

Appendix I



Washington International Flight Academy

Training Syllabus

Private Pilot *Airplane Single Engine Land*

List of Effective Pages

Topic	Revised By	Date	Rev #	Page:
List of Effective Pages	Benzion Zwebner	01/15/2014	2	1
Record of Revisions	Benzion Zwebner	01/15/2014	2	2
Syllabus Outline	Benzion Zwebner	01/15/2014	2	3
Ground Training Lessons Plans	Benzion Zwebner	01/15/2014	2	4
Flight Training Lessons Plans	Benzion Zwebner	01/15/2014	2	19

WIFA PART 141 PRIVATE PILOT SINGLE ENGINE LAND COURSE SYLLABUS

Lesson Time Allocation								
Class Discussion	Stage Exam		Dual Local	Cross County	Night	Solo	Instrument Time	Total Flight Time
		FL1 - Discovery Flight	0.5					0.5
2.0		GL1 – Aerodynamic Principals						
		FL2 – Basic Maneuvers	1.0					1.0
1.0		GL2 – SFRA Procedures						
		FL3 – Basic Maneuvers	1.5					1.5
		FL4 – Slow Flight & Steep Turns	1.5					1.5
2.5		GL3 – Airplane Systems						
		FL5 - Stalls	1.5					1.5
2.5		GL4 – The Flight Environment						
		FL6 – Ground Reference Maneuvers and Engine Out to a Field	1.5					1.5
2.0		GL5 – Communication and Flight Information						
		FL7 –Local Traffic Patterns	1.0					1.0
		FL8 – Local Traffic Patterns	1.0					1.0
1.5		GL6 – Federal Aviation Regulations						
		FL9 – Rejected Landings and Engine Out Landings	1.0					1.0
		FL10 – Local Traffic Patterns	1.0					1.0
		FL11 – Local Traffic Patterns DMW	1.5					1.5
1.0		STAGE EXAM I & Review						
1.0		GL6 – Pre-Solo Written Exam Review						
		FL12- STAGE CHECK I – Pre-Solo	1.0					1.0
		FL13 – Initial Solo	0.5			0.5		1.0
2.5		GL7 – Meteorology for pilots						
		FL14 – Solo Traffic Patterns Local	0.2			1.0		1.2
2.0		GL8 – Interpreting Weather Data						
		FL15 – Solo Traffic Patterns Local				1.0		1.0
		FL16 – Performance Take Offs and Landings	1.0					1.0
2.0		GL9 – Human Factors in aviation						
		FL17 – Attitude Instrument Flying	1.5				1.3	1.5
1.0		STAGE EXAM II & Review						
		FL18 – Attitude Instrument Flying	1.5				1.3	1.5
2.5		GL10 – Computing Performance & Weight and Balance						
		FL19 – Night Traffic Patterns	1.0		1.0			1.0
2.5		GL11 – Navigation						
2.0		GL12 – Planning a Cross Country Flight						
		FL20 – Cross Country	2.5	2.5				2.5
		FL21 – Cross Country	2.5	2.5				2.5
1.0		STAGE EXAM III & Review						
		FL22 – Night Cross Country	2.5	2.5	2.0			2.5
3.0		GL13 – Review						
		FL23 – STAGE CHECK II - Cross Country	2.5	2.5				2.5
		FL24 – Solo Cross Country		2.5		2.5		2.5
1.5		END-OF-COURSE EXAM A & Review						
		FL25 – PPL Check-ride Prep	1.5				0.2	1.5
1.5		END-OF-COURSE EXAM B & Review						
		FL26 – PPL Check-ride Prep	1.5				0.2	1.5
		FL27 - End of Course Check flight	1.5				0.2	1.5
29	6	-Totals -	34.2	12.0	3.0	5.0	3.2	39.2
		Total Flight time: 39.2						
		Total Ground Time: 35.0						



Washington International Flight Academy
Private Pilot FAR 141
Ground Lesson Plans

GROUND LESSON 1 - 2.0 Hours**AERODYNAMIC PRINCIPLES**

A. **Objective.** Become familiar with the four forces of flight, aerodynamic principles of stability, maneuvering flight, and load factor. Gain a basic understanding of stall/spin characteristics as they relate to training airplanes.

Learn the importance of prompt recognition of stall indications

Content:

(1) **FOUR FORCES OF FLIGHT**

- a) Lift
- b) Airfoils
- c) Pilot Control of Lift
- d) Weight
- e) Thrust
- f) Drag
- g) Ground Effect

(2) **STABILITY**

- a) Three Axes of Flight
- b) Longitudinal Stability
- c) Center of Gravity Position
- d) Lateral Stability
- e) Directional Stability
- f) Stalls
- g) Spins

(3) **AERODYNAMICS OF MANEUVERING FLIGHT**

- a) Climbing Flight
- b) Left-Turning Tendencies
- c) Descending Flight
- d) Turning Flight
- e) Load Factor

B. **Completion Standards.** Demonstrate understanding during oral quizzing by instructor at completion of lesson. Instructor issues the following home study review:

Private Pilot Manual: Chapter 3

GROUND LESSON 2 - 1.0 Hours**SFRA Procedures**

A. **Objective.** Become familiar with the Washington DC Special Flight Rules Area and the procedures to conduct flights within the SFRA.

Content:

- (1) **SFRA**
 - a) History
 - b) Purpose
 - c) Dimensions
 - d) Required Equipment
 - e) Required ATC Communications

- (3) **P-40 and R-4009**
 - a) Location
 - b) Dimensions

- (2) **SFRA Flight Plan**
 - a) Introduce the FSS
 - b) Format of SFRA Flight Plan
 - c) How to file an SFRA Flight Plan

- (3) **Interception Procedures**
 - a) Why would you be intercepted
 - b) Immediate actions
 - c) Interpreting signals (gear down, turns etc)

B. **Completion Standards.** Demonstrate understanding during oral quizzing by instructor at completion of lesson. Instructor issues the following home study review:

FAA Safety DC SFRA course

Ground Lesson 3: AIRPLANE SYSTEMS – 2.5 Hours

- A. **Objective.** Gain a basic understanding of the main airplane components and systems. Become familiar with flight instrument functions and operating characteristics, including errors and common malfunctions. Learn about the power plant and related systems.

Content:

- (1) **AIRPLANES**
 - a) Fuselage
 - b) Wings
 - c) Empennage
 - d) Landing Gear
 - e) Engine/Propeller
 - f) Pilot's Operating Handbook (POH)

- (2) **THE POWER PLANT AND RELATED SYSTEMS**
 - a) Reciprocating Engine
 - b) Induction Systems
 - c) Supercharging and Turbo charging
 - d) Ignition Systems
 - e) Fuel Systems
 - f) Refueling
 - g) Oil Systems
 - h) Cooling Systems
 - i) Exhaust Systems
 - j) Propellers
 - k) Propeller Hazards
 - l) Electrical Systems

- (3) **FLIGHT INSTRUMENTS**
 - a) Pitot-Static Instruments
 - b) Airspeed Indicator
 - c) Altimeter
 - d) Vertical Speed Indicator
 - e) Gyroscopic Instruments
 - f) Magnetic Compass

- B. **Completion Standards.** Demonstrate understanding during oral quizzing by instructor at completion of lesson. Instructor issues the following home study review:

Private Pilot Manual: Chapter 2

Ground Lesson 4: THE FLIGHT ENVIRONMENT – 2.5 Hours

A. **Objective.** Understand important safety considerations, including collision avoidance cautions, flight-of-way rules, and minimum safe altitudes. Become familiar with airport marking and lighting, aeronautical charts, and types of airspace. Learn about collision avoidance procedures and runway incursion avoidance.

CONTENT:

(1) SAFETY OF FLIGHT

- a) Collision Avoidance/Visual Scanning
- b) Airport Operations
- c) Right-of-Way Rules
- d) Minimum Safe Altitudes
- e) Taxiing in Wind
- f) Positive Exchange of Flight Controls

(2) AIRPORTS

- a) Controlled and Uncontrolled
- b) Runway Layout
- c) Traffic Pattern
- d) Airport Visual Aids
- e) Taxiway Markings
- f) Ramp Area Hand Signals
- g) Runway Incursion Avoidance
- h) Land and Hold Short Operations (LAHSO)
- i) Airport Lighting
- j) Visual Glideslope Indicators
- k) Approach Light Systems
- l) Pilot-Controlled Lighting

(3) AIRSPACE

- a) Classifications
- b) Uncontrolled Airspace
- c) Controlled Airspace
- d) Class A
- e) Class B
- f) Class C
- g) Class D
- h) Class E
- i) Class G
- j) Special VFR
- k) Special Use Airspace
- l) Other Airspace Areas
- m) Emergency Air Traffic Rules
- n) Air Defense Identification Zones

- C. Completion Standards. Demonstrate understanding during oral quizzing by instructor at completion of lesson. Instructor will issue the follow review chapters:

Private Pilot Manual: Chapter 4

Ground Lesson 5: COMMUNICATION AND FLIGHT INFORMATION – 2.0 Hours

A. **Objective.** Become familiar with radar, transponder operations, and FAA radar equipment and services for VFR aircraft. Understand the types of service provided by an F5S. Learn how to use the radio for communication. Gain a basic understanding of the sources of flight information, particularly the Aeronautical Information Manual and FAA advisory circulars.

Content:

- (1) RADAR AND ATC SERVICES**
 - a) Radar
 - b) Transponder Operation
 - c) FAA Radar Systems
 - d) VFR Radar Services
 - e) Automatic Terminal Information Service (ATIS)
 - f) Flight Service Stations
 - g) VHF Direction Finder Assistance

- (2) RADIO PROCEDURES**
 - a) VHF Communication Equipment
 - b) Using the Radio
 - c) Phonetic Alphabet
 - d) Coordinated Universal Time
 - e) Common Traffic Advisory Frequency (CTAF)
 - f) ATC Facilities and Controlled Airports
 - g) Lost Communication Procedures
 - h) Emergency Procedures
 - i) Emergency Locator Transmitters (ELTs)

- (3) SOURCES OF FLIGHT INFORMATION**
 - a) Airport/Facility Directory
 - b) Federal Aviation Regulations
 - c) Aeronautical information Manual (AIM)
 - d) Notices to Airmen (NOTAMs)
 - e) Advisory Circulars

B. **Completion Standards.** Demonstrate understanding during oral quizzing by instructor at completion of lesson. Instructor issues the following chapters for home review:

Private Pilot Manual: Chapter 5

Ground Lesson 6: Federal Aviation Regulations – 1.5 Hours

A. **Objective.** Understand the appropriate Federal Aviation Regulations in the Private Pilot Recommended Study List. Gain specific knowledge of those FARs which govern student solo flight operations, private pilot privileges, limitations, and National Transportation Safety Board (NTSB) accident reporting requirements.

Content:

- (1) **PART 1**
- (2) **PART 43**
- (3) **PART 61**
- (4) **PART 91**
- (5) **NTSB 830**
- (6) **AIM**
- (7) **Advisory Circulars**
- (8) **Airport Facility Directory**

B. **Completion Standards.** Demonstrate understanding during oral quizzing by instructor at completion of lesson.

Ground Lesson 7: Meteorology for Pilots – 2.5 Hours

Objective: Learn the causes of various weather conditions, frontal systems, and hazardous weather phenomena. Understand how to recognize critical weather situations from the ground and during flight, including hazards associated with thunderstorms. Become familiar with the recognition and avoidance of wind shear and wake turbulence.

Content:

(1) BASIC WEATHER THEORY

- a) The Atmosphere
- b) Atmospheric Circulation
- c) Atmospheric Pressure
- d) Coriolis Force
- e) Global Wind Patterns
- f) Local Wind Patterns

(2) WEATHER PATTERNS

- a) Atmospheric Stability
- b) Temperature Inversions
- c) Moisture
- d) Humidity
- e) Dewpoint
- f) Clouds and Fog
- g) Precipitation
- h) Airmasses
- i) Fronts

(3) WEATHER HAZARDS

- a) Thunderstorms
- b) Turbulence
- c) Wake Turbulence
- d) Wind Shear
- e) Microburst
- f) Icing
- g) Restrictions to Visibility
- h) Volcanic Ash

Completion Standards. Demonstrate understanding during oral quizzing by instructor at completion of lesson. Instructor assigns the following home study:

Private Pilot Manual - Chapter 6

Ground Lesson 8: INTERPRETING WEATHER DATA – 2.0 Hours

A. **Objectives.** Learn how to obtain and interpret weather reports, formats, and graphic charts. Become familiar with the sources of weather information during preflight planning and while in flight. Recognize critical weather situations described by weather reports and forecasts.

Content:

- (1) THE FORECASTING PROCESS**
 - a) Forecasting Methods
 - b) Types of Forecasts
 - c) Compiling and Processing Weather Data
 - d) Forecasting Accuracy and Limitations

- (2) PRINTED REPORTS AND FORECASTS**
 - a) Aviation Routine Weather Report (METAR)
 - b) Radar Weather Reports
 - c) Pilot Weather Reports
 - d) Terminal Aerodrome Forecast (TAF)
 - e) Aviation Area Forecast
 - f) Winds and Temperatures Aloft Forecast
 - g) Severe Weather Reports and Forecasts
 - h) AIRMET/SIGMET/Convective SIGMET

- (3) GRAPHIC WEATHER PRODUCTS**
 - a) Surface Analysis Chart
 - b) Weather Depiction Chart Radar Summary Chart
 - c) Satellite Weather Pictures
 - d) Low-Level Significant Weather Prog
 - e) Severe Weather Outlook Chart
 - f) Forecast Winds and Temperatures Aloft Chart
 - g) Volcanic Ash Forecast and Dispersion Chart

- (4) SOURCES OF WEATHER INFORMATION**
 - a) Preflight Weather Sources
 - b) In-Flight Weather Sources
 - c) Enroute Flight Advisory Service
 - d) Weather Radar Services
 - e) Automated Weather Reporting Systems

B. **Completion Standards:** Demonstrate understanding during oral quizzing by instructor at the completion of lesson. Instructor will issue the follow home review chapters:

Private Pilot Manual: Chapter 7

Ground Lesson 9: Human Factors in Aviation – 2.0 Hours

A. **Objectives.** Gain an insight into important aviation physiological factors as they relate to private pilot operations. Become familiar with the accepted procedures and concepts pertaining to aeronautical decision making and judgment, including cockpit resource management and human factors training. Gain a basic understanding of aeronautical decision making and judgment.

Content:**(1) AVIATION PHYSIOLOGY**

- a) Vision in Flight
- b) Night Vision
- c) Visual Illusions
- d) Disorientation
- e) Respiration
- f) Hypoxia
- g) Hyperventilation
- h) Fatigue

(2) AERONAUTICAL DECISION MAKING

- a) Applying the Decision Making Process
- b) Pilot-in-Command Responsibility
- c) Communication
- d) Workload Management
- e) Situational Awareness
- f) Resource Use
- g) Applying Human Factors Training

B. **Completion Standards.** Demonstrate understanding during oral quizzing by instructor at completion of lesson. Instructor will assign the following home study:

Private Pilot Manual: Chapter 10

Ground Lesson 10: AIRPLANE PERFORMANCE – 2.5 Hours

A. **Objectives.** Learn how to use data supplied by the manufacturer to compute airplane performance, including takeoff and landing distances and fuel requirements. Learn to compute and control the weight and balance condition of a typical training airplane. Become familiar with basic functions of aviation computers. Understand the effects of density altitude on takeoff and climb performance.

Content:

(1) PREDICTING PERFORMANCE

- a) Aircraft Performance and Design
- b) Chart Presentations
- c) Factors Affecting Performance
- d) Takeoff and Landing Performance
- e) Climb Performance (Calculating time, fuel and distance to climb, rate and speeds for climb)
- f) Cruise Performance
- g) Using Performance Charts

(2) WEIGHT AND BALANCE

- a) Importance of Weight
- b) Importance of Balance
- c) Terminology
- d) Principles of Weight and Balance
- e) Computation Method
- f) Table Method
- g) Graph Method
- h) Weight-Shift Formula
- i) Effects of Operating at High Total Weights
- j) Flight at Various CG Positions

B. **Completion Standards:** Demonstrate understanding during oral quizzing by instructor at completion of each lesson. Instructor will issue the following home review chapters:

Private Pilot Manual: Chapter 8

Ground Lesson 11: NAVIGATION – 2.5 Hours

A. **Objectives.** Learn the basic concepts for VFR navigation using pilotage, dead reckoning, and aircraft navigation systems. Become familiar with guidelines and recommended procedures related to flight planning, use of an FAA Right Plan, VFR cruising altitudes, and lost procedures. Gain a basic understanding of VFR navigation using pilotage, dead reckoning, and navigation systems.

Content:

- (1) **AERONAUTICAL CHARTS**
 - a) Latitude and Longitude
 - b) Projections
 - c) Sectional Charts
 - d) World Aeronautical Charts
 - e) Chart Symbology

- (2) **PILOTAGE AND DEAD RECKONING**
 - a) Pilotage
 - b) Dead Reckoning
 - c) Flight Planning
 - d) VFR Cruising Altitudes
 - e) Flight Plans
 - f) Lost Procedures
 - g) Alternate Airport

- (2) **VOR NAVIGATION**
 - a) VOR Operations
 - b) Ground and Airborne Equipment
 - c) Basic Procedures
 - d) VOR Orientation and Navigation
 - e) VOR Checkpoints and Test Signals
 - f) VOR Precautions
 - g) Distance Measuring Equipment (DME)

- (4) **ADVANCED NAVIGATION**
 - a) Global Positioning System

B. **Completion Standards.** Demonstrate understanding during oral quizzing by instructor at the completion of lesson. Instructor issues the following home review chapters:

Private Pilot Manual: Chapter 9

Ground Lesson 12: PLANNING A CROSS COUNTRY FLIGHT – 2.0 Hours

A. Objectives. Develop a sound understanding of the planning process for a cross-country flight. Become familiar with the details of flying a typical cross-country flight, including evaluation of in-flight weather and decisions for alternative actions, such as a diversion. Understand how to plan for alternatives.

Content:**(1) THE FLIGHT PLANNING PROCESS**

- a) Developing the Route
- b) Airport Data
- c) Preflight Weather Briefing
- d) Completing the Navigation Log
- e) Flight Plan
- f) Preflight Inspection

(2) THE FLIGHT

- a) Departure Montgomery County Airpark to Lancaster Airport
- b) Lancaster Airport to Frederick Airport
- c) Frederick Airport to Montgomery County Airpark
- d) Diversion to Clearview and to York Airports

B. Completion Standards. Demonstrate understanding during oral quizzing by instructor at completion of lesson. Instructor will assign the following home study chapter:

Private Pilot Manual: Chapter 11

Ground Lesson 13: REVIEW IN PREPARATION FOR FINAL EXAMS – 3.0 Hours

A. **Objectives.** Review previously covered subject areas and answer student questions to enhance student understanding in preparation for the final exams A and B.

Content:

- (1) Stage I**
 - a) Aerodynamic Principals
 - b) SFRA Procedures
 - c) Airplane Systems
 - d) The Flight Environment
 - e) Federal Aviation Regulations

- (2) Stage II**
 - a) Meteorology for Pilots
 - b) Interpreting Weather Data
 - c) Human Factors in Aviation

- (3) Stage III**
 - a) Airplane Performance & Weight and Balance
 - b) Navigation
 - c) Planning a Cross Country Flight

B. **Completion Standards.** Demonstrate understanding during oral quizzing by instructor at completion of lesson. Instructor will assign the following home study:

Private Pilot Manual Home Review



Washington International Flight Academy
Private Pilot FAR 141
Flight Lesson Plans

FLIGHT LESSON 1 – 0.5 Flight Time**Discovery Flight**

- A. **Lesson Objectives.** Introduce the Student to the world of aviation. Demonstrate basic Maneuvers and allow the student to get a basic feel for the aircraft.

Content.**(1) PREFLIGHT DISCUSSION:**

- a) Aviation Opportunities
- b) Various Ratings and Licenses Available
- c) Route of flight
- d) Pre-Flight Inspection (Walk-Around) of Aircraft

(2) INTRODUCE:

- a) Taxiing
- b) Normal Takeoff and Climb
- c) Straight-and-Level Flight
- d) Low and Medium Banked Turns in Both Directions

- B. **Completion Standards.** Gain a better idea of the Private Pilot Course and aircraft handling.

FLIGHT LESSON 2 – 1.0 Flight Time

BASIC MANEUVERS

- C. **Lesson Objectives.** Become familiar with the training airplane and its systems. Learn about certificates, documents, and checklists. Understand how to conduct the necessary preflight activities. Learn about the functions of the flight controls, and how they are used to maintain specific attitudes. Gain an understanding of preflight preparation and procedures.

Content.

(1) **PREFLIGHT DISCUSSION:**

- a) Fitness for flight
- b) Positive Exchange of Flight Controls
- c) Certificates and documents
- d) Airworthiness Requirements
- e) Airplane logbooks

(2) **INTRODUCE:**

- a) Use of Checklists
- b) Preflight Inspection
- c) Certificates and Documents
- d) Airplane Servicing
- e) Operation of Systems
- f) Equipment Checks
- g) Location of First Aid Kit
- h) Location of Fire Extinguisher
- i) Engine Starting
- j) Taxiing
- k) Before Takeoff Check
- l) Normal Takeoff and Climb
- m) Straight-and-Level Flight
- n) Climbs, Descents, and Level Offs
- o) Medium Banked Turns in Both Directions
- p) After Landing, Parking, and Securing

- D. **Completion Standards.** Display basic knowledge of aircraft systems and the necessity of checking their operation before flight. Become familiar with the control systems and how they are used to maneuver the airplane on the ground and in the air.

FLIGHT LESSON 3 – 1.5 Flight time

BASIC MANEUVERS

A. **Objectives.** Review procedures and maneuvers introduced in Flight Lesson 1, especially preflight activities, ground operations, and attitude control during basic maneuvers using visual reference (VR). Introduce additional procedures and maneuvers. Emphasis will be on correct procedures for preflight and ground operations.

B.

Content:

(1) **PREFLIGHT DISCUSSION:**

- a) Preflight activities and Engine starting
- b) Airport and runway markings and lighting
- c) Ground operations, including crosswind taxiing
- d) Collision avoidance precautions
- fe) Airspeed and configuration changes

(2) **INTRODUCE:**

- a) Airport and Runway Markings and Lighting
- b) Crosswind Taxi
- c) Airspeed and Configuration Changes
- d) Flight at Approach Airspeed
- e) Descents and climbs in High and Low Drag Configurations

(3) **REVIEW:**

- a) Preflight Inspection
- b) Certificates and Documents
- c) Airworthiness Requirements
- d) Operation of Systems
- e) Positive Exchange of Flight Controls
- f) Use of Checklists
- g) Engine Starting
- i) Taxiing
- j) Before Takeoff Check
- k) Normal Takeoff and Climb
- l) Straight-and-Level Flight (VR)
- m) Climbs (VR)
- n) Descents (VR)
- o) Medium Banked Turns in Both Directions (VR)
- q) After Landing, Parking, and Securing

B. **Completion Standards.** Display increased proficiency in preflight activities, ground operations, and coordinated airplane attitude control. Perform takeoffs with instructor assistance. Be familiar with control usage necessary to maintain altitude within +/- 250 feet during airspeed and configuration changes. Exhibit understanding of altitude control by visual references (VR).

FLIGHT LESSON 4 – 1.5 Flight Time

FLIGHT MANEUVERS – SLOW FLIGHT & STEEP TURNS

- A. **Objectives.** Review airspeed control during basic maneuvers. Introduce slow flight and steep turns to increase understanding of airplane control during normal and critical flight conditions.

Content:

(1) PREFLIGHT DISCUSSION:

- a) Situational awareness
- b) Preflight planning, operation of power-plant, aircraft systems, and engine run up procedures
- d) Visual scanning and collision avoidance precautions
- e) Wind-shear and wake turbulence avoidance procedures

(2) INTRODUCE:

- a) Flight at Various Airspeeds From Cruise to Slow Flight
- b) Maneuvering During Slow Flight
- c) Straight-and-Level Flight
- f) Constant Airspeed Climbs and Descents in slow flight
- g) Steep Turns

(3) REVIEW:

- a) Use of Checklists
- b) Airplane Servicing
- c) Preflight Inspection
- d) Engine Starting
- e) Radio Communications
- f) Before Takeoff Check
- g) Normal Takeoff and Climb
- h) Collision Avoidance Precautions
- i) Airspeed and Configuration Changes
- j) Descents in High and Low Drag Configurations
- k) Flight at Approach Airspeed
- l) Normal Approach and Landing
- m) Airport and Runway Markings and Lighting
- n) Parking and Securing the Airplane

- B. **Completion Standards.** Display increased proficiency in coordinated attitude control during basic maneuvers. Perform unassisted takeoffs. Landing completed with instructor assistance. Maintain altitude within +/- 250 feet during airspeed transitions and while maneuvering at slow speeds.

FLIGHT LESSON 5 – 1.5 Flight Time

FLIGHT MANEUVERS - STALLS

- A. **Objectives.** Review airspeed control during basic maneuvers. Introduce stalls from various flight attitudes to increase understanding of airplane control during normal and critical flight conditions.

Content:

(1) PREFLIGHT DISCUSSION:

- a) Situational awareness
- b) Preflight planning, operation of power-plant, aircraft systems, and engine run up procedures
- d) Visual scanning and collision avoidance precautions
- e) Wind-shear and wake turbulence avoidance procedures

(2) INTRODUCE:

- a) Power Off Stalls
- b) Power On Stalls
- c) Demonstrated Stalls

(3) REVIEW:

- a) Use of Checklists
- b) Airplane Servicing
- c) Preflight Inspection
- d) Engine Starting
- e) Radio Communications
- f) Before Takeoff Check
- g) Normal Takeoff and Climb
- j) Collision Avoidance Precautions
- k) Slow Flight
- I) Steep Turns
- l) Normal Approach and Landing

- B. **Completion Standards.** Display increased proficiency in coordinated attitude control during basic maneuvers. Perform unassisted takeoffs. Landing completed with instructor assistance. Maintain altitude within +/- 250 feet during airspeed transitions and while maneuvering at slow speeds.

FLIGHT LESSON 6 – 1.5 Flight Time**GROUND REFERENCE MANEUVERS & ENGINE OUT TO A FIELD**

A. **Objectives.** Practice the review maneuvers to gain proficiency. Introduce ground reference maneuvers and maneuvering at slow airspeeds by instrument reference. Emphasis will be on emergency landing procedures.

Content:**(1) PREFLIGHT DISCUSSION:**

- a) Situational awareness
- b) Realistic distractions
- c) Determining wind direction
- d) Actions to take in the event of an Engine Failure at altitude

(2) INTRODUCE:

- a) Rectangular Courses
- b) S-Turns
- c) Turns around a Point
- d) Engine out Procedures to a Field

(3) REVIEW:

- a) Power-Off Stalls
- b) Power-On Stalls
- c) Flight at Slow Airspeeds with Realistic Distractions, and the Recognition and
- d) Recovery from Stalls Entered from Straight Flight and from Turns
- e) Spin Awareness
- f) Emergency Descent
- g) Normal Takeoffs and Landings
- h) Turns to Headings (VR)

C. **Completion Standards.** Display increased proficiency in coordinated airplane attitude control during basic maneuvers. Perform unassisted takeoffs. Landings completed with instructor assistance. Maintain altitude +/- 200 feet and headings +/- 15 degrees during straight-and-level flight. Demonstrate the ability to recognize and recover from stalls. Indicate basic understanding of simulated emergency landing procedures.

FLIGHT LESSON 7 – 1.0 Flight Time**TRAFFIC PATTERNS**

A. **Objectives.** Introduce takeoffs and landings in the traffic pattern so the student may begin to learn the procedures during pattern operations. Emphasis will be on proper traffic pattern size and altitudes.

Content:**(1) PREFLIGHT DISCUSSION:**

- a) Traffic Patterns
- b) Communication
- c) Workload management
- d) Runway incursion avoidance

(2) INTRODUCE:

- a) Traffic Pattern Legs
- b) Traffic Avoidance
- c) Takeoff and Climb
- d) Approach and Landing
- e) Runway Incursion Avoidance

(3) REVIEW:

- d) Normal Takeoffs and Landings
- e) Traffic Patterns
- f) Wake Turbulence Avoidance

B. **Completion Standards.** Display increased proficiency in coordinated airplane attitude control. Demonstrate ability to fly a specific ground track while maintaining altitude +/- 200 feet.

FLIGHT LESSON 8 – 1.0 Flight Time

TRAFFIC PATTERNS

A. **Objectives.** Introduce Rejected takeoffs and review normal landings in the traffic pattern so the student may begin to learn the procedures during pattern operations. Emphasis will be on proper traffic pattern size and altitudes.

Content:

(2) **PREFLIGHT DISCUSSION:**

- a) Traffic Patterns with crosswinds
- b) Radio Communication
- c) Workload management
- d) Points to correct from previous lesson

(2) **INTRODUCE:**

- a) Radio Communications
- b) Traffic Avoidance
- c) Takeoff and Climb
- d) Approach and Landing
- e) Rejected Take Off

(3) **REVIEW:**

- a) Normal Takeoffs and Landings
- b) Traffic Patterns
- c) Wake Turbulence Avoidance

C. **Completion Standards.** Display increased proficiency in coordinated airplane attitude control. Demonstrate ability to fly a specific ground track while maintaining altitude +/- 200 feet.

FLIGHT LESSON 9 – 1.0 Flight Time**TRAFFIC PATTERNS - REJECTED LANDINGS AND ENGINE OUTS**

A. **Objectives.** Introduce rejected landings and engine out procedures in the traffic pattern. Emphasis will be on correct technique, airspeeds and use of checklists.

Content:**(3) PREFLIGHT DISCUSSION:**

- a) Rejected landings
- b) Engine Out Landings
- c) Workload management
- d) Points to correct from previous lesson

(2) INTRODUCE:

- a) Rejected Landings
- b) Engine Out Landings

(3) REVIEW:

- a) Normal Takeoffs and Landings
- b) Traffic Patterns
- c) Wake Turbulence Avoidance
- d) Radio Communication

D. **Completion Standards.** Display basic proficiency in rejected landings and engine out landings. Demonstrate ability to fly a specific ground track while maintaining altitude +/- 200 feet.

FLIGHT LESSON 10 – 1.0 Flight Time

TRAFFIC PATTERNS

A. **Objectives.** Review Traffic Pattern operations and increase student proficiency and strengthen weak areas. Introduce Forward Slip to Land and No Flap Landings. Emphasis will be on correct technique, airspeeds and use of checklists.

Content:

(4) PREFLIGHT DISCUSSION:

- a) Rejected landings
- b) Engine Out Landings
- c) Student Weak Points

(2) INTRODUCE:

- a) Forward Slip to Landing
- b) No Flap Landings

(3) REVIEW:

- a) Normal Takeoffs and Landings
- b) Traffic Patterns
- c) Wake Turbulence Avoidance
- d) Rejected Landings
- e) Engine Out Landings
- f) Radio Communication

E. **Completion Standards.** Display basic proficiency in normal traffic pattern operations and rejected landings and engine out landings. Demonstrate ability to fly a specific ground track while maintaining altitude +/- 200 feet.

FLIGHT LESSON 11 – 1.0 Flight Time**TRAFFIC PATTERNS DMW or FDK**

A. **Objectives.** Introduce entry and exit of Traffic Pattern, Patterns at other airports, increase student proficiency and strengthen weak areas. Review Steep turns, Stalls and Spin Awareness

Content:**(5) PREFLIGHT DISCUSSION:**

- a) Traffic Pattern Entry and Exit
- b) Obtaining weather from other airports in-flight
- c) Communications with other airport CTAF / Tower
- d) Spin Awareness

(2) INTRODUCE:

- a) Traffic Pattern Entry and Exit
- b) Spin Awareness

(3) REVIEW:

- a) Normal Takeoffs and Landings
- b) Traffic Patterns
- c) Wake Turbulence Avoidance
- d) Rejected Landings
- e) Engine-Out Landings
- f) Stalls
- g) Steep Turns
- h) Radio Communications

F. **Completion Standards.** Display proficiency in normal traffic pattern operations and rejected landings and engine out landings. Display proficiency in entry and exit from traffic patterns. Demonstrate ability to fly a specific ground track while maintaining altitude +/- 150 feet.

FLIGHT LESSON 12 – 1.0 Flight Time

TRAFFIC PATTERNS – PRE SOLO CHECK FLIGHT

A. **Objectives.** Flight is to be conducted by the Chief Instructor, Assistant Chief Instructor or designated check instructor. Review Traffic Pattern operations and test student proficiency and strengthen weak areas. Introduce Forward Slip to Land and No Flap Landings. Emphasis will be on correct technique, airspeeds and use of checklists.

Content:

(6) PREFLIGHT DISCUSSION:

- a) Rejected landings
- b) Engine Out Landings
- c) No Flap Landings
- d) Review any topics mentioned on Pre- Solo Written

(3) REVIEW:

- a) Normal Takeoffs and Landings
- b) Rejected Take Offs and Landings
- c) Wake Turbulence Avoidance
- d) No Flap Landings
- e) Engine Out Landings from altitude
- f) Engine Out Landings within the pattern
- g) Stall Awareness and Recovery
- h) Slow Flight
- i) Radio Procedures

G. **Completion Standards.** Display proficiency in flight maneuvers, traffic pattern operations, rejected landings and engine out landings. Demonstrate ability to fly a specific ground track while maintaining altitude +/- 150 feet. Student will display proficiency to conduct solo flights in the local area.

Flight instructor will ensure that the student has completed the Pre-Solo Written exam.

FLIGHT LESSON 13 – 1.0 Flight Time (0.5 Solo)

FIRST SOLO

- A. **Objectives.** During the dual portion of the lesson, the instructor will review takeoff and landing procedures to check the student's readiness for solo flight. In the second portion of the lesson, the student will fly the first supervised solo flight in the local traffic pattern. Emphasis will be on the correct procedures and techniques for the student's first solo.

Content:

(1) **PREFLIGHT DISCUSSION:**

- a) Any student questions
- b) Student pilot supervised solo flight operations in the local traffic pattern

(2) **REVIEW:**

- a) Engine Starting
- b) Radio Communications
- c) Normal and/or Crosswind Taxiing
- d) Before Takeoff Check
- e) Normal Takeoffs
- f) Traffic Patterns
- g) Go-Around/Rejected Landing
- h) Normal Landings

(3) **INTRODUCE:**

- a) Supervised Solo
- b) Radio Communications
- c) Taxiing
- d) Before Takeoff Check
- e) Normal Takeoffs and Climbs (3)
- f) Traffic Patterns
- g) Normal Approaches and Landings (3)
- h) After Landing, Parking, and Securing

- B. **Completion Standards.** The student will display the ability to solo the training airplane safely in the traffic pattern. At no time will the safety of the flight be in question. Complete solo flight in the local traffic pattern as directed by the instructor.

FLIGHT LESSON 14 – 1.2 Flight Time (0.2 Dual, 1.0 Solo)**SECOND SOLO**

- A. **Objectives.** During the dual portion of the lesson, the instructor will review takeoff and landing procedures to check the student's readiness for solo flight. In the second portion of the lesson, the student will fly the first supervised solo flight in the local traffic pattern. Emphasis will be on the correct procedures and techniques for the student's first solo.

Content:**(1) PREFLIGHT DISCUSSION:**

- a) Any student questions
- b) Student pilot supervised solo flight operations in the local traffic pattern

(2) REVIEW:

- a) Engine Starting
- b) Radio Communications
- c) Normal and/or Crosswind Taxiing
- d) Before Takeoff Check
- e) Normal Takeoffs
- f) Traffic Patterns
- g) Go-Around/Rejected Landing
- h) Normal Landings

(3) INTRODUCE:

- a) Supervised Solo
- b) Radio Communications
- c) Taxiing
- d) Before Takeoff Check
- e) Normal Takeoffs and Climbs (3)
- f) Traffic Patterns
- g) Normal Approaches and Landings (3)
- h) After Landing, Parking, and Securing

- B. **Completion Standards.** The student will display the ability to solo the training airplane safely in the traffic pattern. At no time will the safety of the flight be in question. Complete solo flight in the local traffic pattern as directed by the instructor.

FLIGHT LESSON 15 – 1.0 Flight Time (1.0 Solo)**THIRD SOLO**

- A. **Objectives.** During the dual portion of the lesson, the instructor will review takeoff and landing procedures to check the student's readiness for solo flight. In the second portion of the lesson, the student will fly the first supervised solo flight in the local traffic pattern. Emphasis will be on the correct procedures and techniques for the student's first solo.

Content:**(1) PREFLIGHT DISCUSSION:**

- a) Any student questions
- b) Student pilot supervised solo flight operations in the local traffic pattern

(2) REVIEW:

- a) Engine Starting
- b) Radio Communications
- c) Normal and/or Crosswind Taxiing
- d) Before Takeoff Check
- e) Normal Takeoffs
- f) Traffic Patterns
- g) Go-Around/Rejected Landing
- h) Normal Landings

(3) INTRODUCE:

- a) Supervised Solo
- b) Radio Communications
- c) Taxiing
- d) Before Takeoff Check
- e) Normal Takeoffs and Climbs (3)
- f) Traffic Patterns
- g) Normal Approaches and Landings (3)
- h) After Landing, Parking, and Securing

- B. **Completion Standards.** The student will display the ability to solo the training airplane safely in the traffic pattern. At no time will the safety of the flight be in question. Complete solo flight in the local traffic pattern as directed by the instructor.

FLIGHT LESSON 16 – 1.0 Flight Time**PERFORMANCE TAKEOFFS AND LANDINGS**

- A. **Objectives.** Learn the basic procedures for short- and soft-field takeoffs, climbs, approaches, and landings in the training airplane. Emphasis on short- and soft-field takeoffs and landings.

Content:**(1) PREFLIGHT DISCUSSION:**

- a) Performance estimates
- c) Effects of high density altitude

(2) INTRODUCE:

- a) Low-Level Wind Shear Precautions
- b) Short-Field Takeoff and Climb
- c) Soft-Field Takeoff and Climb
- d) Short-Field Approach and Landing
- e) Soft-Field Approach and Landing

B. **Completion Standards.** The student will be able to explain runway conditions that necessitate the use of soft-field takeoff and landing techniques. Demonstrate the correct procedure to be used under existing or simulated conditions, although proficiency may not be at private pilot level. Ground track during ground reference maneuvers will be accurate. Maintain altitude +/- 150 feet.

FLIGHT LESSON 17 and 18 – 1.5 Flight Time**ATTITUDE INSTRUMENT FLYING**

- A. **Objectives.** Practice the listed maneuvers to gain proficiency and confidence. Introduce airplane control by instrument reference during emergency situations to broaden the student's knowledge. Emphasis will be on the introduction of VOR orientation, tracking, and homing, as well as attitude instrument flying.

Content:**(1) PREFLIGHT DISCUSSION:**

- a) Basic instrument maneuvers and unusual flight attitudes
- b) Situational Awareness
- c) Disorientation

(2) INTRODUCE:

- a) VOR Orientation and Tracking (VR)
- b) ADF Orientation and Homing (VR)
- c) Recovery from Unusual Flight Attitudes
- g) Using Radio Communications, Navigation Systems/Facilities (IR)

(3) REVIEW:

- a) Low Level Wind Shear Precautions
- b) Short-Field Takeoffs and Climbs
- c) Short-Field Approaches and Landings
- d) Power-Off Stalls
- e) Power-On Stalls
- f) Maneuvering During Slow Flight (IR)

- B. **Completion Standards.** Perform takeoffs and landings smoothly, while maintaining good directional control. Approaches will be stabilized and airspeed will be within five knots of that desired. Demonstrate basic understanding of VOR orientation, tracking and homing. Display the correct unusual attitude recovery techniques.

FLIGHT LESSON 19 – 1.0 Flight Time**NIGHT Traffic Patterns**

B. **Objectives.** Student will gain proficiency and confidence in night flight operations.

C.

Content:**(1) PREFLIGHT DISCUSSION:**

- a) Differences between day flying and night flying
- b) Situational Awareness
- c) Disorientation

(2) INTRODUCE:

- a) Night airport operations and safety
- b) Traffic Patterns
- c) Scanning for traffic at night

B. **Completion Standards.** Perform 5 takeoffs and landings to full stop in night time conditions.

FLIGHT LESSON 20 – 2.5 Flight Time

CROSS-COUNTRY: KGAI-KLNS-KGAI

A. **Objectives.** Introduce cross-country procedures and the proper techniques to be used during flights out of the local training area, including use pilotage and dead reckoning. Prepare the student to make cross-country flights as the sole occupant of the airplane. Review instrument and emergency operations. Emphasize cross-country navigation procedures that include a point of landing at least a straight-line distance of more than 50 nautical miles from the original point of departure.

Content:

- (1) **PREFLIGHT DISCUSSION:**
- a) REVIEW CROSS-COUNTRY FLIGHT PLANNING
 - b) Sectional charts
 - c) Flight publications
 - d) Route selection and basic navigation procedures (pilotage and dead reckoning)
 - e) Weather information
 - f) Fuel requirements
 - g) Performance and limitations
 - h) Navigation log
 - i) Weight and balance
 - j) Aeronautical decision making
 - k) Resource use
 - l) Workload management

(2) **INTRODUCE: CROSS-COUNTRY FLIGHT**

- a) Departure
- b) Course Interception
- c) Pilotage
- d) Dead Reckoning
- e) Power Settings and Mixture Control
- f) Diversion to an Alternate
- g) Lost Procedures
- h) Estimates of Groundspeed and ETA
- i) Collision Avoidance Precautions

AIRPORT OPERATIONS

- a) National Airspace System
- b) Controlled Airports
- c) Use of ATIS
- d) Use of ATC
- e) CTAF (FSS or UNICOM) Airports

3) REVIEW:

- a) Runway Incursion Avoidance
- b) Emergency Approach and Landing (Simulated)
- c) Short and Soft Field Take Off and Landing

B. **Completion Standards:** Demonstrate the skill to perform cross-country flight safely as the sole occupant of the airplane, including the use of Pilotage and Dead Reckoning with the use of the GPS as a backup. Include a point of landing at least a straight-line distance of more than 50 nautical miles from the original point of departure. Demonstrate complete preflight planning, weather analysis, use of FAA publications and charts, adherence to the preflight plan, and the use of pilotage, dead reckoning, radio communication, and navigation systems.

FLIGHT LESSON 21 – 2.5 Flight Time**CROSS-COUNTRY: KGAI-W35-KFDK-KGAI (Alternate: KGAI-KLNS-KFDK-KGAI)**

A. **Objectives.** Introduce cross-country procedures and the proper techniques to be used during flights out of the local training area, including use of VOR Navigation and dead reckoning. Prepare the student to make cross-country flights as the sole occupant of the airplane. Review instrument and emergency operations. Emphasize cross-country navigation procedures that include a point of landing at least a straight-line distance of more than 50 nautical miles from the original point of departure.

Content:

- (1) **PREFLIGHT DISCUSSION:**
- a) CROSS-COUNTRY FLIGHT PLANNING
 - b) Sectional charts
 - c) Flight publications
 - d) Route selection and basic navigation procedures (pilotage and dead reckoning)
 - e) Weather information
 - f) Fuel requirements
 - g) Performance and limitations
 - h) Navigation log
 - i) Weight and balance
 - j) Cockpit management
 - k) Aeromedical factors
 - l) Aeronautical decision making
 - m) Resource use
 - n) Workload management
- (2) **INTRODUCE: CROSS-COUNTRY FLIGHT**
- a) Departure
 - b) Course Interception
 - c) VOR Navigation
 - d) Dead Reckoning
 - e) Power Settings and Mixture Control
 - f) Diversion to an Alternate
 - g) Lost Procedures
 - h) Estimates of Groundspeed and ETA
 - i) Collision Avoidance Precautions
- 3) **REVIEW:**
- a) Emergency Operations
 - b) Systems and Equipment Malfunctions
 - c) Emergency Descent
 - d) Runway Incursion Avoidance
 - e) Emergency Approach and Landing (Simulated)
 - f) Short / Soft Field Take Off and Landings

B. **Completion Standards:** Demonstrate the skill to perform cross-country flight safely as the sole occupant of the airplane, including the use of VOR Navigation and Dead Reckoning with the use of the GPS. Include a point of landing at least a straight-line distance of more than 50 nautical miles from the original point of departure. Demonstrate complete preflight planning, weather analysis, use of FAA publications and charts, adherence to the preflight plan, and the use of pilotage, dead reckoning, radio communication, and navigation systems.

FLIGHT LESSON 22 – 2.0 Flight Time

NIGHT FLIGHT and CROSS-COUNTRY KGAI-KESN-KGAI (Alternate: KGAI-KLNS-KGAI)

A. **Objectives.** Introduce night navigation and emergency operations. Recognize the importance of thorough planning and accurate navigation. The flight should include a total distance of more than 100 nautical miles and a point of landing at least a straight-line distance of more than 50 nautical miles from the original point of departure. Emphasize precise aircraft control and the navigation accuracy required for night VFR cross-country flights. Conduct 5 full stop landings at night.

Content:

1) PREFLIGHT DISCUSSION:

- a) Night orientation, navigation, and chart reading techniques
- b) Weather information
- c) Route selection
- d) Altitude selection
- e) Fuel requirements
- f) Departure and arrival procedures

(2) INTRODUCE:

- a) Use of ATIS, Approach, and Departure Control
- b) Pilotage
- c) Dead Reckoning
- d) Radio Navigation (VR-IR)
- e) Emergency Operations
- f) Use of Unfamiliar Airports
- g) Collision Avoidance Precautions
- h) Diversion to Alternate
- i) Lost Procedures
- j) 5 take offs and landings to a full stop

(3) REVIEW:

- a) Aeromedical Factors
- b) Normal Takeoffs and Climbs
- c) Normal Approaches and Landings
- d) Go-Around/Rejected Landing

A. **Completion Standards:** Demonstrated an understanding of night cross- country preparation and flight procedures, including ability to maintain attitude by instrument reference. Navigation should be accurate, and simulated emergency situations should be handled promptly, utilizing proper judgment. Total distance of more than 100 nautical miles required. In addition, the flight must include a point of landing at least a straight-line distance of more than 50 nautical miles from the original point of departure. Complete 10 takeoffs and landings to a full stop with each involving flight in the traffic pattern. Landing approaches stabilized with touch-down at or near the appropriate touchdown area on the runway

FLIGHT LESSON 23 – 2.5 Flight Time

CROSS-COUNTRY CHECK FLIGHT: KGAI-KLNS-KFDK-KGAI

A. **Objectives.** Flight to be conducted by Chief Instructor, Assistant Chief Instructor or designated Check Instructor. Test cross-country procedures and proper techniques to be used during flights out of the local training area, including use VOR Navigation, Pilotage and Dead Reckoning with the GPS as a backup. Verify that the student is proficient to make cross-country flights as the sole occupant of the airplane. Review instrument and emergency operations.

B. **Content:**

(1) **PREFLIGHT DISCUSSION:**

- a) REVIEW CROSS-COUNTRY FLIGHT PLANNING
- b) Sectional charts
- c) Flight publications
- d) Route selection and basic navigation procedures (pilotage and dead reckoning)
- e) Weather information
- f) Fuel requirements
- g) Performance and limitations
- h) Navigation log
- i) Weight and balance
- j) Cockpit management
- k) Aeromedical factors
- l) Aeronautical decision making
- m) Resource use
- n) Workload management

(2) **INTRODUCE: CROSS-COUNTRY FLIGHT**

- a) Departure
- b) Course Interception
- c) Pilotage
- d) Dead Reckoning
- e) VOR Navigation
- f) Power Settings and Mixture Control
- g) Diversion to an Alternate
- h) Lost Procedures
- i) Estimates of Groundspeed and ETA
- j) Collision Avoidance Precautions

3) **REVIEW:**

- a) Emergency Operations
- b) Systems and Equipment Malfunctions
- c) Emergency Descent
- d) Runway Incursion Avoidance
- e) Emergency Approach and Landing (Simulated)
- f) Emergency Equipment and Survival Gear

B. **Completion Standards:** The student will demonstrate the skill needed to perform cross-country flight safely as the sole occupant of the airplane, including the use of Pilotage and Dead Reckoning with the use of the GPS. Include a point of landing at least a straight-line distance of more than 50 nautical miles from the original point of departure. Demonstrate complete preflight planning, weather analysis, use of FAA publications and charts, adherence to the preflight plan, and the use of pilotage, dead reckoning, radio communication, and navigation systems.

FLIGHT LESSON 24 –2.5 Solo Flight Time

CROSS-COUNTRY SOLO: KGAI-KLNS-KFDK-KGAI

A. **Objectives.** Use previous experience and training to complete solo cross- country. Increase proficiency and confidence. The Flight should include a point of landing that is at least a straight line distance of more than 50 nautical miles from the original point of departure and a total distance of 150 nautical miles. Emphasize planning and following the plan, including alternatives.

Content:

(1) PREFLIGHT DISCUSSION:

- a) Review the Solo Cross-Country Briefing
- b) Required documents and endorsements
- c) Basic VFR weather minimums and airspace rules
- d) Enroute communication
- e) ATC services available to pilots
- f) Enroute weather information
- g) VFR position report
- h) Emergency operations
- i) Lost procedures
- j) Diversion
- k) Lost communication procedures
- l) ATC light signals
- m) Aeronautical decision making
- n) Resource use
- o) Workload management

(2) REVIEW:

Preflight Preparation

- a) Sectional Charts
- b) Flight Publications
- c) Route Selection
- d) Weather Information
- e) Fuel Requirements
- f) Performance and Limitations
- g) Weight and Balance
- h) Navigation Log
- i) FAA Flight Plan
- j) Aeromedical Factors

Cross-Country Flight

- k) Opening the Flight Plan
- l) VOR and GPS Navigation
- m) Position Fix by Navigation Facilities
- n) Pilotage
- o) Dead Reckoning
- p) Use of Unfamiliar Airports
- q) Estimates of Groundspeed
- r) Estimates of ETA
- s) Closing the Flight Plan

B. **Completion Standards.** Demonstrate accurate planning and conduct a VFR cross-country flight using three methods of navigation. During the post-flight evaluation, the student will exhibit an understanding of unfamiliar airport operations. At least one landing more than 50 n.m. from the departure airport. **At least 3 landings** at a Towered airport including flight within a traffic pattern.

FLIGHT LESSON 25 and 26– 1.5 Flight Time

PRIVATE PILOT CHECKRIDE TEST PREP

- A. **Objectives.** Review the areas of operation, including specified maneuvers and procedures determined by the instructor to increase proficiency to the level required of a private pilot. Further develop the student's knowledge and skill in preparation for the private pilot practical test. Emphasis will be on correction of any deficient skill or knowledge areas.

Content:

(1) **PREFLIGHT DISCUSSION:**

- a) Maneuvers and procedures in preparation for the FAA Practical Test, including spin awareness.

(2) **REVIEW:**

- b) Preflight Preparation
- c) Ground Operations
- d) Maneuvering During Slow Flight (VR-IR)
- e) PowerOff and PowerOn Stalls (VR-IR)
- f) Steep Turns
- g) Ground Reference Maneuvers
- i) Using Radio Communications, Navigation Systems/Facilities, and Radar Services (IR)
- j) Unusual Attitude Recoveries (IR)
- k) Airport Operations
- l) Normal and/or Crosswind Takeoffs and Landings
- m) GoAround/Rejected Landing
- n) ShortField Takeoffs and Landings
- o) SoftField Takeoffs and Landings
- p) Forward Slips to Landing
- q) Emergency Descent
- r) Engine Out Procedures
- s) After Landing, Parking, and Securing Cross-country Flight Procedures
- t) Specific Maneuvers or Procedures Assigned by the Flight Instructor

- B. **Completion Standards.** The student will exhibit progress and acceptable proficiency by performing each assigned maneuver smoothly and with proper coordination and precision according to the criteria established by the Private Pilot Practical Test Standards.

FLIGHT LESSON 27– 1.5 Flight Time

PRIVATE PILOT END OF COURSE CHECK FLIGHT

- A. **Objectives.** Flight will be conducted by the Chief Instructor or Assistant Chief Instructor. The Student will demonstrate proficiency in the areas of operation, maneuvers and procedures to the level required of a private pilot. Further develop the student's knowledge and skill in preparation for the private pilot practical test. Emphasis will be on correction of any deficient skill or knowledge areas.

Content:

(1) **PREFLIGHT DISCUSSION:**

- a) Maneuvers and procedures in preparation for the FAA Practical Test, including spin awareness.

(2) **REVIEW:**

- b) Preflight Preparation
- c) Ground Operations
- d) Maneuvering During Slow Flight (VR-IR)
- e) PowerOff and PowerOn Stalls (VR-IR)
- f) Steep Turns
- g) Ground Reference Maneuvers
- i) Using Radio Communications, Navigation Systems/Facilities, and Radar Services (IR)
- j) Unusual Attitude Recoveries (IR)
- k) Airport Operations
- l) Normal and/or Crosswind Takeoffs and Landings
- m) GoAround/Rejected Landing
- n) ShortField Takeoffs and Landings
- o) SoftField Takeoffs and Landings
- p) Forward Slips to Landing
- q) Emergency Descent
- r) Engine Out Procedures
- s) After Landing, Parking, and Securing Cross-country Flight Procedures
- t) Specific Maneuvers or Procedures Assigned by the Flight Instructor

- B. **Completion Standards.** The student will exhibit progress and acceptable proficiency by performing each assigned maneuver smoothly and with proper coordination and precision according to the criteria established by the Private Pilot Practical Test Standards.