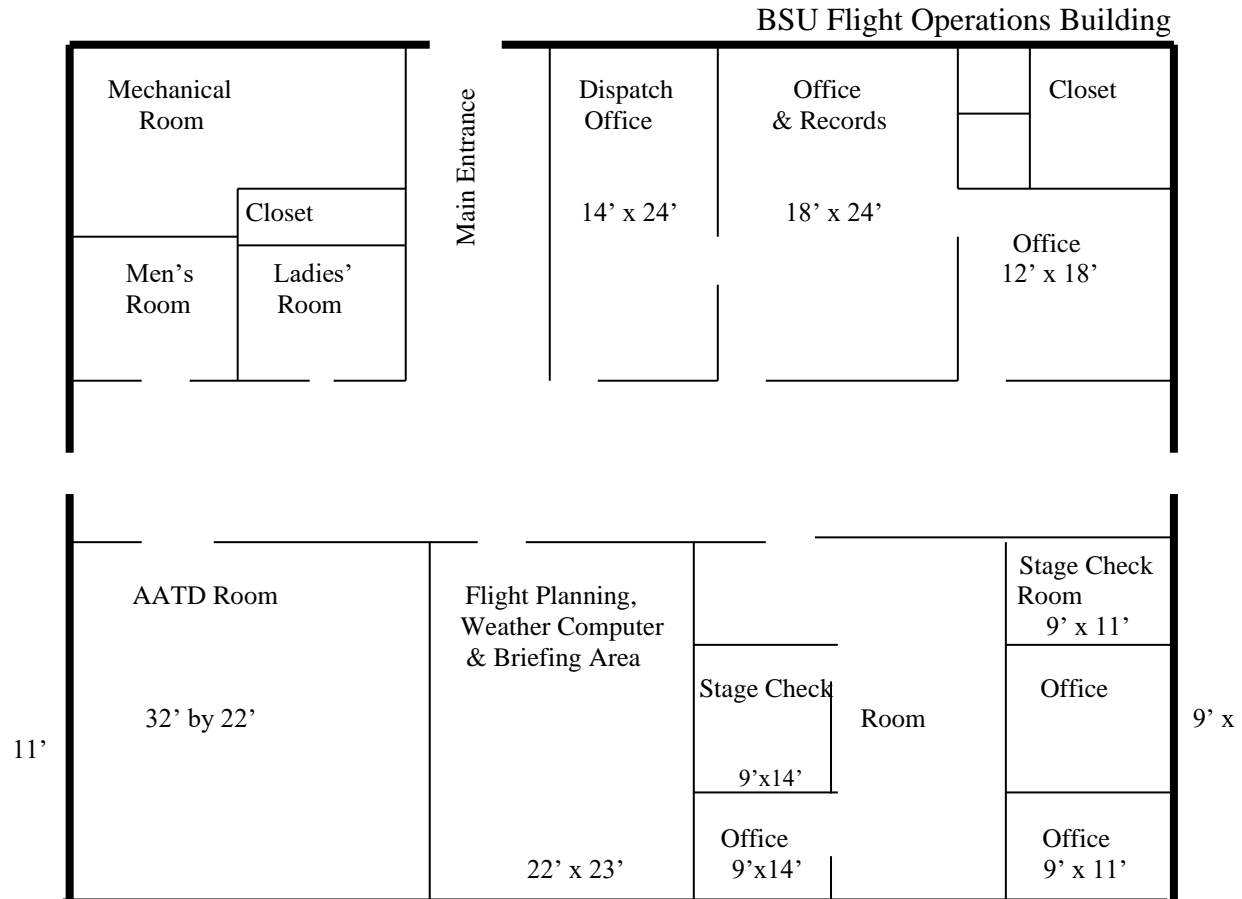
## **Ground Training Aids**

- ⊕ Overhead projector with audio/visual capability
- ⊕ Computer terminal including internet access
- ⊕ Video projector with DVD capability
- ⊕ Ceiling-mounted video projector unit
- ⊕ Wall-mounted dry-erase board
- ⊕ Aeronautical charts, publications, and aircraft components for training purposes only
- ⊕ Resource library
- ⊕ C172R Cockpit Procedures Trainers (CPT)

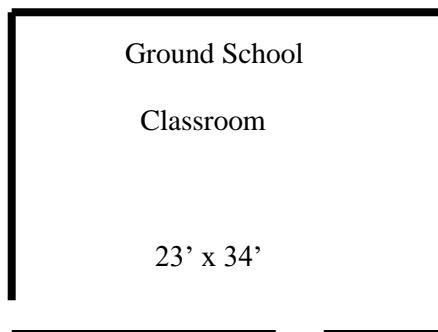
### **NOTE**

All classrooms and administrative areas comply with current local building, health and sanitation codes. All rooms are enclosed and easily accessible, and provide a clean instructional and operational environment free from outside distractions.

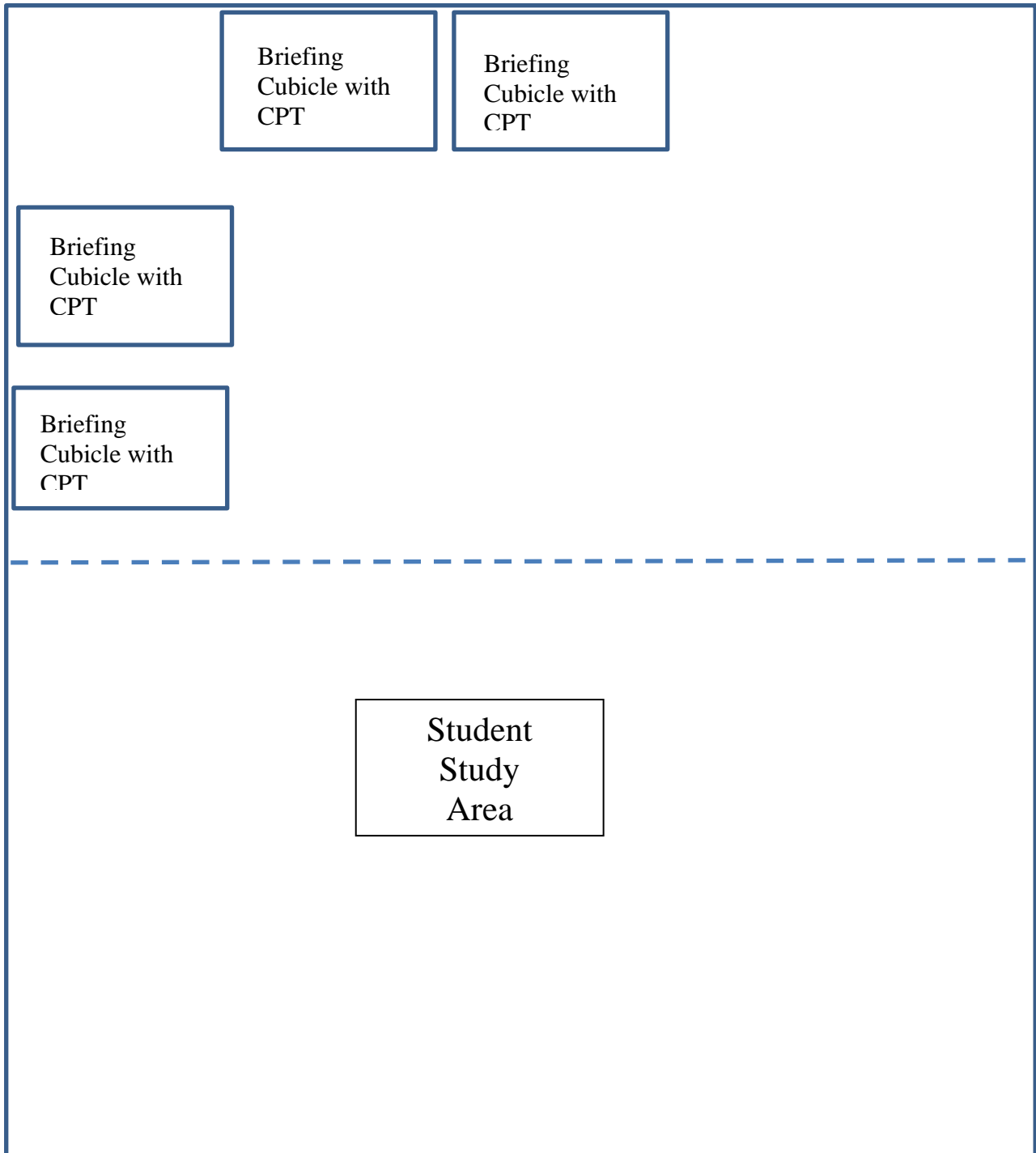
## Flight Training Center Diagram



Not to Scale



## CENTRAL BAY AREA





# **PRIVATE PILOT CERTIFICATION COURSE -ASEL-**

## **PART II COURSE MANUAL**

# PRIVATE PILOT GROUND TRAINING COURSE

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## **PERSONNEL**

### **CHIEF FLIGHT INSTRUCTOR**

The Chief Flight Instructor for this course is Tim Townsend. The Chief Flight Instructor meets the requirements of 14 CFR 141.35(e) and is designated by letter. Whenever the Chief Flight Instructor is either undesignated or unavailable, the Assistant Chief Flight Instructor will assume these duties.

### **ASSISTANT CHIEF FLIGHT INSTRUCTOR**

The Assistant Chief Flight Instructors for this course are Loren Herren, Jared Rylant and Brandyn Johnson. The Assistant Chief Flight Instructor meets the requirements of 14 CFR 141.36 (b) and is designated by letter.

### **CHIEF GROUND INSTRUCTOR**

The Chief Ground Instructor for this course is Tim Townsend. The Chief Ground Instructor meets the requirements of 14 CFR 141.35(e) and is designated by letter. Whenever the Chief Ground Instructor is either undesignated or unavailable, the Assistant Chief Flight Instructor will assume these duties.

### **ASSISTANT CHIEF GROUND INSTRUCTOR**

The Assistant Chief Ground Instructor for this course is Loren Herren. The Assistant Chief Ground Instructor meets the requirements of 14 CFR 141.35(e) and is designated by letter.

### **GROUND INSTRUCTORS**

Each Ground Instructor assigned to this course must possess a valid Ground Instructor Certificate or a valid Flight Instructor Certificate with an Airplane rating. Other individuals may give instruction in this course if the Chief Flight Instructor finds that individual qualified to provide instruction. The instruction will be provided under the direct supervision of the Chief Instructor who is present at the facility when such instruction is given.

### **FLIGHT INSTRUCTORS**

Each Flight Instructor assigned to this course must possess a valid Flight Instructor Certificate with an Airplane rating, and a valid Commercial Pilot certificate.

## **STUDENT INFORMATION**

### **COURSE ENROLLMENT**

To be eligible for enrollment in this course, students must be enrolled either as full-time degree-seeking students or as non-degree seeking students at Bridgewater State University, be of at least 16 years of age and be in possession of at least an FAA Third Class Medical Certificate. Additionally, they must have received or have submitted an application for an FAA Student Pilot Certificate.

### **COMPLETION STANDARDS FOR GRADUATION**

To be eligible for graduation from this course, students must be able to read, speak, write, and understand the English language, and satisfactorily complete all ground and flight training tasks and lessons in this syllabus. Students will demonstrate through oral and written exams and flight tests the knowledge and skill requirements needed to pass the FAA Private Pilot Airman Knowledge Test and Practical Test.

### **LESSON DESCRIPTION AND STAGES OF TRAINING**

The Bridgewater State University Private Pilot Course (ground) contains two (2) stages and a total of 21 lessons. The Flight portion of the course contains three (3) stages and 26 total lessons. Each lesson is fully described within the syllabus and includes objectives, completion standards, and measurable units of accomplishment. Stage objectives and completion standards are provided at the beginning of each stage within the syllabus.

### **TESTS AND STAGE CHECKS**

The syllabus incorporates stage checks and end-of-course tests in accordance with CFR Part 141, Appendix B. The Chief Flight Instructor is responsible for ensuring that each student accomplishes the required stage checks and end-of-course tests in accordance with Bridgewater State University's approved training course. The Chief Flight Instructor may delegate authority for stage checks and end-of-course tests to a Check Instructor.

## **COURSE INTRODUCTION**

The Bridgewater State University Private Pilot Course coordinates academic study assignments and flight training required for pilots learning to operate in a complex aviation environment. New subject matter is introduced during the ground lessons in multimedia formats, including but not limited to:

1. FAA Private Pilot Airman Certification Standards
2. Federal Aviation Regulations
3. Aeronautical Information Manual
4. FAA Pilot's Handbook of Aeronautical Knowledge
5. FAA Risk Management Handbook
6. FAA Airplane Flying Handbook
7. FAA AC 00-45 Aviation Weather
8. FAA AC 00-6 Aviation Weather Services
9. Appropriate Pilot's Operating Handbook
10. Appropriate BSU Flight Standards Manual
11. E6B Flight Computer and Manual
12. Current Chart Supplement
13. Current VFR Navigation Charts
14. Multi-media presentations
15. Instructor/student discussions
16. Knowledge quizzes and written exams

Whenever possible and practical, ground lessons are completed in ground school just prior to the respective flight lessons outlined in the syllabus. Bridgewater State University may elect to present all of the ground lessons before the student is introduced to the airplane. If a significant amount of time lapses between ground and flight lessons, instructors are expected to conduct review training of essential material to ensure that the student has retained and can apply the previous material. Flight lessons should not be conducted until the related ground lesson has been completed.

In accordance with established FAA practices, this syllabus utilizes the building-block theory of learning, where each item taught must be presented on the basis of previously learned knowledge and skills. It is designed to coordinate academic support materials with the flight lessons.

### **COURSE ELEMENTS**

The Bridgewater State University Private Pilot-Airplane Course is designed to be conducted as a combined ground and flight training program, but it may be divided into separate components. This course includes the most current FAA pilot certification requirements. The syllabus and support materials provide necessary information and present the course in a logical manner.

## **GROUND TRAINING**

In accordance with FAR Part 141, ground school training is an integral part of pilot certification courses. The Bridgewater State University ground training syllabus has been designed to meet this requirement. This course coordinates the sequence of ground and flight events to maximize effectiveness of the academic knowledge and its application during flight events.

Lessons shall be conducted in the numerical order as listed in the ground and flight training segments of the syllabus. Flexibility for adapting to individual student needs and training situations is occasionally required, but the syllabus lesson sequence may be altered only with the prior approval of the Chief or Assistant Chief Flight Instructor. Any deviation should not disturb the course continuity or objective. Each lesson may be presented in one session or divided into multiple sessions, as necessary.

## **USING THE GROUND LESSONS**

The Bridgewater State University Private Pilot Course Ground lessons are best utilized by using all of the individual elements together in an organized approach as described in the syllabus. The syllabus contains cross-references which direct the user to the appropriate study materials for each lesson. Instructors are reminded to review the study assignment for the next lesson with their students.

## **STAGE CHECKS**

Stage exams evaluate the student's level of knowledge, risk management capability, and proficiency within a stage of training. Students must successfully complete each stage exam before progressing to the next stage. The Chief Flight Instructor is responsible for the conduct of each stage check and may designate authority for conducting the stage check to a Check Instructor, as necessary. This procedure provides close supervision of training, provides another opinion on the student's progress, and gives the Chief Flight Instructor an opportunity to evaluate training effectiveness. Minimum passing score for any written stage or final exam for the purpose of earning Part 141 credit toward the Private Pilot-Airplane certificate is 80%.

## **TEXTBOOKS/MULTI-MEDIA PRESENTATIONS**

Prior to each ground lesson, students are expected to study the assigned text(s) or other media as the primary sources for initial study and review. The texts and media contain concise explanations of the fundamental concepts and ideas and are organized in a logical building-block sequence. Study of the assigned materials prior to the scheduled lesson will improve student preparation and reduce overall training time.

# **PRIVATE PILOT-AIRPLANE GROUND COURSE**

## **COURSE OVERVIEW**

### **COURSE OBJECTIVE**

The student will obtain the knowledge, risk-management capability and proficiency necessary to meet the requirements for a Private Pilot certificate with an Airplane category rating and a single-engine land class rating.

### **COURSE COMPLETION STANDARDS**

The student must demonstrate through knowledge tests, flight tests, and appropriate records that he/she meets the knowledge, risk management and proficiency requirements necessary to obtain a Private Pilot certificate with an Airplane category rating and a single-engine land class rating.

### **TRAINING SYLLABUS**

The Bridgewater State University Private Pilot syllabus meets all curriculum requirements of 14 CFR 141, Appendix B.

### **TRAINING COURSE**

The Ground Training course contains two (2) stages and a total of nineteen (19) lessons.

# PRIVATE PILOT-AIRPLANE GROUND COURSE SYLLABUS

## **GROUND TRAINING COURSE OBJECTIVE**

The student will obtain and demonstrate knowledge and aeronautical decision-making at a level that meets or exceeds FAA Private Pilot Airman Certification Standard and which is required to pass the FAA Private Pilot Airmen Knowledge test.

## **LESSON GRADING AND COMPLETION STANDARD**

Each ground lesson is graded across three (3) elements; Knowledge (defined by the applicant's ability to demonstrate understanding of the task elements), Risk Management (defined by the applicant's ability to identify, assess and mitigate risks associated with the task) and Skill (defined by the applicant's ability to apply the skill necessary to achieve the listed objective).

## **GROUND TRAINING COMPLETION STANDARD**

The student must demonstrate through written, oral and practical examination that s/he has obtained the knowledge (defined by the applicant's ability to demonstrate understanding of the task elements), risk management ability (defined by the applicant's ability to identify, assess and mitigate risks associated with the task) and skill (defined by the applicant's ability to apply the skill necessary to achieve the listed objective).at a level that meets or exceeds FAA Private Pilot - Airplane Airman Certification Standard and which is required to pass the FAA Private Pilot (ASEL) Airmen Knowledge test.

## **ATTENDANCE**

Attendance and active participation is mandatory and failure to attend and/or participate in a scheduled event is considered an unexcused absence. Students are responsible for contacting their Ground Instructor if there is any question whether a training event will take place. (Aviation Operations Manual, Chapter 5). Any missed class time must be made up and all missed lesson items must be covered in order to complete the course, in accordance with 14 CFR Part 141.



**PRIVATE PILOT-AIRPLANE GROUND COURSE  
TIME ALLOCATION TABLE**

**STAGE I**

LESSON	SUBJECT	HOURS	
		Training	Exam
I.	Human Factors I, ADM, Risk Management	2.0	
II.	Principles of Flight, Weight and Balance	3.0	
III.	Performance and Limitations I	3.0	
IV.	Communication and Navigation	2.0	
V.	Introduction to Aircraft Systems	3.0	
VI.	Federal Aviation Regulations and Flight Operations	2.0	
VII.	Airports and Airspace	3.0	
VIII.	Intro to WX Theory, Obtaining WX Information	2.0	
IX.	Stage I Exam		2.0
Stage I Totals		20.0	2.0

**STAGE II**

LESSON	SUBJECT	HOURS	
		Training	Exam
X.	Human Factors and Aviation Physiology II	2.0	
XI.	Navigation and Flight Planning	4.0	
XII.	Airports and Airspace II, Radar and ATC Services	2.0	
XIII.	Weather Theory II, WX Patterns and Hazards	3.0	
XIV.	Obtaining Weather Information	2.0	
XV.	Principles of Flight, Weight and Balance, Stability II	3.0	
XVI.	Federal Aviation Regulations/AIM/NTSB 830	2.0	
XVII.	Aircraft Systems II	2.0	
XVIII.	Stage II Exam		2.0
XIX.	Final Exam		3.0
Stage II Totals		20.0	5.0
<b>Course Totals</b>		<b>40.0</b>	<b>7.0</b>

## **STAGE I**

### **STAGE OBJECTIVE**

The student will obtain and demonstrate the knowledge and aeronautical decision making skills necessary for safely operating the aircraft as a solo pilot in the airport environment and in the local area.

### **STAGE COMPLETION STANDARD**

This stage is complete when the student completes all oral and written quizzes and the Stage I written exam with a minimum passing score of 80%.

**STAGE I**

**GROUND LESSON 1 (2.0 hrs)**

**HUMAN FACTORS I, RISK MANAGEMENT  
AND AERONAUTICAL DECISION MAKING**

**LESSON REFERENCES**

FAA Pilot's Handbook of Aeronautical Knowledge, Ch. 16-2, 17, AIM Ch. 8, FAA Risk Management Handbook, Ch. 1 – 6.

**RECOMMENDED SEQUENCE**

1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

**LESSON OBJECTIVE**

Students will be introduced to the role of the pilot in command, the interface between human factors and aircraft operations, and the importance and process of risk assessment and decision-making during flight operations.

**CONTENT**

- \_\_\_ Responsibility and Authority of the Pilot-in-Command
- \_\_\_ Defining Risk Management
- \_\_\_ Human Behavior
- \_\_\_ Identifying Hazards and Mitigating Risk
- \_\_\_ Risk Assessment Methods
- \_\_\_ Aeronautical Decision Making
- \_\_\_ Single Pilot Resource Management

**COMPLETION STANDARDS**

Through in-class oral and/or written quizzing students will exhibit satisfactory knowledge, risk management, and skills associated with human factors, risk management and aeronautical decision making.

**STAGE I**

**GROUND LESSON 2 (3.0)**

**PRINCIPLES OF FLIGHT, WEIGHT AND BALANCE,  
STABILITY**

**LESSON REFERENCES**

FAA PHAK, Ch. 3, 4, AFH Chs. 4 – 9, BSU  
TOLD card, Aircraft POH

**RECOMMENDED SEQUENCE**

1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

**COMPLETION STANDARDS**

Through oral and/or written quizzing, students will exhibit satisfactory knowledge, risk management, and skills associated with principles of flight and weight and balance and their application during all phases of flight.

**LESSON OBJECTIVE**

Students are introduced to airfoil components and principles of flight, pilot control of the aircraft, and the importance and influence of aircraft weight and balance and stability on aircraft flight characteristics.

**CONTENT**

**PRINCIPLES OF FLIGHT**

- \_\_\_ Basic Airfoil Components
- \_\_\_ Relative Wind, Angle of Attack
- \_\_\_ Lift
- \_\_\_ Weight
- \_\_\_ Thrust
- \_\_\_ Drag
- \_\_\_ Ground Effect

**WEIGHT AND BALANCE**

- \_\_\_ Reference Datum
- \_\_\_ Weight, Arm, Moment
- \_\_\_ Center of Gravity
- \_\_\_ Proper Aircraft Loading
- \_\_\_ Load Factor

**APPLICATIONS IN FLIGHT**

- \_\_\_ Take Off and Climb
- \_\_\_ Straight and Level
- \_\_\_ Turning
- \_\_\_ Descending
- \_\_\_ Approach and Landing

**STAGE I**

**GROUND LESSON 3 (3.0)**

**PERFORMANCE AND LIMITATIONS I**

**LESSON REFERENCES**

FAA PHAK Chs. 9, 10, Aircraft POH, E6B and Flight Computer Manual

**RECOMMENDED SEQUENCE**

1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

**LESSON OBJECTIVE**

Students will be introduced to basic operation and application of manual and electronic flight computers, performance charts and weight/balance data in pre-flight planning, including weight and balance and performance calculations.

**CONTENT**

**DETERMINING AIRCRAFT**

**PERFORMANCE**

- \_\_\_ Aircraft Performance and Design
- \_\_\_ Determining Performance, FAR 91.103
- \_\_\_ Factors Affecting Performance
- \_\_\_ Density Altitude
- \_\_\_ Pressure Altitude
- \_\_\_ Takeoff and Landing Performance
- \_\_\_ Performance Chart Presentations and Use

**WEIGHT AND BALANCE**

- \_\_\_ Computing Weight and Balance
- \_\_\_ Computation Method
- \_\_\_ Table and Graph Methods

**COMPLETION STANDARDS**

During multiple scenarios students will exhibit satisfactory knowledge, risk management, and skills associated with performance and limitations, and demonstrate proper use of a manual or electronic flight computer and aircraft performance/weight and balance charts to complete a BSU TOLD card.

**STAGE I**  
**GROUND LESSON 4 (2.0)**  
**COMMUNICATION AND NAVIGATION**

**LESSON REFERENCES**

FAR Part 91, AIM Ch. 4, Pilot/Controller Glossary, Terminal Area Chart (Boston), Sectional Chart (New York), Chart Supplement

**COMPLETION STANDARDS**

Through oral and/or written quizzing students will exhibit satisfactory knowledge, risk management, and skills associated with aviation communications and navigation.

**RECOMMENDED SEQUENCE**

1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

**LESSON OBJECTIVE**

Students will be introduced to the aircraft communication and navigation equipment, communication terminology and phraseology, proper communication procedures, aeronautical charts and their use.

**CONTENT**

**COMMUNICATION**

- \_\_\_ Aircraft Communication Equipment Including ELT
- \_\_\_ Phonetic Alphabet
- \_\_\_ Phraseology and Terminology
- \_\_\_ CTAF and UNICOM
- \_\_\_ Controlled and Uncontrolled Airports
- \_\_\_ Lost Communication Procedures
- \_\_\_ Emergency Procedure

**NAVIGATION**

- \_\_\_ Coordinated Universal Time
- \_\_\_ Latitude and Longitude
- \_\_\_ Chart Legend and Symbolology
- \_\_\_ Terminal Area Charts
- \_\_\_ Sectional Charts
- \_\_\_ Chart Supplement
- \_\_\_ Paper vs. Electronic Charts
- \_\_\_ Aircraft Navigation Equipment

**STAGE I**  
**GROUND LESSON 5 (3.0)**  
**INTRODUCTION TO AIRCRAFT SYSTEMS**

**LESSON REFERENCES**

FAA PHAK, Ch. 2, 5, 6, 7, Aircraft  
Pilot's Operating Handbook

**RECOMMENDED SEQUENCE**

1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

**LESSON OBJECTIVE**

Students are introduced to the structure, components, and operation of the training airplane and its systems. The lesson shall include a full walk-around of the training aircraft.

**CONTENT**

- \_\_\_ Visual Inspection: "Walk Around"
- \_\_\_ Fuselage
- \_\_\_ Wings
- \_\_\_ Empennage
- \_\_\_ Landing Gear
- \_\_\_ Power plant/Propeller
- \_\_\_ Flight Controls and Trim
- \_\_\_ Flaps
- \_\_\_ Engine Instruments
- \_\_\_ Flight Instruments
- \_\_\_ Electrical, Fuel, Environmental
- \_\_\_ Pilot's Operating Handbook (POH)

**COMPLETION STANDARDS:**

Through oral and/or written quizzing students will exhibit satisfactory knowledge, risk management, and skills associated with the operation of aircraft systems.

**STAGE I**  
**GROUND LESSON 6 (2.0)**  
**FEDERAL AVIATION REGULATIONS**  
**AND FLIGHT OPERATIONS**

**LESSON REFERENCES**

Federal Aviation Regulations Parts 1,  
23, 43, 61, 67, 91, AIM 1 – 10, BSU  
TOLD card

**RECOMMENDED SEQUENCE**

1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

**LESSON OBJECTIVE**

Students are introduced to sections of the Federal Aviation Regulations (FARs) and Aeronautical Information Manual specific to safe Student solo, their use and importance for safe flight operations.

**CONTENT:**

- \_\_\_ Overview of 14 CFR/FARs
- \_\_\_ Part 1
- \_\_\_ Part 43 (Maintenance)
- \_\_\_ Part 61 (Airmen)
- \_\_\_ Part 67 (Medical)
- \_\_\_ Part 91 (Operating Rules)
- \_\_\_ AIM (Aeronautical Information Manual) Overview and Chapter Walk-Through

**COMPLETION STANDARDS**

Students will exhibit satisfactory knowledge, risk management, and skills associated with the type, privileges and limitations of FAA Medical Certificates and the Student Pilot Certificate, applicable FARs and sections of the AIM.



**STAGE I**

**GROUND LESSON 7 (3.0)**

**AIRPORTS AND AIRSPACE**

**LESSON REFERENCES**

FAA Pilot's Handbook of Aeronautical Knowledge, Ch. 13, 14, FAR Part 61, 71, 91, AIM Ch. 2, 3, 4-2, Ch. 5-1, 5-22, 5-7 – 10. Ch. 6, Section 4.

**COMPLETION STANDARDS**

Through oral and/or written quizzing students will exhibit satisfactory knowledge, risk management, and skills associated with airports and airspace in the national airspace system.

**RECOMMENDED SEQUENCE**

1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

**LESSON OBJECTIVE**

The student will be introduced to airport operations and the national airspace system when operating under visual flight rules as a Private Pilot.

**CONTENT**

**AIRPORTS**

- \_\_\_ Controlled and Non-controlled
- \_\_\_ Runway Layout, Airport Diagram
- \_\_\_ Airport, Runway & Taxiway Markings, Lighting, and Wind Indicators
- \_\_\_ Right of Way Rules and Collision Avoidance
- \_\_\_ Runway Incursion Avoidance
- \_\_\_ Situational Awareness
- \_\_\_ Use of Radio, Proper Communications
- \_\_\_ Compliance with ATC Instructions

**AIRSPACE**

- \_\_\_ National Airspace System
- \_\_\_ Types of Airspace/Airspace Classes, Basic Weather Minimums (emphasis on Class D, E and G Airspace)
- \_\_\_ Charting Symbolology
- \_\_\_ Operating rules, Pilot Certifications, and Aircraft Equipment for Different Types of Airspace
- \_\_\_ Special Use, Restricted, and Other Airspace
- \_\_\_ Temporary Flight Restrictions

**STAGE I**

**GROUND LESSON 8 (2.0)**

**INTRODUCTION TO WX, OBTAINING WX INFORMATION**

**LESSON REFERENCES**

Pilot's Handbook of Aeronautical Knowledge,  
Ch. 11, AIM Ch. 7, AC 00-6, AC-00-45H

**RECOMMENDED SEQUENCE**

1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

**COMPLETION STANDARDS**

Through oral and/or written quizzing students will exhibit satisfactory knowledge, risk management, and skills associated with basic weather theory, information, and applicability to flight operations

**LESSON OBJECTIVE**

Student are introduced to basic weather theory and information to be used for local flight planning.

**CONTENT**

- \_\_\_ The Atmosphere
- \_\_\_ Temperature, Pressure, Density
- \_\_\_ Atmospheric Circulation
- \_\_\_ Coriolis Force
- \_\_\_ Air Masses and Fronts
- \_\_\_ Local Wind Patterns
- \_\_\_ Atmospheric Stability
- \_\_\_ Moisture & Humidity
- \_\_\_ Dew Point
- \_\_\_ Clouds and Fog
- \_\_\_ Precipitation
- \_\_\_ PIREP
- \_\_\_ METAR
- \_\_\_ TAF
- \_\_\_ ATIS
- \_\_\_ Graphical Forecasts for Aviation (GFA Tool)

**STAGE I  
GROUND LESSON 9 (2.0)  
STAGE I EXAM**

**LESSON REFERENCES**

Lesson reference material for lessons 1 – 9.

**RECOMMENDED SEQUENCE**

1. Testing
2. Critique

**LESSON OBJECTIVE**

Students will demonstrate comprehension of the material presented in lessons 1 through 9.

**CONTENT**

**STAGE I EXAM**

- \_\_\_ Human Factors I, ADM, Risk Management
- \_\_\_ Introduction to FARs/AIM
- \_\_\_ Aircraft Systems
- \_\_\_ Principles of Flight, Weight and Balance, Stability
- \_\_\_ Performance I
- \_\_\_ Airports and Airspace
- \_\_\_ Communication and Navigation
- \_\_\_ Intro to WX/Obtaining WX Info

**COMPLETION STANDARDS**

This lesson and stage are complete when the student has completed the Stage I Exam with a minimum score of 80%.

## **STAGE II**

### **STAGE OBJECTIVE**

During this stage, the student will increase and exhibit satisfactory knowledge, risk management, and skills associated with human factors and aeronautical decision-making, aviation physiology, aircraft systems, applicable FARs (including incident/accident reporting), weather theory, patterns and hazards, how to obtain and interpret aviation weather information, and how to apply available information and resources to safely plan and execute solo and cross-country flight operations.

### **STAGE COMPLETION STANDARD**

This stage is complete when the student has demonstrated an understanding of the knowledge areas by completing the Stage II written exam with a minimum passing score of 80%.

**STAGE II**

**GROUND LESSON 10 (2.0)**

**HUMAN FACTORS AND AVIATION PHYSIOLOGY II**

**LESSON REFERENCES**

FAA Pilot's Handbook of Aeronautical Knowledge Ch. 16, 17, FAR Parts 61, 91, AIM Ch. 8

**RECOMMENDED SEQUENCE**

1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

**LESSON OBJECTIVE**

Students will gain a basic understanding of physiological factors related to aviation operations, and increase their knowledge and development of aeronautical decision making skills and risk management.

**CONTENT**

**AVIATION PHYSIOLOGY**

- \_\_\_ Fitness for Flight
- \_\_\_ Alcohol and Drugs, FAR Part 61, 91
- \_\_\_ FAR Part 67
- \_\_\_ Respiration
- \_\_\_ Hypoxia
- \_\_\_ Hyperventilation

**VISION**

- \_\_\_ Eye Physiology
- \_\_\_ Day and Night Vision & Scanning
- \_\_\_ Visual Illusions
- \_\_\_ Landing Illusions
- \_\_\_ Day vs Night Preparation

**SPATIAL DISORIENTATION**

- \_\_\_ Visual Sense
- \_\_\_ Vestibular Sense
- \_\_\_ Kinesthetic Sense
- \_\_\_ Disorientation/Illusions
- \_\_\_ Motion Sickness

**AERONAUTICAL**

**DECISION MAKING**

- \_\_\_ Risk Management Models
- \_\_\_ Applying the Decision Making Process
- \_\_\_ Communication
- \_\_\_ Single Pilot Resource Management
- \_\_\_ Workload Management
- \_\_\_ Situational Awareness

**COMPLETION STANDARDS**

Through oral and/or written quizzing students will exhibit satisfactory knowledge, risk management, and skills associated with the lesson content.

**STAGE II**  
**GROUND LESSON 11 (4.0)**  
**NAVIGATION AND FLIGHT PLANNING**

**LESSON REFERENCES**

FAA Pilot's Handbook of Aeronautical Knowledge Ch. 9, 10, 15 – 17, AIM Ch. 1, 5, Sectional Chart, TAC, VFR Plotter, Navigation Log, Aircraft POH

**RECOMMENDED SEQUENCE**

1. Lesson Introduction
2. Discussion and Practice Exercises
3. Knowledge Review

**LESSON OBJECTIVE**

Students will learn basic VFR navigation using pilotage, dead reckoning, and navigation systems, and become familiar with recommended procedures for flight planning, use of an FAA Flight Plan, VFR cruising altitudes, and lost procedures.

**CONTENT**

**PRE-FLIGHT PLANNING**

- \_\_\_ Weight-Shift Formula
- \_\_\_ Effects of Operating at High Total Weights
- \_\_\_ Flight at Various CG Locations
- \_\_\_ Route Selection
- \_\_\_ Obtaining Weather Information
- \_\_\_ Completing the Navigation Log
- \_\_\_ Filing, Opening, Amending, Closing the Flight Plan
- \_\_\_ Preflight Inspection

**FLIGHT COMPUTERS**

- \_\_\_ Mechanical Flight Computers
- \_\_\_ Electronic Flight Computers and Online Applications
- \_\_\_ Compute Time, Speed, and Distance
- \_\_\_ Compute Airspeed and Density Altitude
- \_\_\_ Compute Wind Problems
- \_\_\_ Computer Weight Problems

- \_\_\_ Conversions
- \_\_\_ Multi-Part Problems

**FLIGHT SCENARIO**

- \_\_\_ Departure
- \_\_\_ KEWB to KHYA to KPVC to KBED
- \_\_\_ Diversion to an Alternate to KPVD
- \_\_\_ Return to KEWB

**PILOTAGE AND DEAD RECKONING**

- \_\_\_ Pilotage
- \_\_\_ Dead Reckoning
- \_\_\_ Flight Planning
- \_\_\_ VFR Cruising Altitudes
- \_\_\_ Flight Plan
- \_\_\_ Lost Procedures

**VOR NAVIGATION**

- \_\_\_ VOR Operations
- \_\_\_ Ground and Airborne Equipment
- \_\_\_ Basic Procedures
- \_\_\_ VOR Orientation and Navigation
- \_\_\_ VOR Checkpoints and Test Signals
- \_\_\_ VOR Precautions
- \_\_\_ Horizontal Situation Indicator
- \_\_\_ Distance Measuring Equipment (DME)

**ADVANCED NAVIGATION EQUIP.**

- \_\_\_ VORTAC-Based Area Navigation
- \_\_\_ Global Positioning System (GPS)
- \_\_\_ Wide Area Augmentation System (WAAS)

**COMPLETION STANDARDS**

Through oral and/or written quizzing students will exhibit satisfactory knowledge, risk management, and skills associated with the lesson content.

**STAGE II**  
**GROUND LESSON 12 (2.0)**  
**AIRPORTS AND AIRSPACE II,**  
**RADAR AND ATC SERVICES**

**LESSON REFERENCES**

FAA PHAK Ch. 14, FAR 91.130 – 145,  
AIM Ch. 3, 5 (Sect 6), Sectional Chart, TAC

**RECOMMENDED SEQUENCE**

1. Lesson Introduction
2. Discussion and Practice Exercises
3. Knowledge Review

**LESSON OBJECTIVE**

Students will gain a basic understanding of the national airspace system and the services provided by various entities including radar services, automated weather services, and flight service stations.

**CONTENT**

**AIRSPACE**

- \_\_\_ Types of Airspace/Airspace Classes,  
Basic Weather Minimums (emphasis on  
Class A, B and C Airspace)
- \_\_\_ Special VFR
- \_\_\_ Emergency Air Traffic Rules
- \_\_\_ Air Defense Identification Zones
- \_\_\_ Air Intercept Procedures

**RADAR and ATC SERVICES**

- \_\_\_ Radar
- \_\_\_ Transponder Requirements
- \_\_\_ Automated Dependent Surveillance  
Broadcast (ADS-B)
- \_\_\_ FAA Radar Systems
- \_\_\_ VFR Radar Services
- \_\_\_ Automated Terminal Information Svc  
(ATIS)
- \_\_\_ Flight Service Stations

**COMPLETION STANDARD**

Through oral and/or written quizzing students will exhibit satisfactory knowledge, risk management, and skills associated with the lesson content.

**STAGE II**  
**GROUND LESSON 13 (3.0)**  
**WEATHER THEORY II,**  
**WX PATTERNS AND HAZARDS**

**LESSON REFERENCES**

Pilot's Handbook of Aeronautical Knowledge, Ch. 11, AIM Ch. 7, AC 00-6 Aviation Weather

**COMPLETION STANDARDS:**

Through oral and/or written quizzing students will exhibit satisfactory knowledge, risk management, and skills associated with the lesson content.

**RECOMMENDED SEQUENCE**

1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

**LESSON OBJECTIVE**

Students will be introduced to various weather conditions, systems, and hazardous phenomena. Students will learn how to recognize and avoid critical weather situations before and during flight, including hazards associated with thunderstorms, wind shear and wake turbulence.

**CONTENT**

**WEATHER HAZARDS**

- \_\_\_ Thunderstorms
- \_\_\_ Turbulence
- \_\_\_ Wake Turbulence
- \_\_\_ Low Level Wind Shear and Avoidance Procedures
- \_\_\_ In-Flight Wind Shear and Avoidance Procedures
- \_\_\_ Microburst
- \_\_\_ Icing
- \_\_\_ Restrictions to Visibility
- \_\_\_ Volcanic Ash



**STAGE II**  
**GROUND LESSON 14 (2.0)**  
**OBTAINING WEATHER INFORMATION II**

**LESSON REFERENCES**

FAA PHAK, Ch. 12, AIM Ch. 7, AC 00-45  
Aviation Weather Services

**RECOMMENDED SEQUENCE**

1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

**LESSON OBJECTIVE**

Students will learn how to obtain, interpret and apply advanced weather information products from a variety of text and graphic resources, and learn to recognize and plan for critical weather situations.

**CONTENT**

**FORECASTING**

- \_\_\_ Forecasting Methods
- \_\_\_ Types of Forecasts
- \_\_\_ Compiling/Processing Weather Data
- \_\_\_ Forecasting Accuracy and Limitations

**TEXTUAL REPORTS AND FORECASTS**

- \_\_\_ Radar Weather Reports
- \_\_\_ Winds & Temps Aloft Forecast (FD)
- \_\_\_ Severe Weather Reports and Forecasts
- \_\_\_ AIRMET/SIGMET/Convective SIGMET (WA/WS/WST)

**GRAPHIC WEATHER PRODUCTS**

- \_\_\_ Surface Analysis Chart
- \_\_\_ Weather Depiction Chart
- \_\_\_ Radar Summary Chart
- \_\_\_ Satellite Weather Pictures
- \_\_\_ Low-Level Significant Weather Prog
- \_\_\_ Convective Outlook Chart
- \_\_\_ Forecast Winds and Temps Aloft Chart
- \_\_\_ Volcanic Ash Frest/Dispersion Chart

**SOURCES OF WEATHER INFORMATION**

- \_\_\_ Preflight Weather Sources
- \_\_\_ In-Flight Weather Sources
- \_\_\_ Enroute Flight Advisory Service
- \_\_\_ Weather Radar Services
- \_\_\_ Automated Weather Reporting Systems

**COMPLETION STANDARDS**

Through oral and/or written quizzing students will exhibit satisfactory knowledge, risk management, and skills associated with the lesson content.

**STAGE II**  
**GROUND LESSON 15 (3.0)**  
**PRINCIPLES OF FLIGHT, WEIGHT AND BALANCE,**  
**STABILITY II**

**LESSON REFERENCES**

FAA PHAK, Ch. 3, 4, AFH Ch. 4 – 9, BSU TOLD card, Aircraft POH

**RECOMMENDED SEQUENCE**

1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

**LESSON OBJECTIVE**

Students will obtain additional and more in-depth knowledge of airfoil components and principles of flight, pilot control of the aircraft, and the importance and influence of aircraft weight and balance and stability on aircraft flight characteristics

**CONTENT**

**STABILITY**

- \_\_\_ Three Axes of Flight
- \_\_\_ Dynamic, Static, Neutral Stability
- \_\_\_ Longitudinal Stability
- \_\_\_ Lateral Stability
- \_\_\_ Directional Stability
- \_\_\_ Weight Shift and Tail-Down Force

**DRAG**

- \_\_\_ Types of Drag
- \_\_\_ Drag (Power) Curve

**PROPELLER DYNAMICS**

- \_\_\_ Basic Propeller Principles
- \_\_\_ Left-Turning Tendencies

**AERODYNAMICS**

- \_\_\_ Lift and Drag Formula
- \_\_\_ Load Factor and VG Diagram
- \_\_\_ Stall/Factors and Awareness

**COMPLETION STANDARDS**

Through oral and/or written quizzing, students will exhibit satisfactory knowledge, risk management, and skills associated with principles of flight and stability, and their application during all phases of flight.

**STAGE II  
GROUND LESSON 16 (2.0)  
FEDERAL AVIATION REGULATIONS/AIM II,  
NTSB 830**

**LESSON REFERENCES**

FARS, AIM, NTSB 830, NASA Report

**RECOMMENDED SEQUENCE**

1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

**COMPLETION STANDARDS**

Through oral and/or written quizzing students will exhibit satisfactory knowledge, risk management, and skills associated with the lesson content.

**LESSON OBJECTIVE**

The student will increase his/her knowledge of the elements of the Federal Aviation Regulations (FARs), Aeronautical Information Manual AIM, and NTSB 830 for Private Pilot cross-country flight operations.

**CONTENT**

- \_\_\_ Part 1
- \_\_\_ Part 23
- \_\_\_ Part 43
- \_\_\_ Part 61
- \_\_\_ Part 67
- \_\_\_ Part 91
- \_\_\_ Part 141
- \_\_\_ NTSB 830
- \_\_\_ NASA Report
- \_\_\_ AIM

**STAGE II**  
**GROUND LESSON 17 (2.0)**  
**AIRCRAFT SYSTEMS II**

**LESSON REFERENCES**

FAA Pilot's Handbook of Aeronautical Knowledge Ch. 2, 5, 6, 7, Aircraft POH, Aircraft MX Manual, AC 91-78

**COMPLETION STANDARDS**

Through oral and/or written quizzing students will exhibit satisfactory knowledge, risk management, and skills associated with the lesson content.

**RECOMMENDED SEQUENCE**

1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

**LESSON OBJECTIVE**

Students will be increase their knowledge of aircraft systems including normal and abnormal operation, failure indications, and basic trouble-shooting procedures, with emphasis on maintaining safe aircraft control.

**CONTENT**

**POWERPLANT & RELATED SYSTEMS**

- \_\_\_ Reciprocating Engine Operating Principles
- \_\_\_ Induction Systems
- \_\_\_ Ignition System
- \_\_\_ Fuel, Oil and Hydraulic
- \_\_\_ Environmental
- \_\_\_ Propellers
- \_\_\_ Electrical

**FLIGHT INSTRUMENTS**

- \_\_\_ Pitot-Static System and Instruments
- \_\_\_ Vacuum System and Instruments
- \_\_\_ Magnetic Compass
- \_\_\_ Primary Flight Display
- \_\_\_ Multi-Function Display

**AVIONICS**

- \_\_\_ Ground-Based Navigation
- \_\_\_ Satellite-Based Navigation
- \_\_\_ Garmin 430
- \_\_\_ Transponder
- \_\_\_ Interface with Tablet/iPad

**STAGE II**  
**GROUND LESSON 18 (2.0)**  
**STAGE II EXAM**

**LESSON REFERENCES**

Lesson reference material for lessons 13 – 19.

**RECOMMENDED SEQUENCE**

1. Testing
2. Critique

**LESSON OBJECTIVE**

Students will demonstrate comprehension of the material presented in lessons 1 through 11.

**CONTENT**

**STAGE II EXAM**

- \_\_\_ Human Factors and ADM II
- \_\_\_ Aircraft Systems II
- \_\_\_ FARs/AIM/NTSB II
- \_\_\_ Weather Theory, Patterns and Hazards
- \_\_\_ Obtaining WX Information II
- \_\_\_ Navigation and Flight Planning
- \_\_\_ Airports and Airspace II, Radar and ATC Services

**COMPLETION STANDARDS**

This lesson and stage are complete when the student has completed the Stage II Exam with a minimum score of 80%.

**STAGE II**  
**GROUND LESSON 19 (3.0)**  
**END OF COURSE FINAL EXAM**

**LESSON REFERENCES:** As previously assigned in lessons 1 - 18

**RECOMMENDED SEQUENCE:**

1. Testing
2. Critique

**LESSON OBJECTIVE:**

Students will demonstrate comprehension of the material presented in this course in preparation for the FAA Private Pilot Airmen Knowledge Test.

**CONTENT:**

\_\_Private Pilot Ground School Final Exam

**COMPLETION STANDARDS**

For Part 141 credit for completion of the course each student must complete the Private Pilot End of Course Final Exam with a minimum score of 80%.

# **PRIVATE PILOT-ASEL FLIGHT TRAINING SYLLABUS**

## **COURSE OBJECTIVES**

The student will obtain the necessary aeronautical knowledge, risk management, and skill necessary to meet FAA requirements for a private pilot certificate with an airplane category rating and single-engine land class rating.

## **LESSON GRADING AND COMPLETION STANDARDS**

Each flight lesson is graded across three (3) elements; Knowledge (defined by the applicant's ability to demonstrate understanding of the task elements), Risk Management (defined by the applicant's ability to identify, assess and mitigate risks) and Skill (defined by the applicant's ability to apply the skill necessary to achieve the listed objective).

## **COMPLETION STANDARDS**

The student must demonstrate through flight tests and school records that the aeronautical knowledge, risk management, and skill necessary to meet FAA requirements to obtain a private pilot certificate with an airplane category rating and single-engine land class rating have been met.

## **STAGE I OBJECTIVES**

During this stage the student obtains the foundation for all future aviation training. The student will become familiar with the basic knowledge, aeronautical decision-making and risk management, and physical skills required to plan and conduct safe solo flights in the training airplane in the traffic pattern and local area using visual attitude reference.

## **STAGE I COMPLETION STANDARDS**

At the completion of this stage, the student will demonstrate the acquisition of knowledge and proficiency in basic visual ground and flight maneuvers at a level that permits him/her to conduct solo aircraft operations in the traffic pattern and the local area of the home airport.

## **STAGE II OBJECTIVES**

The student gains experience with solo operations, is introduced to VFR day and night cross-country flight planning and execution, navigation, flight by reference to instruments, emergency and abnormal procedures, and the National Airspace System.

## **STAGE II COMPLETION STANDARDS**

This stage is complete when the student demonstrates through oral and flight tests and the knowledge, risk management, and skills necessary to conduct solo flights as Pilot In Command and dual VFR day and night cross-country flights as acting PIC, and complete the stage check at a level that meets or exceeds current FAA Private Pilot Airman Certification Standards.

**STAGE III OBJECTIVES**

The student will gain additional proficiency in local and cross-country solo operations in preparation for the end-of-course stage check and the FAA Practical Test.

**STAGE III COMPLETION STANDARDS**

This stage and the course are complete when the student demonstrates the knowledge, risk management, and flying skill necessary to conduct solo and dual day-VFR cross-country and local flights as Pilot In Command or acting PIC, and completes the stage check at a level that exceeds current FAA Private Pilot Airman Certification Standards.



**PRIVATE PILOT FLIGHT COURSE  
TIME ALLOCATION TABLE**

STAGE NO.	LESSON NO.	SCHD TIME	DUAL	SOLO	FLIGHT BRIEF	INST. TRAINING	AATD/CPT	STAGE CHECK		A/C TYPE
								ORAL	FLIGHT	
I	1	2.5	1.5		1.0					ASEL
I	2	2.5			0.5		1.0/1.0			CPT/AATD
I	3	2.0	1.5		0.5					ASEL
I	4	2.0	1.5		0.5					ASEL
I	5	1.5	1.0		0.5					ASEL
I	6	2.0	1.5		0.5					ASEL
I	7	2.5			0.5		1.0/1.0			CPT/AATD
I	8	1.7	1.2		0.5					ASEL
I	9	2.0	1.5		0.5					ASEL
I	10	2.0	1.5		0.5					ASEL
	GRD A	2.0								GROUND
	GRD B	2.0								GROUND
I	11	3.5	1.5		0.5			2.0	1.5	ASEL
II	12	1.5	0.5	0.5	0.5					ASEL
II	13	2.0	0.0	1.0	1.0					ASEL
II	14	2.0	2.0		0.5	0.5	1.5/0			AATD
	15A	2.0								GROUND
II	15B	2.0	1.5		0.5	0.4				ASEL
II	16	2.0 X-C	1.5		0.5	0.3				ASEL
II	17	2.0 Night	1.5		0.5	0.3				ASEL
II	18	3.2 NT x-c	2.2		1.0	0.3				ASEL
II	19	2.5 D/N Opt	1.5		1.0	0.3				ASEL
II	20	3.5	1.5		0.5	0.4		2.0	1.5	ASEL
III	21	2.0	0.0	1.5	0.5					ASEL
III	22	2.5 x-c	2.0		0.5	0.3				ASEL
III	23	2.5 x-c	0.0	2.0	0.5					ASEL
III	24	2.0	1.5		0.5	0.3				ASEL
III	25	2.0	1.5		0.5					ASEL
III	26	4.0	1.7		0.5	0.4		2.0	2.0	ASEL
<b>Totals</b>			<b>31.6</b>	<b>5.0</b>	<b>15.0</b>	<b>3.5</b>	<b>3.5/2.0</b>	<b>6.0</b>	<b>5.0</b>	
MINIMUM COURSE HOURS										
			DUAL	SOLO	DUAL XC	DUAL NIGHT	INSTRUMENT TRNG AIRPLANE			
			<b>31.6</b>	<b>5.0</b>	<b>5.7</b>	<b>3.0</b>	<b>3.0</b>			

**NOTE**

**INSTRUCTORS SHALL PROVIDE A FULL PRE AND POST-FLIGHT BRIEFING FOR EVERY FLIGHT TRAINING EVENT.**

**A MINIMUM 15 minutes pre-flight plus 15 minutes post-flight (.5 total) is expected.**

# STAGE I

## **STAGE I OBJECTIVE**

During this stage the student obtains the foundation for all future aviation training. The student will become familiar with the basic knowledge, risk management, and skills required to plan and conduct safe solo flights in the training airplane in the traffic pattern and local area using visual attitude reference.

## **STAGE I COMPLETION STANDARD**

At the completion of this stage, the student will demonstrate the acquisition of knowledge and proficiency in basic visual ground and flight maneuvers at a level that permits him/her to conduct solo aircraft operations in the traffic pattern and the local area of the home airport.

**STAGE I  
FLIGHT LESSON 1  
DUAL — LOCAL TO AN AIRPORT**

- A. Preflight Briefing
- B. Flight Lesson
- C. Post-flight Briefing and Critique

**LESSON OBJECTIVE**

The student is introduced to the training airplane, aeronautical decision making, and the knowledge, planning and procedures required for a safe flight. The instructor will demonstrate knowledge of basic aircraft ground and flight operation, human factors, and risk management during flight by visual reference. The student shall perform tasks as designated by the instructor.

**CONTENT**

**INTRODUCTION**

- \_\_\_ Human Factors
- \_\_\_ Preflight Assessment (Pilot Assmt)
- \_\_\_ Pilot Qualifications
- \_\_\_ Airworthiness Requirements
- \_\_\_ Operation of Flight Controls
- \_\_\_ Preflight Assessment (walk-around)
- \_\_\_ Engine Starting
- \_\_\_ Radio Communications
- \_\_\_ Cockpit Management
- \_\_\_ Taxiing
- \_\_\_ Before Takeoff Check
- \_\_\_ Normal Takeoff and Climb
- \_\_\_ Climbing and Descending
- \_\_\_ Straight-and-Level
- \_\_\_ Level Turns Right and Left
- \_\_\_ Speed Transitions in Level Flight
- \_\_\_ Coordination Exercise
- \_\_\_ Use of Trim
- \_\_\_ Normal Approach and Landing
- \_\_\_ Postflight Procedures

**COMPLETION STANDARDS**

The student will demonstrate and apply knowledge of basic aircraft ground and flight operation, ADM and human factors, and risk management during flight by visual reference. The student will conduct the takeoffs and landings with instructor assistance.

DATE: __/__/__	DUAL: ____	BRIEF: ____
_____ STUDENT NAME AND SIGNATURE		
_____ CFI NAME, SIGNATURE, CFI # & EXPIRATION DATE		
_____ ROUTE, LANDINGS & LOCATION(S)		
<b>Lesson Grade</b> ____		

**STAGE I  
FLIGHT LESSON 2  
DUAL — PROCEDURES TRAINER AND AATD**

- A. Preflight Briefing
- B. Flight Lesson
- C. Post-flight Briefing and Critique

**LESSON OBJECTIVE**

The student will demonstrate knowledge of flows, checklists and procedures in the Procedures Trainer and subsequently in the controlled dynamic environment of the AATD.

**CONTENT  
REVIEW**

- \_\_\_ Preflight Assessment (walk-around)
- \_\_\_ Engine Starting
- \_\_\_ Radio Communications
- \_\_\_ Cockpit Management

**INTRODUCTION**

**PT:**

- \_\_\_ Before Start Flow/Checklist
- \_\_\_ Engine Start Procedures/Checklist
- \_\_\_ Taxi Flow/Checklist
- \_\_\_ Before Takeoff Flow/Checklist
- \_\_\_ Takeoff Flow/Checklist
- \_\_\_ Climb Flow/Checklist
- \_\_\_ Cruise Flow/Checklist
- \_\_\_ Descent Flow/Checklist
- \_\_\_ Before Landing Flow/Checklist
- \_\_\_ After Landing Flow/Checklist
- \_\_\_ Shutdown Flow/Checklist
- \_\_\_ Pre-Maneuver Flow/Checklist

**AATD:**

- \_\_\_ Before Start Flow/Checklist
- \_\_\_ Engine Start Procedure/Checklist
- \_\_\_ Taxi Flow/Checklist
- \_\_\_ Before Takeoff Flow/Checklist
- \_\_\_ Takeoff Flow/Checklist
- \_\_\_ Climb Flow/Checklist
- \_\_\_ Cruise Flow/Checklist
- \_\_\_ Descent Flow/Checklist
- \_\_\_ Before Landing Flow/Checklist
- \_\_\_ After Landing Flow/Checklist
- \_\_\_ Shutdown Flow/Checklist
- \_\_\_ Radio/ATC Communications
- \_\_\_ Taxi Procedures

**COMPLETION STANDARDS:**

The student will display competency and proficiency in the performance of flows and checklists both in the Procedures Trainer and the AATD. The student must demonstrate sufficient procedural knowledge and smooth performance in both environments so that operation in the aircraft will be efficient and consistent.

DATE: \_\_\_/\_\_\_/\_\_\_      DUAL: \_\_\_    BRIEF: \_\_\_

\_\_\_\_\_  
STUDENT NAME / SIGNATURE

\_\_\_\_\_  
CFI NAME / SIGNATURE / CFI # & EXP.

**Lesson Grade** \_\_\_\_\_

**STAGE I  
FLIGHT LESSON 3  
DUAL — LOCAL**

- A. Preflight Briefing
- B. Flight Lesson
- C. Post-flight Briefing and Critique

**LESSON OBJECTIVE**

The student will increase knowledge, skill and risk-management ability for all tasks. The flight will include a minimum (4) takeoffs and landings. *Emphasize VISUAL attitude flying, use of checklist flows, and correct see & avoid procedures.*

**CONTENT**

**REVIEW**

- \_\_\_ Review of Previous Lesson
- \_\_\_ Outcome/Goals
- \_\_\_ Preflight Assessment (Pilot Assmt)
- \_\_\_ Airworthiness Requirements
- \_\_\_ Preflight Assessment
- \_\_\_ Engine Starting
- \_\_\_ Radio Communications
- \_\_\_ Cockpit Management
- \_\_\_ Before Takeoff Check
- \_\_\_ Normal Takeoff and Climb
- \_\_\_ Climbing and Descending
- \_\_\_ Straight-and-Level
- \_\_\_ Level Turns Right and Left
- \_\_\_ Speed Transitions in Level Flight
- \_\_\_ Coordination Exercise
- \_\_\_ Use of Trim
- \_\_\_ Normal Approach and Landing
- \_\_\_ Postflight Procedures
- \_\_\_ Flows/Checklists/Briefings

**INTRODUCTION**

- \_\_\_ Obtaining a FSS Weather Briefing
- \_\_\_ National Airspace System
- \_\_\_ Performance and Limitations
- \_\_\_ Go/No Go Decision Making
- \_\_\_ Maneuvering During Slow Flight
- \_\_\_ Power Off Stall (Imminent & Full)
- \_\_\_ Departure/Power On Stall (Imm & Full)
- \_\_\_ Turning Stall (Imminent)
- \_\_\_ Traffic Patterns
- \_\_\_ Go-Around/Rejected Landing

**COMPLETION STANDARDS**

The student will display increased proficiency in aircraft ground and flight operations. Landings will be performed with instructor assistance as needed. The student will work towards maintaining altitude  $\pm 100'$  and heading  $\pm 10^\circ$  during flight, and demonstrate increased proficiency with flight by visual reference.

<b>DATE:</b> ___/___/___	<b>DUAL:</b> ___ <b>BRIEF:</b> ___
_____ <b>STUDENT NAME / SIGNATURE</b>	
_____ <b>CFI NAME / SIGNATURE / CFI # &amp; EXP.</b>	
_____ <b>ROUTE OF FLIGHT</b>	
_____ <b>LANDINGS &amp; LOCATION:</b>	
_____ <b>Lesson Grade</b>	

**STAGE I  
FLIGHT LESSON 4  
DUAL — LOCAL**

- A. Preflight Briefing
- B. Flight Lesson
- C. Post-flight Briefing and Critique

**LESSON OBJECTIVE**

The student will be introduced to ground reference maneuvers They will increase knowledge, skill and risk-management ability for all tasks. The flight will include a minimum (4) takeoffs and landings.

*Emphasize VISUAL attitude flying, use of checklist flows, and correct see & avoid procedures.*

**CONTENT  
REVIEW**

- \_\_\_ Review of Previous Lesson Outcome/Goals
- \_\_\_ Obtaining a FSS Weather Briefing
- \_\_\_ Go/No Go Decision Making
- \_\_\_ PIC Authority and Responsibility
- \_\_\_ Maneuvering During Slow Flight
- \_\_\_ National Airspace System
- \_\_\_ Power Off Stall
- \_\_\_ Power On Stall
- \_\_\_ Turning Stall
- \_\_\_ Go-Around/Rejected Landing
- \_\_\_ Normal Landing
- \_\_\_ Traffic Patterns
- \_\_\_ Postflight Procedures
- \_\_\_ Flows/Checklists/Briefings

**INTRODUCTION**

- \_\_\_ Sys. and Eqpmt Malfunctions
- \_\_\_ Rectangular Course
- \_\_\_ Turns Around a Point
- \_\_\_ S-Turns
- \_\_\_ Forward Slip to a Landing

**COMPLETION STANDARDS**

The student will display increased knowledge and proficiency on all tasks and maneuvers by visual reference and perform take offs without instructor assistance, and landings with instructor assistance as necessary. Altitudes will be maintained +/- 100', headings +/- 10<sup>0</sup>, and +10/-5 knots of specified airspeed.

DATE: __/__/__	DUAL: ____	BRIEF: ____
_____ STUDENT NAME / SIGNATURE		
_____ CFI NAME / SIGNATURE / CFI # & EXP.		
_____ ROUTE OF FLIGHT		
LANDINGS & LOCATION: _____		
<b>Lesson Grade</b> ____		

**STAGE I  
FLIGHT LESSON 5  
DUAL — LOCAL TO AN AIRPORT**

- A. Preflight Briefing
- B. Flight Lesson
- C. Post-flight Briefing and Critique

**LESSON OBJECTIVE**

The student will be introduced to steep turns and emergency procedures and increase knowledge, skill and risk-management ability for all tasks. The introduction of Emergency Approach and Landing will be introduced with an emphasis on energy management. *Emphasize VISUAL attitude flying, use of checklist flows, and correct see & avoid procedures.*

**CONTENT**

**REVIEW**

- \_\_\_ Review of Previous Lesson
- \_\_\_ Outcome/Goals
- \_\_\_ Pilot Qualifications
- \_\_\_ Airworthiness Requirements
- \_\_\_ Performance and Limitations
- \_\_\_ Obtain a FSS Weather Briefing
- \_\_\_ Preflight Assessment
- \_\_\_ Normal and/or Crswd Take Off
- \_\_\_ Power-Off Stall (Full)
- \_\_\_ Power-On Stall (Full)
- \_\_\_ Sys. and Eqpmt Malfunctions (Fuel)
- \_\_\_ Normal and/or Crswd Landing
- \_\_\_ Post-flight Procedures
- \_\_\_ Flows/Checklists/Briefings

**INTRODUCTION**

- \_\_\_ Steep Turns
- \_\_\_ Emergency Procedures
- \_\_\_ Emerg. Appch and Ldg to Runway
- \_\_\_ Emergency Appch to Ldg (Simulated, Off-Airport)
- \_\_\_ Crosswind Takeoff and Climb
- \_\_\_ Crosswind Approach and Landing

**COMPLETION STANDARDS**

The student will display increased knowledge and proficiency on all review tasks and maneuvers, have flown to and landed at an airport other than the home airport, and perform take offs and landings with minimal instructor assistance. Altitudes will be maintained +/- 100', headings +/- 10<sup>0</sup>, and +10/-5 knots of specified airspeed.

DATE: ___/___/___	DUAL: _____ BRIEF: _____
STUDENT NAME / SIGNATURE _____	
CFI NAME / SIGNATURE / CFI # & EXP. _____	
ROUTE OF FLIGHT _____	
LANDINGS & LOCATION: _____	
<b>Lesson Grade</b> _____	

**STAGE I  
FLIGHT LESSON 6  
DUAL — LOCAL**

- A. Preflight Briefing
- B. Flight Lesson
- C. Post-flight Briefing and Critique

**LESSON OBJECTIVE**

This lesson will be a progress check of the student's skill set in performing the maneuvers required for solo flight. The student will conduct a minimum (3) takeoffs and landings. *Emphasize VISUAL attitude flying, use of checklist flows, and correct see & avoid procedures.*

**CONTENT  
REVIEW**

- \_\_\_ Ground lesson A complete
- \_\_\_ Maneuvering During Slow Flight
- \_\_\_ Power Off Stall (Imminent & Full)
- \_\_\_ Departure/Power On Stall (Imm & Full)
- \_\_\_ Turning Stall (Imminent)
- \_\_\_ Traffic Patterns
- \_\_\_ Go-Around/Rejected Landing
- \_\_\_ Sys. and Eqpmt Malfunctions
- \_\_\_ Rectangular Course
- \_\_\_ Turns Around a Point
- \_\_\_ S-Turns
- \_\_\_ Forward Slip to a Landing
- \_\_\_ Steep Turns
- \_\_\_ Emergency Procedures
- \_\_\_ Emerg. Appch and Ldg
- \_\_\_ Crosswind Takeoff and Climb
- \_\_\_ Crosswind Approach and Landing
- \_\_\_ Flows/Checklists/Briefings

**COMPLETION STANDARDS**

The student will demonstrate increased knowledge and proficiency in all tasks flying by visual reference, complete takeoffs, landings, and go-arounds **without instructor assistance**, and maintain altitudes +/- 100', headings +/- 10<sup>0</sup>, and airspeeds +/- 10 kts.

DATE: ___/___/___	DUAL: _____ BRIEF: _____
STUDENT NAME / SIGNATURE _____	
CFI NAME / SIGNATURE / CFI # & EXP. _____	
ROUTE OF FLIGHT _____	
LANDING & LOCATION: _____	
Lesson Grade _____	



**STAGE I  
FLIGHT LESSON 7  
DUAL — PROCEDURES TRAINER AND AATD**

- A. Preflight Briefing
- B. Flight Lesson
- C. Post-flight Briefing and Critique

**LESSON OBJECTIVE**

The student will demonstrate knowledge and improve proficiency in Emergency Procedures, using the Procedures Trainer, and the ability to enter the traffic pattern and deal with dynamic changes to traffic patterns at both controlled and uncontrolled airports, using the AATD.

**CONTENT**

**REVIEW – PT**

- \_\_\_ C-172 FSM Emergency Procedures
- \_\_\_ C-172 FSM Abnormal Procedures

**REVIEW -- AATD**

- \_\_\_ Depart Class D airport for Practice Area
- \_\_\_ Collision Avoidance Procedures
- \_\_\_ Comms and ATC Light Signals
- \_\_\_ Awareness of Class D airspace
- \_\_\_ Selected Stage 1 Maneuvers (optional)
- \_\_\_ Sys. and Eqpmt Malfunctions
- \_\_\_ Ground Reference Maneuver
- \_\_\_ Stall (Power-Off or Power On)
- \_\_\_ Flows/Checklists/Briefings

**INTRODUCTION – AATD**

- \_\_\_ Diverting to another airport (with and without GPS)
- \_\_\_ Entry to traffic pattern at uncontrolled airport
- \_\_\_ Radio communications at Class D airports
- \_\_\_ Radio communications at uncontrolled airports
- \_\_\_ Runway change at Class D airport
- \_\_\_ Pattern entry change at Class D airport
- \_\_\_ Loss of comm. at a Class D airport
- \_\_\_ In-Flight Partial Power Loss

**COMPLETION STANDARDS**

The student will display competency and proficiency in the performance of flows and checklists both in the Procedures Trainer and the AATD. The student must demonstrate sufficient procedural knowledge and smooth performance in both environments so that operation in the aircraft will be efficient and consistent.

DATE: ___/___/___	DUAL: ____ BRIEF: ____
_____ STUDENT NAME / SIGNATURE	
_____ CFI NAME / SIGNATURE / CFI # & EXP.	
_____ ROUTE OF FLIGHT	
LANDINGS & LOCATION: _____	
Lesson Grade _____	

**STAGE I  
FLIGHT LESSON 8  
DUAL — LOCAL TO AN AIRPORT**

- A. Preflight Briefing
- B. Flight Lesson
- C. Post-flight Briefing and Critique

**LESSON OBJECTIVE**

The student will continue to increase knowledge, skill and risk management ability for all tasks. The flight will be to an airport other than the home airport with a landing. *Emphasize VISUAL attitude flying, use of checklist flows, and correct see & avoid procedures.*

**CONTENT  
REVIEW**

- \_\_\_ Review of Previous Lesson Outcome/Goals
- \_\_\_ Obtain a FSS Weather Briefing Performance and Limitations
- \_\_\_ Preflight Assessment (Aircraft)
- \_\_\_ Comms and Light Gun Signals
- \_\_\_ Taxiing
- \_\_\_ Traffic Patterns
- \_\_\_ Use of Trim
- \_\_\_ Maneuvering During Slow Flight
- \_\_\_ Power Off Stall (Imminent & Full)
- \_\_\_ Departure/Power On Stall (Imm & Full)
- \_\_\_ Diverting to another airport (with and without GPS)
- \_\_\_ Entry to traffic pattern at uncontrolled airport
- \_\_\_ Forward Slip to a Landing
- \_\_\_ Go-Around/Rejected Landing
- \_\_\_ Emergency Approach and Landing
- \_\_\_ Postflight Procedures
- \_\_\_ Flows/Checklists/Briefings

**INTRODUCTION**

- \_\_\_ Secondary Stall (demonstration)
- \_\_\_ Accelerated Stall (demonstration)
- \_\_\_ Systems & Eqpmt Malfnctn (Trim)

**COMPLETION STANDARDS**

The student will have flown to an airport other than the home airport, demonstrate increased knowledge, skill and risk management for all listed tasks, conduct the listed tasks and a minimum (4) takeoffs and landings with no instructor assistance, maintaining altitude +/- 100', headings +/- 10°, and airspeed +/- 10 knots. At least one full stop and taxi back must be conducted at an airport other than the home airport.

DATE: ___/___/___	DUAL: _____ BRIEF: _____
_____	
STUDENT NAME / SIGNATURE	
_____	
CFI NAME / SIGNATURE / CFI # & EXP.	
_____	
ROUTE OF FLIGHT	
_____	
LANDING & LOCATION: _____	
Lesson Grade _____	

**STAGE I  
FLIGHT LESSON 9  
DUAL — LOCAL TO AN AIRPORT**

- A. Preflight Briefing
- B. Flight Lesson
- C. Post-flight Briefing and Critique

**LESSON OBJECTIVE**

The student will continue to increase knowledge, proficiency and decision-making in the listed maneuvers and procedures. The flight will be to an airport other than the home airport with a landing. The preflight review shall consist of an assessment of the student's aircraft systems knowledge appropriate to pre-solo flight. Ground review will be conducted as necessary

**CONTENT  
REVIEW**

- \_\_\_ Review of Previous Lesson
- \_\_\_ Outcome/Goals (ground lesson B complete)
- \_\_\_ Performance and Limitations
- \_\_\_ Preflight Assessment
- \_\_\_ Turns Around A Point
- \_\_\_ S-Turns
- \_\_\_ Emergency Appch to Ldg (Simulated, Off-Airport)
- \_\_\_ In-flight power loss leading to diversion
- \_\_\_ Diverting to another airport (with and without GPS)
- \_\_\_ Entry to traffic pattern at uncontrolled airport
- \_\_\_ Go-Around/Rejected Landing
- \_\_\_ Postflight Procedures
- \_\_\_ Flows/Checklists/Briefings

**INTRODUCTION**

- \_\_\_ Crossed-Control Stall (demonstration)
- \_\_\_ Elevator Trim Stall (demonstration)
- \_\_\_ In-Flight Partial Power Loss (sim.)
- \_\_\_ No-Flap Approach and Landing

**COMPLETION STANDARDS**

The student will have flown to and landed at an airport other than the home airport, and demonstrate increased knowledge and proficiency in all listed tasks. The student will maintain altitude +/- 100', headings +/- 10°, and airspeed +/- 10 knots, and be able to conduct all tasks with minimal instructor assistance.

DATE: ___/___/___	DUAL: _____	BRIEF: _____
STUDENT NAME / SIGNATURE _____		
CFI NAME / SIGNATURE / CFI # & EXP. _____		
ROUTE OF FLIGHT _____		
LANDING & LOCATION: _____		
<b>Lesson Grade</b> _____		

**STAGE I  
FLIGHT LESSON 10  
DUAL — LOCAL TO AN AIRPORT**

- A. Preflight Briefing
- B. Flight Lesson
- C. Post-flight Briefing and Critique

**LESSON OBJECTIVE**

The student will review all listed tasks in preparation for the first stage check and solo flight in the traffic pattern.

**COMPLETION STANDARDS**

The student will demonstrate increased knowledge, skill, and risk management ability for all listed tasks, maintain altitude +/- 100', headings +/- 10°, and airspeed +/- 10 knots, and conduct all tasks without instructor assistance.

**CONTENT  
REVIEW**

- \_\_\_ Obtain a FSS Weather Briefing
- \_\_\_ Preflight Assessment
- \_\_\_ Cockpit Management
- \_\_\_ Engine Starting
- \_\_\_ Comms & Light Gun Signals
- \_\_\_ Taxiing
- \_\_\_ Before Takeoff Check
- \_\_\_ Normal Takeoff & Climb
- \_\_\_ Traffic Patterns
- \_\_\_ Use of Trim
- \_\_\_ Pilotage
- \_\_\_ Ground Reference Maneuvers
- \_\_\_ Maneuvering During Slow Flight
- \_\_\_ Power Off Stall
- \_\_\_ Power On Stall
- \_\_\_ Spin Awareness
- \_\_\_ In-Flight Partial Power Loss (sim.)
- \_\_\_ Systems and Eqpmt Malfunction
- \_\_\_ Emergency Approach and Landing
- \_\_\_ Normal Approach and Landing
- \_\_\_ Crosswind Approach and Landing
- \_\_\_ Go-Around/Rejected Landing
- \_\_\_ Postflight Procedures
- \_\_\_ Flows/Checklists/Briefings

DATE: __/__/__	DUAL: ____ BRIEF: ____
_____	
STUDENT NAME / SIGNATURE	
_____	
CFI NAME / SIGNATURE / CFI # & EXP.	
_____	
ROUTE OF FLIGHT	
LANDING & LOCATION: _____	
Lesson Grade _____	

**STAGE I  
GROUND LESSON A  
GROUND LESSON**

A. Ground Lesson

**LESSON OBJECTIVE**

The student and CFI will review knowledge items pertinent to Private Pilot pre-solo operations. *Ground Lesson A must be satisfactorily completed prior to the commencement of Lesson 6.*

**COMPLETION STANDARDS**

The student will display exhibit adequate knowledge of the covered subject areas sufficient for safe solo operations. The instructor will evaluate the student's knowledge with a quiz at the conclusion of the lesson.

**CONTENT  
REVIEW**

- \_\_\_ Human Factors
- \_\_\_ Pilot Qualifications
- \_\_\_ Airworthiness Requirements
- \_\_\_ Aircraft Weight and Balance
- \_\_\_ Performance and Limitations

DATE: \_\_\_/\_\_\_/\_\_\_      DUAL: \_\_\_\_ BRIEF: \_\_\_\_

\_\_\_\_\_  
STUDENT NAME / SIGNATURE

\_\_\_\_\_  
CFI NAME / SIGNATURE / CFI # & EXP.

**Lesson Grade** \_\_\_\_

**STAGE I  
GROUND LESSON B**

A. Ground Lesson

**LESSON OBJECTIVE**

The student and CFI will review knowledge items pertinent to Private Pilot pre-solo operations. ***Ground Lesson B must be satisfactorily completed prior to the commencement of Lesson 9.***

**CONTENT  
REVIEW**

- \_\_\_ 14 CFR Parts 61 and 91
- \_\_\_ Aircraft Systems
- \_\_\_ Aeronautical Decision Making
- \_\_\_ Interpreting Weather Reports and Forecasts
- \_\_\_ National Airspace System
- \_\_\_ Hazardous Wind Shear Avoidance
- \_\_\_ Wake Turbulence Avoidance
- \_\_\_ Pre-solo written exam reviewed, graded and corrected to 100%

**COMPLETION STANDARDS**

The student will display exhibit adequate knowledge of the covered subject areas sufficient for safe solo operations. The instructor will evaluate the student's knowledge with a quiz at the conclusion of the lesson.

DATE: ___/___/___	DUAL: _____	BRIEF: _____
STUDENT NAME / SIGNATURE _____		
CFI NAME / SIGNATURE / CFI # & EXP. _____		
Lesson Grade _____		

**STAGE I  
FLIGHT LESSON 11, STAGE CHECK  
DUAL — LOCAL (Optional - TO AN AIRPORT)**

- A. Oral Exam
- B. Pre-Flight Briefing and Flight Exam
- C. Post-flight Briefing and Evaluation

**LESSON OBJECTIVE**

The Chief Flight Instructor or designee will evaluate the student's ability to demonstrate the aeronautical decision-making, knowledge and skill required to safely operate the airplane in solo flight in the local area and traffic pattern.

**CONTENT**

**ORAL**

- \_\_\_ Pilot Qualifications
- \_\_\_ Airworthiness Requirements
- \_\_\_ Performance and Limitations
- \_\_\_ Aircraft Weight and Balance
- \_\_\_ National Airspace System
- \_\_\_ Operation of Systems
- \_\_\_ Human Factors

**FLIGHT**

- \_\_\_ Obtain a FSS Weather Briefing
- \_\_\_ Preflight Assessment
- \_\_\_ Cockpit Management
- \_\_\_ Engine Starting
- \_\_\_ Comms & Light Gun Signals
- \_\_\_ Taxiing
- \_\_\_ Before Takeoff Check
- \_\_\_ Normal Takeoff & Climb
- \_\_\_ Crosswind Takeoff & Climb
- \_\_\_ Traffic Patterns
- \_\_\_ Use of Trim
- \_\_\_ Pilotage
- \_\_\_ Ground Reference Maneuvers
- \_\_\_ Maneuvering During Slow Flight
- \_\_\_ Power Off Stall

- \_\_\_ Power On Stall
- \_\_\_ Spin Awareness
- \_\_\_ In-Flight Partial Power Loss (sim.)
- \_\_\_ Systems and Equipment Malfunction
- \_\_\_ Emergency Approach and Landing
- \_\_\_ Normal Approach and Landing
- \_\_\_ Crosswind Approach and Landing
- \_\_\_ Go-Around/Rejected Landing
- \_\_\_ Postflight Procedures
- \_\_\_ Flows/Checklists/Briefings

**COMPLETION STANDARDS**

The student will demonstrate the aeronautical decision-making, knowledge and skill required to safely operate the airplane in solo flight in the local area and traffic pattern while acting as Pilot-In-Command. Altitude will be maintained +/- 100', headings +/- 10<sup>0</sup>, and airspeeds +/- 5 knots.

DATE: ___/___/___	DUAL: ___ BRIEF: ___
STUDENT NAME / SIGNATURE _____	
CFI NAME / SIGNATURE / CFI # & EXP. _____	
ROUTE OF FLIGHT _____	
# LANDINGS & LOCATION: _____	
Lesson Grade _____	

## **STAGE II**

### **STAGE II OBJECTIVES**

The student gains experience with solo operations, is introduced to VFR day and night cross-country flight planning and execution, navigation, flight by reference to instruments, emergency and abnormal procedures.

### **STAGE II COMPLETION STANDARDS**

This stage is complete when the student demonstrates through oral and flight tests the knowledge, risk management, and skills necessary to conduct solo flights as Pilot In Command and dual VFR day and night cross-country flights as acting PIC, and complete the stage check at a level that meets or exceeds current FAA Private Pilot Airman Certification Standards.



**STAGE II  
FLIGHT LESSON 12  
DUAL and SOLO — LOCAL**

- A. Preflight Briefing
- B. Flight Lesson
- C. Post-flight Briefing and Critique

**LESSON OBJECTIVE**

The student will conduct her/his final practice flight before flying solo in the airport traffic pattern. Following the dual portion of the lesson, the instructor will leave the aircraft and supervise the student as he/she conducts the first solo flight.

**CONTENT**

**REVIEW DUAL**

- \_\_\_ Review of Previous Lesson Outcome/Goals
- \_\_\_ Preflight Assessment
- \_\_\_ Pilot Qualifications
- \_\_\_ Obtain a FSS Weather Briefing
- \_\_\_ Taxiing
- \_\_\_ Normal and X-wind T.O. and Climb
- \_\_\_ Traffic Patterns
- \_\_\_ Go-Around/Rejected Landing
- \_\_\_ Normal and X-wind Appch & Landing

**INTRODUCTION: FIRST SOLO**

- \_\_\_ Taxiing
- \_\_\_ Normal and X-wind Takeoff and Climb
- \_\_\_ Traffic Patterns
- \_\_\_ Normal and X-wind Appch & Landing
- \_\_\_ Postflight Procedures

**COMPLETION STANDARDS**

This lesson is complete when the student demonstrates the knowledge, risk management and skill required to safely conduct all listed tasks without instructor assistance. During solo flight, the student will conduct a minimum three (3) full-stop taxi-back landings in the traffic pattern at an airport.

<b>DATE:</b> _____ <b>DUAL:</b> ____ <b>SOLO :</b> ____ <b>BRIEF:</b> ____
_____ <b>STUDENT NAME / SIGNATURE</b>
_____ <b>CFI NAME / SIGNATURE / CFI # &amp; EXP.</b>
_____ <b>ROUTE OF FLIGHT</b>
<b># LANDINGS &amp; LOCATION:</b> _____
<b>Lesson Grade</b> ____

**STAGE II  
FLIGHT LESSON 13  
SOLO — LOCAL**

- A. Preflight Briefing
- B. Flight Lesson
- C. Post-flight Briefing and Critique

**LESSON OBJECTIVE:**

The student will safely conduct a solo flight from the home airport and practice the listed maneuvers to increase proficiency and confidence. All in-flight maneuvers will be conducted at an altitude that permits recovery above 3000' AGL. The student shall accumulate no less than 1.0 solo flight time on this flight.

**CONTENT**

**PRE-FLIGHT BRIEFING**

- \_\_\_ Review of Previous Lesson Outcome/Goals
- \_\_\_ Aeronautical Decision Making
- \_\_\_ Obtaining a FSS Weather Briefing
- \_\_\_ Weight and Balance
- \_\_\_ Performance and Limitations

**REVIEW**

- \_\_\_ Preflight Inspection
- \_\_\_ ATC Communications
- \_\_\_ Taxiing
- \_\_\_ Before Takeoff Check
- \_\_\_ Normal Takeoff and Climb
- \_\_\_ Traffic Patterns
- \_\_\_ Normal Approach and Landing
- \_\_\_ Postflight Procedures

**INTRODUCTION SOLO**

- \_\_\_ Go-Around/Rejected Landing
- \_\_\_ Maneuvering During Slow Flight
- \_\_\_ Power Off Stall (Imm.)
- \_\_\_ Power On Stall (Imm.)
- \_\_\_ Steep Turns
- \_\_\_ Pilotage

**COMPLETION STANDARDS**

The student will have safely conducted a solo flight within 25 NM from the home airport, and increased his/her proficiency and confidence while conducting the listed tasks. All in-flight maneuvers will be conducted at an altitude that permits recovery above 3000' AGL. The student shall accumulate not less than 1.0 solo flight time.

DATE: ___/___/___	SOLO: _____	BRIEF: _____
_____		
STUDENT NAME / SIGNATURE		
_____		
CFI NAME / SIGNATURE / CFI # & EXP.		
_____		
ROUTE OF FLIGHT		
# LANDINGS & LOCATION: _____		
Lesson Grade _____		

**STAGE II  
FLIGHT LESSON 14  
DUAL — AATD  
(SIMULATED IFR AND NIGHT)**

- A. Preflight Briefing
- B. Flight Lesson
- C. Post-flight Briefing and Critique

**LESSON OBJECTIVE**

The student will expand experience with flight by reference to instruments, be introduced to similarities between night and instrument flight conditions, and be introduced to emergency procedures. Students are to obtain a minimum 0.5 hours of simulated flight by reference to instruments.

**CONTENT**

**REVIEW**

- \_\_\_ Review of Previous Lesson Outcome/Goals
- \_\_\_ Cockpit Management

**INTRODUCTION (ALL IR)**

- \_\_\_ Straight and Level Flight
- \_\_\_ Turns to Headings
- \_\_\_ Recovery from Unusual Flight Attitudes

*Simulated Instrument Flying Conditions*

- \_\_\_ Determining Aircraft Position
- \_\_\_ VOR Orientation and Tracking
- \_\_\_ GPS Orientation and Tracking
- \_\_\_ CFIT Avoidance: Climbs & Descents
- \_\_\_ Radio Comms, Nav Systems, and Radar Svcs

*Simulated Night Flying Conditions*

- \_\_\_ Night Preparation
- \_\_\_ Straight and Level Flight
- \_\_\_ Turns to Headings
- \_\_\_ Climb
- \_\_\_ Descent
- \_\_\_ Determining Aircraft Position
- \_\_\_ Airport, Runway and Taxiway Lighting

*Emergency Operations*

- \_\_\_ Oil Pressure/Temp Warning
- \_\_\_ Engine Failure During Takeoff
- \_\_\_ Alternator Failure
- \_\_\_ Vacuum System Failure
- \_\_\_ Low Fuel Warning

**COMPLETION STANDARDS**

The student will demonstrate the knowledge, risk management, and skill to determine aircraft orientation using navigation systems and radar services, demonstrate aircraft control by reference to instruments, conduct proper procedures when faced with various emergency situations, maintain altitude +/- 200', headings +/- 20°, and airspeeds +/- 10 knots . *The student will obtain a minimum 0.5 hours of training in flight by reference to instruments.*

DATE: \_\_\_/\_\_\_/\_\_\_ DUAL AATD: \_\_\_ IR: \_\_\_ BRIEF: \_\_\_

\_\_\_\_\_  
STUDENT NAME / SIGNATURE

\_\_\_\_\_  
CFI NAME / SIGNATURE / CFI # & EXP.

\_\_\_\_\_  
ROUTE OF FLIGHT

**Lesson Grade** \_\_\_\_\_

**STAGE II  
FLIGHT LESSON 15A  
GROUND LESSON**

A. Ground Lesson

**LESSON OBJECTIVE**

The student will learn the proper procedures and techniques for planning a safe VFR cross-country flight.

**CONTENT**

**REVIEW**

- \_\_\_ Review of Previous Lesson
- \_\_\_ Outcome/Goals
- \_\_\_ Obtain a FSS Weather Briefing
- \_\_\_ Purpose of IR training for PVT pilots
- \_\_\_ Instrument Scan and Interpretation
- \_\_\_ Preflight Assessment (Envir. Factors)

**INTRODUCTION**

- \_\_\_ Navigation Log Preparation
- \_\_\_ Radio Comms, Nav Sys, & Radar Svcs
- \_\_\_ Use of Aircraft Performance Charts
- \_\_\_ Flight Planning Considerations
- \_\_\_ Filing the Flight Plan
- \_\_\_ Cross Country Departure Procedures
- \_\_\_ Opening and Closing Flight Plan
- \_\_\_ Use of Departure and Approach Control
- \_\_\_ Dead Reckoning
- \_\_\_ Lost Procedures
- \_\_\_ National Airspace System

**COMPLETION STANDARDS**

The student will successfully complete the planning to complete the VFR cross-country required by Lesson 16.

DATE: \_\_\_\_\_ DUAL: \_\_\_\_\_ IR: \_\_\_\_\_ BRIEF: \_\_\_\_\_

\_\_\_\_\_  
STUDENT NAME / SIGNATURE

\_\_\_\_\_  
CFI NAME / SIGNATURE / CFI # & EXP.

**Lesson Grade** \_\_\_\_\_

**STAGE II  
FLIGHT LESSON 15B  
DUAL — LOCAL TO AN AIRPORT**

- A. Preflight Briefing
- B. Flight Lesson
- C. Post-flight Briefing and Critique

**LESSON OBJECTIVE**

The student will review previously learned material, be introduced to VFR navigation and flight by reference to instruments in the airplane, with special emphasis placed on proper pre-flight planning, cockpit management, and diverting to an alternate airport. The flight will be to a landing at an airport other than the home airport. The student shall receive a minimum 0.3 hours of instrument training during the flight.

**CONTENT  
REVIEW**

- \_\_\_ Obtain a FSS Weather Briefing
- \_\_\_ Purpose of IR training for PVT pilots
- \_\_\_ Instrument Scan and Interpretation
- \_\_\_ Preflight Assessment (Envir. Factors)
- \_\_\_ Emergency Procedures on Takeoff
- \_\_\_ Use of Departure and Approach Control
- \_\_\_ Pilotage
- \_\_\_ Dead Reckoning
- \_\_\_ Diversion to an Alternate Airport
- \_\_\_ Lost Procedures
- \_\_\_ Postflight Procedures

**INTRODUCTION**

- \_\_\_ Cross-Country Departure to 1<sup>st</sup> Checkpoint
- \_\_\_ Straight and Level Flight (IR)
- \_\_\_ Turns to Headings (IR)
- \_\_\_ Recovery from Unusual Attitudes (IR)
- \_\_\_ Emergency Descent
- \_\_\_ Short Field Takeoff and Climb
- \_\_\_ Short Field Approach and Landing
- \_\_\_ Soft Field Takeoff and Climb
- \_\_\_ Soft Field Approach and Landing

**COMPLETION STANDARDS**

The student will demonstrate the knowledge, risk management, and skill to describe conduct all lesson tasks. During VFR flight the student will maintain altitudes +/- 100', headings +/- 10<sup>0</sup>, and airspeeds +/- 10 knots. During IR flight the student will maintain altitudes +/- 200', headings +/- 20<sup>0</sup>, and airspeeds +/- 10 knots.

<b>DATE:</b> _____ <b>DUAL:</b> _____ <b>IR:</b> _____ <b>BRIEF:</b> _____
_____ <b>STUDENT NAME / SIGNATURE</b>
_____ <b>CFI NAME / SIGNATURE / CFI # &amp; EXP.</b>
_____ <b>ROUTE OF FLIGHT</b>
<b># LANDINGS &amp; LOCATION:</b> _____
<b>Lesson Grade</b> _____

**STAGE II  
FLIGHT LESSON 16  
DUAL – DAY- CROSS COUNTRY**

- A. Preflight Briefing
- B. Flight Lesson
- C. Post-flight Briefing and Critique

**LESSON OBJECTIVE**

During this lesson the student will combine previously learned knowledge and skills to safely conduct a VFR Day cross-country flight. The student will plan and conduct a cross-country flight to three (3) airports with the first leg of not less than 50 NM from the home airport.

**CONTENT**

**REVIEW**

- \_\_\_ Review of Previous Lesson
- \_\_\_ Outcome/Goals
- \_\_\_ Obtain a FSS Weather Briefing
- \_\_\_ Human Factors
- \_\_\_ National Airspace System
- \_\_\_ Preflight Assessment (Ext. Press.)
- \_\_\_ Short-Field Takeoff and Climb
- \_\_\_ Navigation Log Preparation
- \_\_\_ Flight Planning Considerations
- \_\_\_ Departure
- \_\_\_ Opening and Closing Flight Plan
- \_\_\_ Recovery From Unusual Attitudes (IR)
- \_\_\_ Emergency Approach and Landing (Sim)
- \_\_\_ Emergency Equip. and Survival Gear
- \_\_\_ Pilotage
- \_\_\_ Dead Reckoning
- \_\_\_ Lost Procedures
- \_\_\_ Radio Comms, Nav. Sys and Radar Svcs
- \_\_\_ No-Flap Landing
- \_\_\_ Go-Around/Rejected Landing

**INTRODUCTION**

- \_\_\_ Estimated Groundspeed and ETA
- \_\_\_ Unfamiliar Airport Operations
- \_\_\_ Diversion to/Landing at an Alternate
- \_\_\_ Landing Not Less Than 50 NM from Departure Airport

**COMPLETION STANDARDS**

The student will demonstrate correct techniques and procedures for safely conducting a day VFR cross-country flight. The student will demonstrate single-pilot resource management and improved ADM. Altitudes will be maintained +/- 100', headings +/- 10°, and airspeeds +/-5 knots.

<b>DATE:</b> ___/___/___ <b>DUAL:</b> _____ <b>IR:</b> ___ <b>BRIEF:</b> _____
_____ <b>STUDENT NAME / SIGNATURE</b>
_____ <b>CFI NAME / SIGNATURE / CFI # &amp; EXP.</b>
_____ <b>ROUTE OF FLIGHT</b>
<b># LANDINGS &amp; LOCATION:</b> _____
<b>Lesson Grade</b> _____

**STAGE II  
FLIGHT LESSON 17  
DUAL-NIGHT-LOCAL TO AN ARPT**

- A. Preflight Briefing
- B. Flight Lesson
- C. Post-flight Briefing and Critique

**LESSON OBJECTIVE:**

The student will review and increase knowledge, risk management and skill with night flight operations, with emphasis on proper preflight planning, increased use of navigation equipment and ATC resources, CFIT avoidance, and human factors. *The student will obtain a minimum 1.2 hours of night aeronautical experience. The lesson must include a minimum of 1.0 ground briefing time in preparation for Night Operations*

**CONTENT:**

**REVIEW**

- \_\_\_ Review of Previous Lesson
- \_\_\_ Outcome/Goals
- \_\_\_ Night Flight Preparation
- \_\_\_ Personal Equipment
- \_\_\_ Obtain a FSS Weather Briefing
- \_\_\_ Taxiing
- \_\_\_ Use of Obstacle Departure Procedures
- \_\_\_ Human Factors (Spatial Dis/ Ldg Illns)

**INTRODUCTION (NIGHT)**

- \_\_\_ Emergency Equip. and Survival Gear
- \_\_\_ Preflight Assessment
- \_\_\_ Cockpit Management
- \_\_\_ Before Takeoff Check
- \_\_\_ Normal Takeoff and Climb
- \_\_\_ VOR Orientation and Tracking
- \_\_\_ GPS Orientation and Tracking
- \_\_\_ Power-Off Stall (Imminent)
- \_\_\_ Power-On Stall (Imminent)
- \_\_\_ Pilotage
- \_\_\_ Dead Reckoning
- \_\_\_ Diversion to an Alternate
- \_\_\_ Lost Procedures

- \_\_\_ Emergency Procedures
- \_\_\_ Basic Instrument Maneuvers (IR)
- \_\_\_ Recovery From Un. Attitudes (IR)
- \_\_\_ Emergency Appch and Ldg (Sim)
- \_\_\_ Go-Around/Rejected Landing
- \_\_\_ Normal Approach and Landing
- \_\_\_ Normal Approach and Landing (Without Landing Light)

**COMPLETION STANDARDS**

The student will demonstrate knowledge, risk management and skill for all listed tasks, complete a minimum of five (5) takeoffs and landings from the traffic pattern, and maintain altitudes +/- 100', headings +/- 10°, and airspeeds +/-5 knots. *The student will obtain a minimum 1.2 hours of night aeronautical experience.*

DATE: ___/___/___ DUAL: ___ IR: ___ BRIEF: ___	
_____ STUDENT NAME / SIGNATURE	
_____ CFI NAME / SIGNATURE / CFI # & EXP.	
_____ ROUTE OF FLIGHT	_____ NIGHT
# LANDINGS & LOCATION: _____	
Lesson Grade _____	

**STAGE II  
FLIGHT LESSON 18  
DUAL-NIGHT-CROSS COUNTRY**

- A. Preflight Briefing
- B. Flight Lesson
- C. Post-flight Briefing and Critique

**LESSON OBJECTIVE**

During this lesson the student will combine previously learned knowledge and skills to safely conduct a VFR night cross-country flight. The flight will be conducted to three (3) airports with the first leg at least 50 NM from the departure airport, and a total distance of more than 100 NM for the entire flight.

**CONTENT**

**REVIEW**

- \_\_\_ Review of Previous Lesson
- \_\_\_ Outcome/Goals
- \_\_\_ Obtain a FSS Weather Briefing
- \_\_\_ Night Preparation
- \_\_\_ Human Factors
- \_\_\_ Flight Planning Considerations
- \_\_\_ National Airspace System
- \_\_\_ Preflight Assessment (Ext. Press.)
- \_\_\_ Navigation Log Preparation
- \_\_\_ Radio Comms, Nav Sys, & Radar Svcs (VR/IR)
- \_\_\_ Departure
- \_\_\_ Determination of Groundspeed/ETA
- \_\_\_ Filing, Opening and Closing Flight Plan
- \_\_\_ Recovery From Unusual Attitudes (IR)
- \_\_\_ Basic Attitude Instrument Maneuvers
- \_\_\_ Emergency Appch and Landing (Sim)
- \_\_\_ Emergency Equip. and Survival Gear
- \_\_\_ Pilotage
- \_\_\_ Dead Reckoning
- \_\_\_ Lost Procedures
- \_\_\_ Normal Takeoff and Climb
- \_\_\_ Go-Around/Rejected Landing
- \_\_\_ Normal Approach and Landing

**COMPLETION STANDARDS**

The student will safely conduct a night VFR cross-country flight, and a minimum five (5) night takeoffs and landings as PIC while maintaining altitudes +/- 100', headings +/- 10°, and airspeeds +/-5 knots. Minimum of 0.3 simulated instrument time. **NOTE: Conduct IR time AFTER completing all VFR legs. Ensure the student has completed a minimum 10 night takeoffs & landings from the traffic pattern, 3.0 hours dual cross-country, and 3.0 hours night flight.**

DATE: _____ DUAL: _____ IR: _____ BRIEF: _____		
STUDENT NAME / SIGNATURE _____		
CFI NAME / SIGNATURE / CFI # & EXP. _____		
ROUTE OF FLIGHT _____	X-COUNTRY _____	NIGHT _____
# LANDINGS & LOCATION: _____		
Lesson Grade: _____		



**STAGE II  
FLIGHT LESSON 19  
DUAL — LOCAL (DAY/NIGHT OPTION)**

- A. Preflight Briefing
- B. Flight Lesson
- C. Post-flight Briefing and Critique

**LESSON OBJECTIVE**

In preparation for the upcoming stage check the student will demonstrate proficiency at a level that meets current FAA Airman Certification Standards. The student will demonstrate the ability to safely and competently plan and execute a cross-country VFR flight without instructor assistance. *NOTE: The FAA Private Pilot Knowledge Test must be completed before the student is eligible for the stage II check.*

**CONTENT  
REVIEW**

- \_\_\_ Pilot Qualifications
- \_\_\_ Airworthiness Requirements
- \_\_\_ Performance and Limitations
- \_\_\_ Aircraft Weight and Balance
- \_\_\_ National Airspace System
- \_\_\_ Cross-Country Flight Planning
- \_\_\_ Weather Information
- \_\_\_ Operation of Systems
- \_\_\_ Human Factors
- \_\_\_ Night Preparation
- \_\_\_ Preflight Assessment
- \_\_\_ Cockpit Management
- \_\_\_ Comms & Light Gun Signals
- \_\_\_ Taxiing
- \_\_\_ Before Takeoff Check
- \_\_\_ Normal Takeoff & Climb
- \_\_\_ Short Field Takeoff & Climb
- \_\_\_ Soft Field Takeoff & Climb
- \_\_\_ Pilotage and Dead Reckoning
- \_\_\_ Traffic Patterns
- \_\_\_ Spin Awareness
- \_\_\_ Basic Instrument Maneuvers (IR)
- \_\_\_ Diversion

- \_\_\_ Nav. Systems and Radar Svcs (VR/IR)
- \_\_\_ Lost Procedures
- \_\_\_ Emergency Descent
- \_\_\_ Emergency Equip. & Survival Gear
- \_\_\_ Systems and Equipmt. Malfunction
- \_\_\_ Emergency Approach and Landing
- \_\_\_ Forward Slip to a Landing
- \_\_\_ Normal Approach and Landing
- \_\_\_ Short Field Approach and Landing
- \_\_\_ Soft Field Approach and Landing
- \_\_\_ No-Flap Landing
- \_\_\_ Go-Around/Rejected Landing
- \_\_\_ Postflight Procedures

**COMPLETION STANDARDS**

The student demonstrates the ability to safely conduct a solo cross-country flight. Knowledge, flight proficiency and aeronautical decision-making is demonstrated at a level that meets or exceeds current FAA Private Pilot Airman Certification Standards.

DATE: _____ DUAL: _____ IR: _____ BRIEF: _____
_____ <b>STUDENT NAME / SIGNATURE</b>
_____ <b>CFI NAME / SIGNATURE / CFI # &amp; EXP.</b>
_____ <b>ROUTE OF FLIGHT</b>
<b># LANDINGS &amp; LOCATION:</b> _____
<b>Lesson Grade</b> _____

**STAGE II  
FLIGHT LESSON 20, STAGE CHECK  
DUAL — LOCAL TO AN AIRPORT**

- A. Oral Exam
- B. Pre-Flight Briefing and Flight
- C. Post-flight Briefing and Evaluation

- \_\_\_ Traffic Patterns
- \_\_\_ Forward Slip to a Landing
- \_\_\_ Normal Approach and Landing
- \_\_\_ Short Field Approach and Landing
- \_\_\_ No-Flap Approach and Landing
- \_\_\_ Go-Around/Rejected Landing
- \_\_\_ Postflight Procedures

**LESSON OBJECTIVE**

The Chief Flight Instructor or designee will evaluate the student’s ability to demonstrate the knowledge, risk management ability and skill required to safely conduct cross-country flight as Pilot In Command.

**COMPLETION STANDARDS**

This lesson is complete when the student demonstrates the demonstrate the knowledge, risk management ability and skill required to safely conduct cross-country flight as Pilot In Command at a level that meets or exceeds current FAA Private Pilot Airman Certification Standard.

**CONTENT**

**ORAL**

- \_\_\_ Pilot Qualifications
- \_\_\_ Airworthiness Requirements
- \_\_\_ Performance and Limitations
- \_\_\_ Aircraft Weight and Balance
- \_\_\_ National Airspace System
- \_\_\_ Cross-Country Flight Planning
- \_\_\_ Weather Information
- \_\_\_ Operation of Systems
- \_\_\_ Human Factors
- \_\_\_ Night Preparation

**FLIGHT**

- \_\_\_ Preflight Assessment
- \_\_\_ Cockpit Management
- \_\_\_ Comms & Light Gun Signals
- \_\_\_ Taxiing
- \_\_\_ Before Takeoff Check
- \_\_\_ Normal Takeoff & Climb
- \_\_\_ Short Field Takeoff & Climb
- \_\_\_ Pilotage and Dead Reckoning
- \_\_\_ Spin Awareness
- \_\_\_ Basic Instrument Maneuvers (IR)
- \_\_\_ Diversion
- \_\_\_ Nav. Systems and Radar Svcs (VR/IR)
- \_\_\_ Lost Procedures
- \_\_\_ Emergency Descent
- \_\_\_ Emergency Equip. & Survival Gear
- \_\_\_ Systems and Equipmt. Malfunction
- \_\_\_ Emergency Approach and Landing

<b>DATE:</b> _____ <b>DUAL:</b> _____ <b>IR:</b> _____ <b>BRIEF:</b> _____
_____ <b>STUDENT NAME / SIGNATURE</b>
_____ <b>CFI NAME / SIGNATURE / CFI # &amp; EXP.</b>
_____ <b>ROUTE OF FLIGHT</b>
<b># LANDINGS &amp; LOCATION:</b> _____
<b>Lesson Grade</b> _____

## **STAGE III**

### **STAGE III OBJECTIVES**

During this stage, the student will gain additional proficiency in local and cross-country solo operations in preparation for the end-of-course stage check and the FAA Practical Test.

### **STAGE III COMPLETION STANDARDS**

This stage and the course will be complete when the student completes the end-of-course stage check by exhibiting the knowledge, risk management and flying skills at a level that exceeds current FAA Private Pilot Airman Certification Standards.

**STAGE III  
FLIGHT LESSON 21  
SOLO — LOCAL (25nm OPTION)**

- A. Preflight Briefing
- B. Flight Lesson
- C. Post-flight Briefing and Critique

**LESSON OBJECTIVE**

The student will practice the listed tasks in preparation for the solo cross-country flight. Emphasis is placed on single pilot resource management and cockpit management while conducting the flight as Pilot In Command.

**NOTE: To exercise the 25NM solo option to land at another airport, the CFI must ensure that ALL requirements of 61.93(b) have been met.**

**CONTENT**

**REVIEW**

- \_\_\_ Review of Previous Lesson
- \_\_\_ Outcome/Goals
- \_\_\_ Traffic Patterns
- \_\_\_ Comms and ATC Light Signals
- \_\_\_ Emergency Procedures
- \_\_\_ Cockpit Resource Management
- \_\_\_ Single Pilot Resource Management
- \_\_\_ Preflight Assessment
- \_\_\_ Short-Field Takeoff and Climb
- \_\_\_ Soft-Field Takeoff and Climb
- \_\_\_ Traffic Pattern Operations
- \_\_\_ Maneuvering During Slow Flight
- \_\_\_ Steep Turns
- \_\_\_ Power-Off Stall (Imm. & Full)
- \_\_\_ Power-On Stall (Imm. & Full)
- \_\_\_ Turning Stall (Imm. & Full)
- \_\_\_ Go-Around/Rejected Landing
- \_\_\_ Short-Field Approach and Landing
- \_\_\_ Soft-Field Approach and Landing
- \_\_\_ Postflight Procedures

**COMPLETION STANDARDS**

This lesson is complete when the student demonstrates aeronautical decision making, single pilot resource management, proper navigation procedures, and safe execution of traffic pattern entries and exits during solo flight.

DATE: _____ SOLO: _____ BRIEF: _____
STUDENT NAME / SIGNATURE _____
CFI NAME / SIGNATURE / CFI # & EXP. _____
ROUTE OF FLIGHT _____
# LANDINGS & LOCATION: _____
Lesson Grade _____



**STAGE III  
FLIGHT LESSON 23  
SOLO — CROSS COUNTRY**

- A. Preflight Briefing
- B. Flight Lesson
- C. Post-flight Briefing and Critique

**LESSON OBJECTIVE**

During this lesson the student will execute sound ADM and flying skills to conduct a solo cross-country flight. The route must be at least 100 NM and include a landing at three (3) different airports, with one leg of the route not less than 50 NM between takeoff and landing locations. The student shall complete the navigation log for the post-flight briefing and the navigation log shall be kept in the student's training folder.

**CONTENT**

**REVIEW**

- \_\_\_ Pilot Qualifications
- \_\_\_ Airworthiness Requirements
- \_\_\_ Performance and Limitations
- \_\_\_ Aircraft Weight and Balance
- \_\_\_ Cross-Country Flight Planning
- \_\_\_ Weather Information
- \_\_\_ Human Factors
- \_\_\_ Preflight Assessment
- \_\_\_ Cockpit Management
- \_\_\_ Engine Starting
- \_\_\_ Taxiing
- \_\_\_ Before Takeoff Check
- \_\_\_ Normal Takeoff & Climb
- \_\_\_ Short Field Takeoff & Climb
- \_\_\_ Pilotage and Dead Reckoning
- \_\_\_ Traffic Patterns
- \_\_\_ Nav. Systems and Radar Svcs
- \_\_\_ Emergency Equip. & Survival Gear
- \_\_\_ Forward Slip to a Landing
- \_\_\_ Normal Approach and Landing
- \_\_\_ Short Field Approach and Landing
- \_\_\_ Postflight Procedures

**COMPLETION STANDARDS**

The lesson is complete when the student completes the flight at a level that meets or exceeds current FAA Private Pilot Airman Certification Standards. Upon arrival at the home airport the instructor and student shall review the completed navigation log during the post flight briefing and the navigation log shall be inserted in the student's training folder.

DATE: ___/___/___		SOLO: ___		BRIEF: ___	
_____ STUDENT NAME / SIGNATURE					
_____ CFI NAME / SIGNATURE / CFI # & EXP.					
_____ ROUTE OF FLIGHT			_____ X-COUNTRY		
# LANDINGS & LOCATION: _____					
Lesson Grade _____					

**STAGE III  
FLIGHT LESSON 24  
DUAL — LOCAL TO AN AIRPORT**

- A. Preflight Briefing
- B. Flight Lesson
- C. Post-flight Briefing and Critique

**LESSON OBJECTIVE**

The student will practice the listed tasks and demonstrate aeronautical knowledge, flight proficiency and decision making skills at a level that exceeds current FAA Private Pilot Airman Certification Standards.

**CONTENT  
REVIEW**

- \_\_\_ Pilot Qualifications
- \_\_\_ Airworthiness Requirements
- \_\_\_ Performance and Limitations
- \_\_\_ Aircraft Weight and Balance
- \_\_\_ National Airspace System
- \_\_\_ Weather Information
- \_\_\_ Operation of Systems
- \_\_\_ Human Factors
- \_\_\_ Preflight Assessment
- \_\_\_ Cockpit Management
- \_\_\_ Comms & Light Gun Signals
- \_\_\_ Taxiing
- \_\_\_ Before Takeoff Check
- \_\_\_ Normal Takeoff & Climb
- \_\_\_ Short Field Takeoff & Climb
- \_\_\_ Soft Field Takeoff & Climb
- \_\_\_ Basic Instrument Maneuvers (IR)
- \_\_\_ Nav. Systems and Radar Svcs (VR/IR)
- \_\_\_ Ground Reference Maneuvers (All)
- \_\_\_ Forward Slip to a Landing
- \_\_\_ Normal Approach and Landing
- \_\_\_ Short Field Approach and Landing
- \_\_\_ Soft Field Approach and Landing
- \_\_\_ No-Flap Approach and Landing
- \_\_\_ Go-Around/Rejected Landing
- \_\_\_ Postflight Procedures

**COMPLETION STANDARDS**

The lesson is complete when the student is able to demonstrate aeronautical knowledge, risk management and flying skills at a level that *exceeds* current FAA Private Pilot Airman Certification Standards.

DATE: ___/___/___ DUAL: _____ IR: _____ BRIEF: _____
_____
STUDENT NAME / SIGNATURE
_____
CFI NAME / SIGNATURE / CFI # & EXP.
_____
ROUTE OF FLIGHT
# LANDINGS & LOCATION: _____
Lesson Grade _____

**STAGE III  
FLIGHT LESSON 25  
DUAL — LOCAL TO AN AIRPORT**

- A. Preflight Briefing
- B. Flight Lesson
- C. Post-flight Briefing and Critique

**LESSON OBJECTIVE**

This is the final lesson prior to the end-of-course stage check. The student will demonstrate aeronautical knowledge, flight proficiency and decision making at a level that exceeds current FAA Private Pilot Airman Certification Standards.

**CONTENT**

**REVIEW**

- \_\_\_ Certificates and Documents
- \_\_\_ Airworthiness Requirements
- \_\_\_ Human Factors
- \_\_\_ Preflight Assessment
- \_\_\_ Taxiing
- \_\_\_ Before Takeoff Check
- \_\_\_ Steep Turns
- \_\_\_ Power-On Stall (Imminent & Full)
- \_\_\_ Power-Off Stall (Imminent & Full)
- \_\_\_ Slow Flight
- \_\_\_ Spin Awareness
- \_\_\_ Navigation Systems and Radar Svcs
- \_\_\_ Emergency Descent
- \_\_\_ Emergency Approach and Ldg (Sim)
- \_\_\_ Short-Field Approach and Landing
- \_\_\_ Soft-Field Approach and Landing
- \_\_\_ Postflight Procedures

**COMPLETION STANDARDS**

The lesson is complete when the student is able to conduct all listed tasks at a level that *exceeds* current FAA Private Pilot Airman Certification Standards.

DATE: _____ DUAL: _____ BRIEF: _____
_____ STUDENT NAME / SIGNATURE
_____ CFI NAME / SIGNATURE / CFI # & EXP.
_____ ROUTE OF FLIGHT
# LANDINGS & LOCATION: _____
<b>Lesson Grade</b> _____



**STAGE III  
FLIGHT LESSON 26, EOC STAGE CHECK  
DUAL-LOCAL TO AN AIRPORT**

- A. Oral Exam
- B. Pre-Flight Briefing and Flight
- C. Post-flight Briefing and Evaluation

**LESSON OBJECTIVE**

This lesson is the End-of Course test conducted by the Chief Flight Instructor or designee. The student will demonstrate aeronautical knowledge, flight proficiency and decision making at a level that exceeds current FAA Private Pilot Airman Certification Standard.

**CONTENT**

**ORAL**

- \_\_\_ Pilot Qualifications
- \_\_\_ Airworthiness Requirements
- \_\_\_ Performance and Limitations
- \_\_\_ Aircraft Weight and Balance
- \_\_\_ National Airspace System
- \_\_\_ Cross-Country Flight Planning
- \_\_\_ Weather Information
- \_\_\_ Operation of Systems
- \_\_\_ Human Factors
- \_\_\_ Night Preparation

**FLIGHT**

- \_\_\_ Preflight Assessment
- \_\_\_ Cockpit Management
- \_\_\_ Comms & Light Gun Signals
- \_\_\_ Taxiing
- \_\_\_ Before Takeoff Check
- \_\_\_ Normal Takeoff & Climb
- \_\_\_ Soft Field Takeoff and Climb
- \_\_\_ Short Field Takeoff & Climb
- \_\_\_ Pilotage and Dead Reckoning
- \_\_\_ Traffic Patterns
- \_\_\_ Ground Reference Maneuvers
- \_\_\_ Maneuvering During Slow Flight
- \_\_\_ Power Off Stall (Imminent or Full)
- \_\_\_ Power On Stall (Imminent or Full)
- \_\_\_ Spin Awareness

- \_\_\_ Basic Instrument Maneuvers (IR)
- \_\_\_ Steep Turns
- \_\_\_ Diversion
- \_\_\_ Nav. Systems and Radar Services (VR/IR)
- \_\_\_ Lost Procedures
- \_\_\_ Emergency Descent
- \_\_\_ Emergency Equip. & Survival Gear
- \_\_\_ Systems and Equipmt. Malfunction
- \_\_\_ Emergency Approach and Landing
- \_\_\_ Forward Slip to a Landing
- \_\_\_ Normal Approach and Landing
- \_\_\_ Soft Field Approach and Landing
- \_\_\_ Short Field Approach and Landing
- \_\_\_ Go-Around/Rejected Landing
- \_\_\_ Postflight Procedures

**COMPLETION STANDARDS**

This lesson is complete when the student demonstrates knowledge, flight proficiency and aeronautical decision making skill at a level that *exceeds* current FAA Private Pilot Airman Certification Standard.

DATE: \_\_\_/\_\_\_/\_\_\_ DUAL: \_\_\_ IR: \_\_\_ BRIEF: \_\_\_

\_\_\_\_\_  
STUDENT NAME / SIGNATURE

\_\_\_\_\_  
CFI NAME / SIGNATURE / CFI # & EXP.

\_\_\_\_\_  
ROUTE OF FLIGHT

# LANDINGS & LOCATION: \_\_\_\_\_

**Lesson Grade** \_\_\_\_\_