

Private Pilot Syllabus

Introduction:

Thank you for choosing Mid Island Air Service for your flight training. Our course of training is based on over 75 years of training students from Sport Pilot all the way up to and including ATP (Airline Transport Pilots). The foundation of our course is built on Safety and transference of knowledge through various handbooks, articles, and videos.

The Syllabus consists of 3 Stages that are made up of both ground, simulator (Aviation Training Device), and flight lessons designed to facilitate your way through the course.

1. This syllabus is designed for use in both 61 and part 141 trainings and meets all the applicable requirements of 14 CFR 141 Appendix B and 14 CFR 61 Subpart E.
2. Each lesson consists of approximate times for completion. These times are recommendations only and are not to be used as a mandate for lesson completion.
3. Completion of the course is eligible when a trainee has successfully completed all lessons and meets the aeronautical experience requirements of 14 CFR 141 Appendix B (35 Hours of Ground and 35 Hours of Flight) and 14 CFR 61 Subpart E (40 Hours of Flight). Part 61 training does not have a minimum ground training requirement but plan to do a minimum of 35 hours of ground training.
4. Each lesson has a learning objective that is based on the current Airmen Certification Standards.
5. Each lesson consists of topics for review and homework to be completed prior to the next lesson. The homework consists of reading in the Pilot's Handbook of Aeronautical Knowledge, Airplane Flying Handbook, Weight & Balance Handbook, Aviation Weather, Aviation Weather Services, AFM/POH, and various training videos.

Prerequisite for enrollment:

A trainee may not begin the Private Pilot Syllabus until the trainee has obtained at least a FAA Class III Medical Certificate, appropriate TSA documentation, meets the English Language standard as outlined in the current version of AC 61-20, eligible for a student pilot certificate as outlined by the Federal Aviation Administration, and has met with the Chief Flight Instructor for the course or his/her designee.

Eligibility for a Private Pilot Certificate:

In order to successfully obtain a Private Pilot Certificate the student must meet the eligibility requirements for a Private Pilot Certificate as outlined in 14 CFR Part 61.103.

1. The applicant must be at least 17 years of age.
2. Be able to read, speak, write, and understand the English Language. English Language Standards are defined by FAA Advisory Circular 60-28.
3. Receive a logbook endorsement from an authorized instructor who conducted the training or reviewed a home study course for the required knowledge test.
4. Pass the required knowledge tests on the subjects outlined in 61.105(b)
5. Received flight training and a logbook endorsement for the areas of operation listed in 61.107(b) and that the applicant is ready for the practical test.
6. Meet the aeronautical experience requirements as outlined in 61.109.
7. Pass a Practical Test with an FAA Designated Pilot Examiner (DPE)

Private Pilot Estimated Lesson Times							
Lesson Number	Ground Pre/Post	Dual	Solo	AATD/FTD	Instrument	Cross Country	Night
Ground Lesson 1	1.0						
Ground Lesson 2	1.0						
Simulator Lesson 1	.5	1.5		1.5			
Flight Lesson 1	1.0	1.0					
Flight Lesson 2	.5	1.0					
Ground Lesson 3	1.5						
Simulator Lesson 2	.5	1.5		1.5	0.2		
Ground Lesson 4	1.5						
Flight Lesson 3	.5	1.0			0.2		
Flight Lesson 4	.5	1.0			0.2		
Ground Lesson 5	1.5						
Simulator Lesson 3	.5	1.5		1.5			
Flight Lesson 5	.5	1.0			0.3		
Flight Lesson 6	.5	1.0					
Ground Lesson 6	1.5						
Flight Lesson 7	.5	1.0			0.3		
Ground Lesson 7	1.5						
Ground Lesson 8	1.5						
Flight Lesson 8	.5	1.5			0.2		
Stage 1 Check	1.5	1.5					
Stage 1 Totals	18.5	14.5	0.0	4.5	1.4	0.0	
Ground Lesson 9	1.5						

Flight Lesson 9	.5	1.0					
Ground Lesson 10	1.5						
Flight Lesson 10	.5	1.0					
Ground Lesson 11	1.5						
Simulator Lesson 4	.5	1.0		.5			
Flight Lesson 11	.5	1.0			0.3		
Ground Lesson 12	1.5						
Flight Lesson 12	.5	1.5			0.3	1.5	
Flight Lesson 13	.5	1.5					1.5
Flight Lesson 14	.5	1.5			0.3	1.5	
Flight Lesson 15	.5	1.5			0.3	1.5	1.5
Ground Lesson 13	1.5						
Stage 2 Check	1.0	1.5			0.3		
Stage 2 Totals	12.5	10.5	0.0	0.5	1.5	4.5	3.0
Flight Lesson 16	.5	0.5	0.5				
Flight Lesson 17	.5	0.5	0.5				
Flight Lesson 18	.5	0.5	0.5				
Flight Lesson 19			2.0				
Flight Lesson 20			1.5				
Flight Lesson 21	0.5		2.5			2.5	
Flight Lesson 22	0.5		2.5			2.5	
Ground Lesson 14	1.5						
Flight Lesson 23	.5	1.0			0.3		

Flight Lesson 24	.5	1.0			0.3		
End of Course Check	1.5	1.5			0.3		
Stage 3 Totals	6.5	5.0	10.0	0.0	0.9	5.0	0.0
Course Totals	37.5	30.0	10.0	5.0	3.8	9.5	3.0

"Notes:

- 1. Lesson times are only suggested minimums. Lessons may be longer or shorter based on trainee ability.**
- 2. Course Totals are in line with the FAA minimum for a Part 61 trainee.**
- 3. Part 141 trainees are eligible to complete in less total time. See 14 CFR Appendix D for current minimum requirements.**

Stage 1

Stage Objectives: During this stage, the trainee is introduced to pilot training, various opportunities in aviation, human factors, how to perform the four basic flight maneuvers, how to maintain a desired track over the ground, how to takeoff and land the airplane and they will become knowledgeable of the Airplane Systems, the National Airspace System, Weather Theory and Reports, aerodynamics of Flight, the Flight Environment in order to safely maneuver the training aircraft. A student may not move onto the next flight lesson until completion of all items from the previous flight lesson has been obtained. However, a student may proceed to the next ground lesson if all the items from the previous ground lesson were satisfactorily completed and weather or maintenance prevents the next scheduled flight lesson from taking place. Although, the student made not be permitted to progress to the next stage until the Stage 1 Check is completed.

Completion Standards

At the completion of the Stage 1 Check the student will be able to perform basic flight maneuvers. Additionally, the student will have completed a Pre-solo Written exam that has been reviewed and corrected by their instructor to 100% and be able to explain to the Chief Flight Instructor or his/her designee the following items: Operations of Systems of the Training Aircraft, Privileges and Limitations of a Student Pilot Certificate, Airworthiness Requirements, Airspace, The Flight Environment, Weather reports pertinent to flight in the traffic pattern and local practice area.

Ground Lesson 1

Objective: For the trainee to become familiar with the pilot training structure, opportunities in aviation, human factors, and how to properly preflight the training aircraft and the Mid Island Air Service Flight Operations Manual.

References: Jeppesen Guided Flight Discovery Private Pilot Textbook: Chapter 1, Mid Island Air Service Flight Operations Manual

Course Overview

- Course Elements and Materials
- Exams and Tests
- Mid Island Air Service Flight Operations Manual
- Student/Instructor Expectations
- Use of Aviation Training Devices/Flight Training Devices in the course
- Pre-flight of the Training Aircraft

Section A- Pilot Training

- How to Get Started
- Role of the FAA
- Fixed-Base Operators (FBO's)
- Eligibility Requirements
- Types of Training Available
- Phases of Training
- Private Pilot Privileges and Limitations

Section B- Aviation Opportunities

- New Experiences
- Aviation Organizations
- Category/Class Ratings
- Additional Pilot Certificates and ratings
- Aviation Careers

Section C- Introduction to Human Factors

- Single Pilot Resource Management
 - Aeronautical Decision Making
 - Risk Management
 - Task Management
 - Situational Awareness
 - CFIT Awareness
 - Automation Management
- Aviation Physiology
 - Alcohol, Drugs, and Performance
 - Fitness for Flight

Completion Standards:

Completion is determined by the student being able to understand the various opportunities available to them in the aviation field and being able to successfully preflight themselves and the aircraft in preparation for their first flight.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Read and answer the questions for Jeppesen Private Pilot Textbook Chapter 2

Ground Lesson 2

Objective: For the student to gain the basic understanding of the systems of the training aircraft and for the student to become familiar with the flight instruments including their operation, errors, and common malfunctions.

References: Jeppesen Guided Flight Discovery Private Pilot Textbook: Chapter 2, Appropriate Pilot Operating Handbook for the aircraft to be used. Pilot's Handbook of Aeronautical Knowledge

Section A- Airplanes

- Fuselage
- Wings
- Empennage
- Landing Gear
- Engine/Propeller
- Pilot's Operating Handbook (POH)

Section B- The Powerplant and Related Systems to the Training Aircraft*

- Reciprocating Engine
- Induction Systems
- Supercharging and Turbocharging
- Ignition Systems
- Fuel Systems
- Refueling
- Oil Systems
- Cooling Systems
- Exhaust Systems
- Propellers
- Propeller Hazards
- Electrical Systems

*The Instructor will review the above areas with the student about the specific training Aircraft where applicable.

Section C- Flight Instruments

- Pitot-Static Instruments
- Airspeed Indicator
- Altimeter
- Vertical Speed Indicator
- Gyroscopic Instruments
- Magnetic Compass

Completion Standards

Completion is determined by the student being able to understand aircraft systems and how the flight instruments operate through oral quizzing and completion of the Aircraft Limitations Exams with a grade of 80% or better. Additionally, the student will answer the questions at the end of each section with a grade of 80% or better.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Review checklists and preflight procedures for Simulator Lesson 1

Simulator Lesson 1

Objective: For the student to get exposed to the ground and flight operations they will be performing on Flight Lesson 1. Additionally, the student will become familiar with checklist usage including during which phase of flight one should be performed. The student will also understand the operation of the FTD or AATD and its significance in the training environment.

References: Checklist for the Aircraft to be used, MIAS Maneuvers Manual for the Aircraft to be used, and the Airplane Flying Handbook

Preflight Preparation

- Use of Checklists
- Passenger Crew briefing (SAFESTS)
 - Seatbelts – how they work and how to use them.
 - Air Vents – How they work and how to use them.
 - Fire Extinguisher – Location, and operation. Verify it has been checked
 - Emergency Exits – How are we getting out?
 - Survival Gear – Do we have anything on board? Do we need anything?
 - Traffic Watch – Using the clock system to check for traffic
 - Sterile Cockpit – Critical phase of flights.
 - Questions?
- Takeoff Briefing
 - Type of Takeoff Normal/Short/Soft
 - Takeoff Runway
 - Wind Direction and Velocity
 - Takeoff Distance needed Ground Roll/50' ft obstacle
 - Abort point/ Rejected Takeoff
 - Emergency Procedures
 - On the runway before rotation
 - Below the Crosswind Turn
 - Above the crosswind Turn.
- Approach and Landing Briefing
 - Type of Landing
 - Landing Runway
 - Wind Direction and Velocity
 - Landing Distance needed Ground Roll/50' ft obstacle
 - DFGAP – Defined Go Around Point – 300' on centerline fully configured
 - Emergency Procedures
 - Foreign object on runway
 - Braking conditions
 - Flat tire on landing
- FTD/AATD Familiarization

Preflight Procedures

- Cockpit Management
- Operation of Systems
- Engine Starting
- Radio Communication

- Positive Exchange of the Flight Controls
- Taxiing
- Runway Incursion Avoidance

Takeoffs and Go Arouns

- Normal Takeoff and Climb
- Go Arouns

Fundamentals of Flight

- Collision Avoidance.
- Use of Trim Control.
- Straight-and-Level Flight.
- Climbs, Descents, and Level offs.
- Medium Banked Turns in both Directions.
- Pitch and Power to achieve desired airspeed.
- Pitch and Power to achieve desired rate of climb or descent.

Completion Standards

Completion is determined by the student's ability to display basic knowledge and familiarization with the operation of the flight controls both on the ground and in flight.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Review checklists and preflight procedures for Flight Lesson 1

Flight Lesson 1

Objective: For the student to be able to determine if the training airplane is in an airworthy condition for flight. Additionally, the student will understand the importance of using checklists through all phases of flight, how to taxi the airplane, and how to use the flight controls to perform the 4 Fundamentals of Flight.

References: Airplane Flying Handbook, MIAS Checklists, MIAS Maneuvers Manual, POH for Aircraft to be used

Preflight Preparation

- Use of Checklists
- Preflight Inspection
- Airplane Certificates and Documents
- Airplane Servicing
 - Fuel, Oil, Tires, and Struts
 - Location of First Aid Kit or Fire Extinguisher/if applicable

Preflight Procedures

- Cockpit Management
- Operation of Systems
- Engine Starting
- Radio Communication
- Positive Exchange of the Flight Controls
- Taxiing
- Runway Incursion Avoidance

Takeoffs, Landings, and Go Arouns

- Abort/Rejected Takeoff
- Normal Takeoff and Climb – Hand Throttle until outside of the airport environment.
- Normal Approach and Landing (Demo only)
- After Landing, Parking, and Securing

Fundamentals of Flight

- Collision Avoidance
- Wake Turbulence Avoidance
- Use of Trim Control
- Straight-and-Level Flight
- Climbs, Descents, and Level offs
- Medium Banked Turns in both Directions

Completion Standards

Completion is determined by the student's ability to display basic knowledge of the aircraft systems and being familiar with the operation of the flight controls both on the ground and in flight.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Review checklists, preflight procedures, Traffic Pattern Operations, Wake Turbulence avoidance procedures for Flight Lesson 2

Flight Lesson 2

Objective: For the student to become familiar with the local traffic pattern including proper entry and exit and Go- Around Procedures.

References: Airplane Flying Handbook, MIAS Checklists, MIAS Maneuvers Manual, POH for aircraft to be used

Review

- Use of Checklists
- Preflight Inspection
- Airplane Certificates and Documents
- Airplane Servicing
- Cockpit Management
- Operation of Systems
- Engine Starting
- Radio Communication
- Positive Exchange of the Flight Controls
- Taxiing
- Runway Incursion Avoidance
- Takeoff Briefing & Rejected Takeoff
- Normal Takeoff and Climb
- Collision Avoidance Procedures
- Wake Turbulence Avoidance
- Straight-and-Level Flight
- Climbs, Descents, and Level offs
- Normal Approach and Landing (Demo only)
- After Landing, Parking, and Securing

Introduce

- Aviation Security
- Airport, Runway, Taxiway Signs, Markings, and Lighting
- Crosswind Taxiing
- Turns to Headings
- Airspeed Configuration Changes
- Flight at Approach Airspeed
- Traffic Patterns
- Descents in High and Low Drag Configuration
- Go- Around Procedures

Completion Standards

Completion is determined by the student's ability to perform a preflight with minimal assistance from the Flight Instructor, ability to start the engine and operate it safely on the ground with assistance from the instructor as necessary. The Student should be able to maintain altitude within 250 feet during level flight, control airspeed and rate of climbs and descents as needed for the traffic pattern environment, and the proper go-around procedure.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Read and answer the questions for Jeppesen Private Pilot Textbook Chapter 3.

Ground Lesson 3

Objective: For the student to become familiar with aerodynamic principles that make an airplane fly.

References: Jeppesen Guided Flight Discovery Private Pilot Textbook: Chapter 3

Section A- Four Forces of Flight

- Lift
- Airfoils
- Pilot Control of Lift
- Weight
- Thrust
- Drag
- Ground Effect

Section B- Stability

- Three Axes of Flight
- Longitudinal Stability
- Center of Gravity Positions
- Lateral Stability
- Directional Stability
- Stalls
- Spins

Section C- Aerodynamics of Maneuvering Flight

- Climbing Flight
- Left-Turning Tendencies
- Descending Flight
- Turning Flight
- Load Factor

Completion Standards

Completion is determined by the student being able to understand the aerodynamic principles of flight and what makes an airplane fly through oral quizzing. Additionally, the student will answer the questions at the end of each section with a grade of 80% or better.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Review areas of weakness from Flight Lesson 2 and read MIAS Maneuvers Manual and Airplane Flying Handbook on procedures for performing Slow Flight, Power-On Stalls, Power-Off Stalls in preparation for Simulator Lesson 2.

Simulator Lesson 2

Objective: For the student to improve the students understanding and or gain additional proficiency in the areas presented from Flight Lesson 2 and to introduce the students to flight at slow airspeeds, stalls.

References: Airplane Flying Handbook, MIAS Checklist, MIAS Maneuvers Manual

Review

- Use of Checklists
- Cockpit Management
- Engine Starting
- Normal Takeoff and Climb & Abort/Rejected Takeoff
- Collision Avoidance Procedures
- Straight-and-Level Flight
- Climbs, Descents, and Level offs
- Turns to Headings

Introduce

- Climbing and Descending Turns
- Maneuvering During Slow Flight
- Power-Off Stalls
- Power-On Stalls
- Avoidance of Accelerated, Cross Controlled, and Elevator Trim Stalls

Completion Standards

Completion is determined by the student's ability to show increased proficiency from Flight Lesson 2 review items, maintain altitude within 250 feet, and to have an understanding of how the aircraft flight controls respond at slow airspeeds.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Read and answer the questions for Jeppesen Private Pilot Textbook Chapter 4

Ground Lesson 4

Objective: For the student to understand safety during flight by being able to explain, collision avoidance procedures, right of way rules, minimum safe altitudes, Airspace, and how to read an Aeronautical Chart.

References: Jeppesen Guided Flight Discovery Private Pilot Textbook: Chapter 4, Pilot's Handbook of Aeronautical Knowledge

Section A- Safety of Flight

- Collision Avoidance/Visual Scanning
- Risk Management/ Personal Minimums
- Estimating Inflight Visibility
- Airport Operations
- Right-of-Way Rules
- Minimum Safe Altitudes
- Taxing in Wind
- Positive Exchange of Flight Controls

Section B- Airports

- Controlled and Uncontrolled
- Runway Layout
- Contaminated runway/FICON
- Traffic Pattern
- Airport Visual Aids
- Runway and Taxiway Markings
- Runway Touchdown zone markings day and night
- Ramp Area Hand Signals
- Runway Incursion Avoidance
- Land and Hold Short Operations (LAHSO)
- Airport Lighting
- Visual Glide Path Indicators
- Approach Light Systems
- Pilot-Controlled Lighting

Section C- Aeronautical Charts

- Latitude and Longitude
- Projections
- Sectional Aeronautical Charts
- Terminal Area Charts
- World Aeronautical Charts
- Chart Symbology

Section D- Airspace

- Classifications
- Uncontrolled Airspace
- Controlled Airspace

- Class E
- Class D
- Class C
- Class B
- Class A
- Special VFR
- Special Use Airspace
- Other Airspace Areas
- Emergency Air Traffic Rules
- Air Defense Identification Zones
- Security-Related Flight Restrictions
- Intercept Procedures

Completion Standards

Completion is determined by the student being able to understand how to read Aeronautical Chart symbols and how to determine cloud clearance and visibility requirements for various classes of Airspace. Additionally, the student will answer the questions at the end of each section with a grade of 80% or better.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Review areas to improve performance and understand of topics presented in Simulator Lesson 2 and procedures for performing Slow Flight, Power-On Stalls, Power-Off Stalls for Flight Lesson 3.

Flight Lesson 3

Objective: For the student to gain additional proficiency and to improve their performance demonstrated in Flight Lesson 2 and to introduce the students to flight at slow airspeeds, stalls, and flight using a view limited device.

References: Airplane Flying Handbook, MIAS Checklist, MIAS Maneuvers Manual

Review

- Use of Checklists
- Preflight Inspection
- Airplane Certificates and Documents
- Airplane Servicing
- Cockpit Management
- Operation of Systems
- Engine Starting
- Radio Communication
- Positive Exchange of the Flight Controls
- Airport, Runway, Taxiway Signs, Markings, and Lighting
- Contaminated runway NOTAM (FICON)
- Crosswind Taxiing
- Runway Incursion Avoidance
- Normal Takeoff and Climb Abort/Rejected Takeoff
- Collision Avoidance Procedures
- Straight-and-Level Flight
- Climbs, Descents, and Level offs
- Turns to Headings
- Traffic Patterns
- Go Arouns
- After Landing, Parking, and Securing

Introduce

- Climbing and Descending Turns
- Maneuvering During Slow Flight
- Power-Off Stalls
- Power-On Stalls

Completion Standards

Completion is determined by the student's ability to show increased proficiency from Flight Lesson 2 review items, maintain altitude within 200 feet, perform correct traffic pattern entry, and a landing with assistance from the instructor.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Review areas of weakness from Flight Lesson 3, Airplane Flying Handbook, MIAS Maneuvers Manual, and MIAS Checklists on Emergency Procedures for Flight Lesson 4.

Flight Lesson 4

Objective: For the student to gain additional proficiency in the areas to improve their performance demonstrated during Flight Lesson 3 and to introduce the students to various emergency situations.

References: Airplane Flying Handbook, MIAS Checklist, MIAS Maneuvers Manual

Review

- Use of Checklists
- Preflight Inspection
- Cockpit Management
- Operation of Systems
- Radio Communication
- Positive Exchange of the Flight Controls
- Airport, Runway, Taxiway Signs, Markings, and Lighting
- Abort/Rejected Takeoff
- Traffic Patterns
- Go Arouns

Introduce

- System and Equipment Malfunctions
- Emergency Descent
- Emergency Approach and Landing (Simulated)
- Emergency Equipment and Survival Gear
- Steep Turns
- Stall Spin avoidance and recovery
- Demonstrated Stalls (Secondary, Accelerated, Cross-Control, and Elevator Trim)
- Soft Field Approach and Landing

Completion Standards

Completion is determined by the student's ability to show increased proficiency from Flight Lesson 3 review items by performing an unassisted Takeoff and Climb, use correct radio procedures, maintain altitude within 200 feet, and perform correct traffic pattern entry. The student should be able to have a basic understanding of Steep Turns and the procedure for spin recovery and recovery from the demonstrated stalls.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Read and answer the questions for Private Pilot Textbook Chapter 5, Communication and Flight Information, and Pilot Controller Glossary.

Ground Lesson 5

Objective: For the student to become familiar with Radar, Transponder operations, services provided by Flight Service Stations, and to learn how to use the radio.

References: Jeppesen Guided Flight Discovery Private Pilot Textbook: Chapter 5, Pilot Controller Glossary, and FAA ATC Order JO 7110.65 Air Traffic Control Procedures and phraseology

Section A- Radar and ATC Services

- Radar
- Transponder Operation
- FAA Radar Systems
- VFR Radar Systems
- Automatic Terminal Information Service (ATIS)
- Flight Service

Section B- Radio Procedures

- VHF Communication Equipment
- Using the Radio
- Phonetic Alphabet
- Coordinated Universal Time (ZULU)
- Common Traffic Advisory Frequency (CTAF)
- ATC Facilities at Controlled Airports
- Lost Communications Procedures
- Emergency Procedures
- Emergency Locator Transmitters (ELT's)

Section C- Sources of Flight Information

- Airport Facility Directory/ Chart Supplement
- Federal Aviation Regulations
- Aeronautical Information Manual (AIM)
- Notices to Airmen (NOTAMs)
- Advisory Circulars

Completion Standards

Completion is determined by the student being able to understand how radar and ATC services work, radio procedures, and the sources of flight information during oral quizzing by the instructor. Additionally, the student will answer the questions at the end of each section with a grade of 80% or better.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Review areas to improve upon from Flight Lesson 4 and Ground Proximity Awareness Training for Simulator Lesson 3. Watch "Piper Warrior Crash Landing at Bethlehem Aerodrome" and UND Normal Approach and Landing Video 1.

Simulator Lesson 3

Objective: For the student to become more proficient in their response to emergency situations and work on their crosswind control through Ground Proximity Awareness Training.

References: Airplane Flying Handbook, Ground Proximity Awareness Training(www.thelandingdoctor.com), MIAS Checklist, MIAS Maneuvers Manual

Review

- Use of Checklists
- Preflight Inspection
- Cockpit Management
- Operation of Systems
- Radio Communication
- Positive Exchange of the Flight Controls
- Airport, Runway, Taxiway Signs, Markings, and Lighting
- Traffic Patterns
- System and Equipment Malfunctions
- Emergency Descent
- Emergency Approach and Landing “The Impossible Turn”
- Abort/Rejected Takeoff
- Soft Field Landings
- Go Arouns

Introduce

- Straight-and-Level Flight (IR)
- Constant Airspeed Climbs (IR)
- Constant Airspeed Descents (IR)
- Ground Proximity Awareness
- Effects of wind on the Aircraft Ground Track
- Effects of a Tailwind on Landing performance
- Determining Crosswind factor by use of graphs and other means.
- Crosswind Approach and Landing
- Ground Effect
- Soft Field Approach and Landing

Completion Standards

Completion is determined by the student’s ability to show increased proficiency from Flight Lesson 4 and their ability to align the aircraft with the centerline while in ground effect with various crosswinds.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Review procedures for the areas to improve upon from Flight Lesson 4 and review Airplane Flying Handbook and MIAS Maneuvers Manual on performing Ground Reference Maneuvers for Flight Lesson 5.

Flight Lesson 5

Objective: For the student to practice and review maneuvers from previous lessons and to learn the various Ground Reference Maneuvers.

References: Airplane Flying Handbook, MIAS Maneuvers Manual, MIAS Checklist

Review

- Use of Checklists
- Preflight Inspection
- Cockpit Management
- Operation of Systems
- Radio Communication
- Positive Exchange of the Flight Controls
- Airport, Runway, Taxiway Signs, Markings, and Lighting
- Abort/Rejected Takeoff
- Traffic Patterns
- Straight-and-Level Flight (IR)
- Constant Airspeed Climbs (IR)
- Constant Airspeed Descents (IR)
- Power Off Stalls
- Power On Stalls
- Steep Turns
- Emergency Descent
- Emergency Approach to Landing (Simulated)
- Soft Field Approach and Landing
- Go Arouns

Introduce

- Determining the appropriate wind correction angle
- Rectangular Course
- S-Turns Across a Road
- Turns Around a Point
- Maneuvering During Slow Flight (IR)

Completion Standards

Completion is determined by the student's ability to show increased proficiency from Flight Lesson 4 review items by performing an unassisted Takeoff and Climb, use correct radio procedures, maintain altitude within 200 feet, perform correct traffic pattern entry, and a landing with minimal assistance from the instructor. The student should be able to have a basic understanding of Ground Reference Maneuvers.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Review areas of weakness from Flight Lesson 5 and Airplane Flying Handbook, MIAAS Maneuvers Manual on Go-Around and landing procedures for Flight Lesson 6.

Flight Lesson 6

Objective: For the student to practice and review maneuvers from previous lessons and to learn how to perform Go-Arounds, Forward Slips, and Landings.

References: Airplane Flying Handbook, MIAS Maneuvers Manual, MIAS Checklist

Review

- Use of Checklists
- Preflight Inspection
- Cockpit Management
- Operation of Systems
- Radio Communication
- Positive Exchange of the Flight Controls
- Airport, Runway, Taxiway Signs, Markings, and Lighting
- Normal Takeoff and Climb & Abort/Rejected Takeoff
- Crosswind Takeoff and Climb
- Ground References Maneuvers
- Traffic Patterns
- Soft Field Approach and Landing
- Go-Around/Rejected Landing

Introduce

- Normal Approach and Landing
- Forward Slips to a Landing
- Crosswind Approach and Landing
- Wake Turbulence Avoidance
- ATC Light Gun Signals
- Land and Hold Short Operations
- Controlled Flight Into Terrain

Completion Standards

Completion is determined by the student's ability to show increased proficiency from Flight Lesson 5 review items by performing an unassisted Takeoff, correct traffic pattern entry, and the ability to maintain runway centerline during the approach to landing phase with a crosswind. The student should be able to maintain altitude within 200 feet, and heading within 20 degrees, and airspeed within 15 knots.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Read and answer the questions for Jeppesen Private Pilot Textbook Chapter 6.

Ground Lesson 6

Objective: For the student to learn the causes of various weather conditions, frontal systems, and hazardous weather phenomena. How to become familiar with the recognition and avoidance of wind shear and wake turbulence.

References: Jeppesen Guided Flight Discovery Private Pilot Textbook: Chapter 6, Aviation Weather, Aviation Weather Services, Pilot Handbook of Aeronautical Knowledge

Section A- Basic Weather Theory

- The Atmosphere
- Atmospheric Circulation
- Atmospheric Pressure
- Coriolis Force
- Global Wind Patterns
- Local Wind Patterns

Section B- Weather Patterns

- Atmospheric Stability
- Temperature Inversions
- Moisture
- Humidity
- Dewpoint
- Clouds and Fog
- Precipitation
- Air masses
- Fronts

Section C- Weather Hazards

- Thunderstorms
- Turbulence
- Wake Turbulence
- Wind Shear
- Microburst
- Icing
- Restrictions to Visibility
- Volcanic Ash

Completion Standards

Completion is determined by the student being able to understand basic weather theory, weather patterns, and weather hazards during oral quizzing by the instructor. Additionally, the student will answer the questions at the end of each section with a grade of 80% or better.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Review areas of weakness from previous Flight Lessons in preparation for Flight Lesson 7.

Flight Lesson 7

Objective: For the student to practice and review maneuvers from previous lessons in preparation for the Stage 1 Check.

References: Airplane Flying Handbook, MIAS Maneuvers Manual, MIAS Checklists

Review

- Use of Checklists
- Preflight Inspection
- Cockpit Management
- Operation of Systems
- Radio Communication
- Positive Exchange of the Flight Controls
- Airport, Runway, Taxiway Signs, Markings, and Lighting
- Runway Incursion Avoidance
- Normal Takeoff and Climb/ Abort point/ Rejected Takeoff
- Crosswind Takeoff and Climb
- Straight and Level Flight (VR/IR)
- Constant Airspeeds Climbs and Descents (VR/IR)
- Climbing and Descending Turns (VR/IR)
- Turns to Headings (VR/IR)
- Steep Turns
- Ground References Maneuvers
- Traffic Patterns
- Go Around/Rejected Landings
- Forward Slips to Landing
- System and Equipment Malfunctions
- ATC Light Signals
- Emergency Approach and Landing (Simulated)
- Normal Approach and Landing
- Crosswind Approach and Landing
- Soft Field Approach and Landing
- Land and Hold Short Operations (LAHSO)

Completion Standards

Completion is determined by the student's ability to show increased proficiency from Flight Lesson 6 review items by performing an unassisted Takeoff, perform correct traffic pattern entry, and the ability to maintain runway centerline during unassisted landings. The student should be able to maintain altitude within 150 feet, and heading within 15 degrees, and airspeed within 10 knots.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Read and answer the questions for Private Pilot Textbook Chapter 7

Ground Lesson 7

Objective: For the student to learn how to obtain and interpret weather reports in both textual and graphical format, and become familiar with the various sources of weather information during preflight planning and the enroute phase of flight.

References: Jeppesen Guided Flight Discovery Private Pilot Textbook: Chapter 7, Aviation Weather Services Advisory Circular, Pilot's Handbook of Aeronautical Knowledge

Section A- The Forecasting Process

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

Section B- Printed Reports and Forecasts

- Aviation Routine Weather Report (METAR)
- Radar Weather Reports
- Pilot Weather Reports
- Terminal Aerodrome Forecasts (TAF)
- Aviation Area Forecasts
- Winds and Temperature Aloft Forecast
- Severe Weather Reports and Forecasts
- AIRMET/SIGMET/Convective SIGMET
- Icing Forecasts

Section C- Graphic Weather Products

- Surface Analysis Chart
- Weather Depiction Chart
- Radar Summary Chart
- Satellite Weather Pictures
- Low-Level Significant Weather Prog
- Convective Outlook Chart
- Forecasts Winds and Temperatures Aloft Chart
- Volcanic Ash Forecasts and Dispersion Chart

Section D- Sources of Weather Information

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

Completion Standards

Completion is determined by the student being able to understand how to obtain and read various meteorological reports during oral quizzing by the instructor. Additionally, the student will answer the questions at the end of each section with a grade of 80% or better.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Read FAR's applicable to Private Pilot and complete the Pre-Solo Written Exam.

Ground Lesson 8

Objective: For the student to review and correct their Pre-Solo Written Exam and to understand the Federal Aviation Regulations pertinent to Private Pilot's.

References: Current Federal Aviation Regulations, Jeppesen Private Pilot Textbook, Pilot's Handbook of Aeronautical Knowledge, MIAS Checklists, POH of Aircraft to be used, Airplane Flying Handbook

Federal Aviation Regulations

- FAR Part 1
- FAR Part 61
- FAR Part 91
- NTSB 830

Pre-Solo Review

- Review and correct of Pre-Solo Written Exam
- Mid Island Air Service Flight Operations Manual Information pertinent to Solo Flight
- Privileges and Limitations of a Solo Student Pilot

Completion Standards

Completion is determined by the student being able to explain to the instructor the information pertinent for a Solo Student including Privileges, Limitations, Local Airspace, and Aircraft Systems. Additionally, the student and instructor will review the Pre-Solo Written Exam to 100%.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Review all procedures in preparation for Flight Lesson 8 and the Stage 1 Check.

Flight Lesson 8

Objective: For the student to practice and review maneuvers from previous lessons in preparation for the Stage 1 Check.

References: Airplane Flying Handbook, MIAS Maneuvers Manual, MIAS Checklist, Ground Proximity Awareness Training

Review

- Use of Checklists
- Preflight Inspection
- Cockpit Management
- Operation of Systems
- Radio Communication
- Positive Exchange of the Flight Controls
- Airport, Runway, Taxiway Signs, Markings, and Lighting
- Runway Incursion Avoidance
- Normal Takeoff and Climb/ Abort point/ Rejected Takeoff
- Crosswind Takeoff and Climb
- Straight and Level Flight (VR/IR)
- Constant Airspeeds Climbs and Descents (VR/IR)
- Climbing and Descending Turns (VR/IR)
- Turns to Headings (VR/IR)
- Steep Turns
- Maneuvering During Slow Flight
- Flight at Slow Airspeeds with Realistic Distractions
- Power-On Stalls
- Power-Off Stalls
- Ground References Maneuvers
- Traffic Patterns
- Go Around/Rejected Landings
- Forward Slips to Landing
- System and Equipment Malfunctions
- ATC Light Signals
- Emergency Procedures
- Emergency Approach and Landing (Simulated)
- Normal Approach and Landing
- Crosswind Approach and Landing
- Soft Field Approach and Landing
- Land and Hold Short Operations (LAHSO)

Completion Standards

Completion is determined by the student's ability to perform all maneuvers from above with no assistance from the instructor in order to demonstrate that the student is ready for the Stage 1 Check. The student should be able to maintain altitude within 150 feet, heading within 15 degrees, and airspeed within 10 knots.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Study for Stage 1 Flight Check

Stage 1 Check

Objective: To evaluate if the student is prepared to move into the Cross-Country Stage by demonstrating ACS standard on the ground tasks and the completion standards outlined below for the flight tasks. The student must be able to complete both the Ground and Flight Portion.

References-Current FAA Airmen Certification Standards, Pilot's Handbook of Aeronautical Knowledge, Airplane Flying Handbook, MIAS Maneuvers Manual, MIAS Checklists, Ground Proximity Awareness Training (www.thelandingdoctor.com)

Evaluate-Ground

- Certificates and Documents
- Airworthiness Requirements
- Operations of Systems
- National Airspace System
 - Identification of Sectional Chart symbols and Airspace in the immediate vicinity of the airport.
- Weather Information
 - Student must be able to locate, read, and interpret:
 - METARS
 - TAF's
 - AIRMETS
 - SIGMETS
 - Convective SIGMETS

Evaluate-Flight

- Use of Checklists
- Preflight Inspection
- Cockpit Management
- Operation of Systems
- Engine Starting
- Taxing
- Radio Communication
- Airport, Runway, Taxiway Signs, Markings, and Lighting
- Runway Incursion Avoidance
- Normal Takeoff and Climb/ Abort point/ Rejected Takeoff
- Crosswind Takeoff and Climb
- Maneuvering During Slow Flight
- Flight at Slow Airspeeds with Realistic Distractions
- Power-On Stalls
- Power-Off Stalls
- Spin Awareness
- Traffic Patterns
- Go Around/Rejected Landings
- Forward Slips to Landing
- System and Equipment Malfunctions
- ATC Light Signals
- Emergency Procedures

- Emergency Approach and Landing (Simulated)
- Normal Approach and Landing
- Crosswind Approach and Landing
- Soft Field Approach and Landing
- Land and Hold Short Operations (LAHSO)

Completion Standards

Completion is determined by the student's ability to explain and perform all maneuvers from above with no assistance from the instructor in order to demonstrate that the student is ready for the First Solo. The student should be able to maintain altitude within 150 feet, heading within 15 degrees, and airspeed within 10 knots.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Read Jeppesen Guided Flight Discovery Private Pilot Textbook Chapter 8 and answer the questions presented at the end of each section.

Stage 2

Objectives: Stage 2 is designed for the student to be able to gain the remaining Aeronautical Knowledge as outlined in 14 CFR Part 61 in order to take the FAA Private Pilot Airplane Aeronautical Knowledge Test before progressing to Stage 3. Students will learn how to predict performance, control and calculate the weight and balance of the aircraft. As well as be introduced to various forms of navigation including Pilotage, Dead Reckoning, and other forms of advanced navigation. The student will continue to become more proficient on the maneuvers learned in the previous stage as they begin to learn to plan a cross country flight in the National Airspace System using the navigation methods described above.

Completion Standards:

At the completion of Stage 2 the student will have passed their FAA Aeronautical Knowledge Exam (70% or better) and the instructor will have reviewed the incorrect responses with the student. The student will be able to fly cross country through the use of Pilotage, Dead Reckoning and other Navigational Aid. The student will have learned and become proficient in Short Field and Soft Field Takeoff and Landings and complete all tasks to ACS Standard.

Ground Lesson 9

Objective: For the student to learn how to predict performance based on data supplied by the Manufacturer and how to compute time en-route, ground speed, fuel consumption, and wind correction angle through the use of a flight computer.

References: Jeppesen Guided Flight Discovery Private Pilot Textbook: Chapter 8, Pilot's Handbook of Aeronautical Knowledge

Section A- Predicting Performance

- Aircraft Performance and Design
- Chart Presentations
- Factors Affecting Performance
- Climb Performance
- Cruise Performance
- Using Performance Charts

Section B- Weight and Balance

- Importance of Weight
- Importance of Balance
- Terminology
- Principles of Weight and Balance
- Weight and Balance Methods – Computations, Table, and Graph
- Weight Shift Formula
- Effects of Operating at High Total Weights
- Flight at Various CG Positions

Section C- Flight Computers

- Mechanical Flight Computers
- Time, Speed, and Distance
- Airspeed and Density Altitude Computations
- Wind Problems
- Conversions
- Multi-Part Problems

Completion Standards

Completion is determined by the student being able to calculate aircraft performance and explain the effects of weight and balance on an aircraft during oral quizzing by the instructor. Additionally, the student will answer the questions at the end of each section with a grade of 80% or better.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Read Airplane Flying Handbook, MIAS Maneuvers Manual on Short Field and Soft Field Takeoff's and Landings in preparation for Flight Lesson 9.

Flight Lesson 9

Objective: For the student to learn the basic procedures for performing short and soft field takeoff, climbs, approaches, and landings.

References: Airplane, Flying Handbook, MIAS Maneuvers Manual, MIAS Checklists, POH of aircraft to be used

Review

- National Airspace System
- Aircraft Performance
- Weight and Balance
- Crosswind Takeoff and Climb
- Ground Reference Maneuvers
- Traffic Patterns
- Airport Signs, Markings, and Lighting
- Normal Takeoff and Climb/ Abort point/ Rejected Takeoff
- Crosswind Approach and Landing
- Soft Field Approach and Landing
- Go Arouns

Introduce

- Low Level Wind Shear
- Short Field Takeoff and Climbs
- Soft Field Takeoff and Climb
- Short Field Approach and Landing

Completion Standards

Completion is determined by the student's ability to perform and explain when Short Field and Soft Field Takeoff and Climb procedures would be used along with the importance of maintaining a stabilized approach to landing during a Short Field and Soft Field Landing. The Ground Reference Maneuvers should be completed by maintaining the desired ground track and altitude with 150.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Read and answer the questions for Private Pilot Textbook Chapter 9

Ground Lesson 10

Objective: For the student to learn various forms of navigation used today including, Pilotage, Dead Reckoning, VOR Navigation, and GPS Navigation.

References: Jeppesen Guided Flight Discovery Private Pilot Textbook: Chapter 9, Pilot's Handbook of Aeronautical Knowledge

Section A- Pilotage and Dead Reckoning

- Pilotage
- Dead Reckoning
- VFR Cruising Altitudes
- Flight Plan
- Lost Procedures

Section B- VOR Navigation

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

Section C – Intentionally Omitted

Section D- Advanced Navigation

- Area Navigation
- Inertial Navigation Systems
- Global Positioning System (GPS)

Completion Standards

Completion is determined by the student being able to demonstrate understanding of Pilotage, Dead Reckoning, VOR navigation, and GPS navigation during oral quizzing by the instructor. Additionally, the student will answer the questions at the end of each section with a grade of 80% or better.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Review all procedures in preparation for Flight Lesson 10

Flight Lesson 10

Objective: For the student to review basic flight maneuvers.

References: Airplane Flying Handbook, MIAS Maneuvers Manual, MIAS Checklists, POH for aircraft to be used

Review

- Radio Communications
- Normal Takeoff and Climb/ Abort point/ Rejected Takeoff
- Crosswind Takeoff and Climb
- Power Off Stalls
- Power On Stalls
- Maneuvering During Slow Flight
- Stall/Spin Awareness
- Traffic Patterns
- Normal Approach and Landing
- Crosswind Approach and Landing

Completion Standards

Completion is determined by the student's ability to perform the basic flight maneuvers while maintaining the altitude within 100 feet, heading within 10 degrees, airspeed within 10 knots. At no point should the safe completion of any maneuver be in doubt or any instructor intervention required.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Read and answer the questions in Jeppesen Private Pilot Textbook Chapter 10

Ground Lesson 11

Objective: For the student to become familiar with Single Pilot Resource Management (SRM), the Aeronautical Decision Making Process (ADM), the symptoms and corrective actions to several physiological scenarios.

References: Jeppesen Guided Flight Discovery Private Pilot Textbook: Chapter 10, Pilot's Handbook of Aeronautical Knowledge, FAA Risk Management Handbook

Section A- Aviation Physiology

- Vision in Flight
- Night Vision
- Visual Illusions
- Disorientation
- Respiration
- Hypoxia
- Hyperventilation

Section B- Single Pilot Resource Management (SRM)

- Aeronautical Decision Making (ADM)
 - Applying the Decision Making Process
 - Pilot-in-Command Responsibility
 - Hazardous Attitudes
- Risk Management
- Task Management
- Situational Awareness
- CFIT Awareness
- Automation Management
- SRM Training

Completion Standards

Completion is determined by the student being able to understand and explain the different human factor principles and SRM during oral quizzing by the instructor. Additionally, the student will answer the questions at the end of each section with a grade of 80% or better.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Review all procedures in preparation for Flight Lesson 11

Simulator Lesson 4

Objective: For the student to practice the listed maneuvers and to gain proficiency in attitude instrument flying and control of the airplane by reference to instruments. Additionally, to begin navigating using VOR, GPS Navigation.

Introduce

- VOR Orientation and Tracking
- GPS Orientation and Tracking
- Human Factors related to Advanced Avionics
- Automation & Auto Pilot
- Power-Off Stalls (IR)
- Power-On Stalls (IR)
- Recovery from Unusual Flight Attitudes (IR)
- Using Radio Communications, Navigation Systems/Facilities, and Radar Services (IR)

Completion Standards

Completion is determined by the student's ability to perform takeoffs and landings smoothly, maintaining directional control, and performing a stabilized approach to landing within 5 knots of the proper airspeed. Demonstrate basic understanding of VOR, GPS navigation. Display the correct unusual attitude recover techniques.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Review the areas of weakness from above in preparation for Flight Lesson 11.

Flight Lesson 11

Objective: For the student to practice the listed maneuvers and to gain proficiency in attitude instrument flying and control of the airplane by reference to instruments. Additionally, to begin navigating using VOR, GPS Navigation.

Review

- Low Level Wind Shear
- Short-Field Takeoffs and Maximum Performance Climbs
- Short-Field Approach and Landings
- Power-Off Stalls
- Power-On Stalls
- Maneuvering During Slow Flight (IR)

Introduce

- VOR Orientation and Tracking
- GPS Orientation and Tracking
- Human Factors related to Advanced Avionics
- Automation & Auto Pilot
- Power-Off Stalls (IR)
- Power-On Stalls (IR)
- Recovery from Unusual Flight Attitudes (IR)
- Using Radio Communications, Navigation Systems/Facilities, and Radar Services (IR)

Completion Standards

Completion is determined by the student's ability to perform takeoffs and landings smoothly, maintaining directional control, and performing a stabilized approach to landing within 5 knots of the proper airspeed. Demonstrate basic understanding of VOR, GPS navigation. Display the correct unusual attitude recover techniques.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Read and answer the questions for Private Pilot Textbook Chapter 11 Section A. Plan a Cross Country to a destination of the instructor's choosing.

Ground Lesson 12

Objective: For the student to become familiar with the steps required to plan a Cross Country Flight and become familiar with all the details of flying a typical cross-country flight.

References: Jeppesen Guided Flight Discovery Private Pilot Textbook: Chapter 11 Section A

Section A- The Flight Planning Process

- Developing the Route
- Preflight Weather Briefing
- Completing the Navigation Log
- Flight Plan
- Preflight Inspection

Planning the Cross Country Flight

- Key Terms
- Drawing the Course Line
- Flight Planning Form
- Selecting proper Checkpoints
- VFR Cruising Altitudes
- Altitude Selection
- Computing required fuel
- Filing of the Flight Plan

Completion Standards

Completion is determined by the student being able to understand the flight planning process from start to finish as demonstrated by the instructor.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Prepare a Cross Country in preparation for Flight Lesson 12.

Flight Lesson 12

Objective: To introduce the student to Cross-Country procedures and the proper techniques to be used during flights outside of the practice areas.

References: Airplane Flying Handbook, MIAS Checklist, Appropriate Aircraft POH

Review

- Runway Incursion Avoidance
- Emergency Operations
- System and Equipment Malfunctions
- Emergency Descent
- Emergency Approach and Landing (Simulated)
- Basic Attitude Instrument Flying
- Radio Navigation

Introduce

- Cross Country Flight
- Estimating Inflight Visibility
- Flight Plan Considerations
- Departure
- Opening and Closing Flight Plan
- Course Interception
- Pilotage
- Dead Reckoning
- Autopilot Operation (if installed)
- Power Settings and Mixture Control
- Diversion to an Alternate
- 180 degree level turn out of unforecasted weather (IR)
- Lost Procedures
- Estimates of Groundspeed and ETA
- Position Fix by Navigation Facilities
- Flight on Federal Airways
- Collision Avoidance

Completion Standards

Completion is determined by the student's ability to fly a cross-country flight safely while completing a navigational log in the National Airspace System and being able to understand the basic procedures of flying to an unfamiliar airport.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Review procedures for basic maneuvers and Night illusions in preparation for Flight Lesson 13. Read the Airplane Flying Handbook Chapter respective to Night Operations.

Flight Lesson 13

Objective: To introduce the student to operational considerations while flying at night and to practice night takeoffs, climbs, traffic patterns, approaches, and landings.

References: Airplane Flying Handbook, MIAS Maneuvers Manual, MIAS Checklists, Pilot's Handbook of Aeronautical Knowledge

Review

- Aeromedical Factors
- CFIT Awareness and Wire Strike Avoidance
- Visual Illusions and Disorientation
- Night Vision and Night Scanning/Collision Avoidance
- Aircraft, Airport, and Obstruction Lighting
- ATC Light Gun Signals
- Personal Equipment

Introduce

- Preparation for Night Flying
- Cockpit Management
- Flight Planning Considerations
- Use of Checklists
- Airworthiness Requirements
- Preflight Inspection
- Airport Lighting & Pilot Controlled Lighting
- Taxing
- Normal and Short-Field Takeoffs and Climbs
- VFR Navigation
- Steep Turns
- Maneuvering During Slow Flight
- Stalls
- Normal and Short-Field Approaches and Landings
- Soft Field Takeoffs and Landings
- Go Around Rejected Landings

Completion Standards

Completion is determined by the student's ability to demonstrate the importance of attitude control while flying at night. The student should be able to maintain altitude within 150 feet during all maneuvers. The student should accomplish 8 Takeoffs and Landings to a full stop with each involving a flight in the traffic pattern.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Prepare a Cross Country flight to an airport chosen by the instructor in preparation for Flight Lesson 14.

Flight Lesson 14

Objective: For the student to demonstrate Cross Country Flight procedures in preparation for the Stage 2 Flight Check.

References: Airplane Flying Handbook, MIAS Checklist, Appropriate Aircraft POH

Review

- Runway Incursion Avoidance
- Emergency Operations
- System and Equipment Malfunctions
- Emergency Descent
- Emergency Approach and Landing (Simulated)
- Basic Attitude Instrument Flying
- Radio Navigation
- Cross Country Flight
- Flight Plan Considerations
- Departure
- Opening and Closing Flight Plan
- Course Interception
- Pilotage
- Dead Reckoning
- Autopilot Operation (if installed)
- Power Settings and Mixture Control
- Diversion to an Alternate
- Lost Procedures
- Estimates of Groundspeed and ETA
- Position Fix by Navigation Facilities
- Flight on Federal Airways
- Collision Avoidance

Completion Standards

Completion is determined by the student's ability to fly a cross-country flight safely while completing a navigational log in the National Airspace System and being able to understand the basic procedures of flying to an unfamiliar airport. The student should be able to perform the cross country flight with minimal assistance from the instructor.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Prepare a Cross Country to an airport of the instructors choosing in preparation for Flight Lesson 15.

Flight Lesson 15

Objective: For the student to demonstrate Cross Country Flight procedures at night in preparation for the Stage 2 Flight Check.

References: Airplane Flying Handbook, MIAS Checklists, Appropriate Aircraft POH, Pilot's Handbook of Aeronautical Knowledge

Review

- Preparation for Night Flight
- Airport Lighting & Pilot Controlled Lighting
- ATC Light Gun Signals
- Aeromedical Factors
- Runway Incursion Avoidance
- Emergency Operations
- System and Equipment Malfunctions
- Emergency Descent
- Emergency Approach and Landing (Simulated)
- Basic Attitude Instrument Flying
- Radio Navigation
- Cross Country Flight
- Flight Plan Considerations
- Departure
- Opening and Closing Flight Plan
- Course Interception
- Pilotage
- Dead Reckoning
- Autopilot Operation (if installed)
- Power Settings and Mixture Control
- Diversion to an Alternate
- Lost Procedures
- Estimates of Groundspeed and ETA
- Position Fix by Navigation Facilities
- Flight on Federal Airways
- Collision Avoidance

Completion Standards

Completion is determined by the student's ability to fly a cross-country flight safely at night while completing a navigational log in the National Airspace System and being able to understand the basic procedures of flying to an unfamiliar airport. The student should be able to perform the cross country flight with minimal assistance from the instructor.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Review FAA Aeronautical Knowledge in preparation for taking the FAA Written Exam.

Ground Lesson 13

Objective: For the student to complete their FAA Aeronautical Written Exam with a score of 70% or better.

Review

- FAA Written Exam Results

Completion Standards

Completion of this lesson will occur when the student has passed their FAA Aeronautical Written Exam with a 70% or better and the instructor has reviewed the deficient items with the student in accordance with 14 CFR Part 61.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Review all procedures and maneuvers in preparation of the Stage 2 Check

Stage 2 Check

Objective: For the student to demonstrate proficiency to the Chief Flight Instructor or his or her designee of proficiency with Cross Country Flight Planning, Performance and Limitations, the National Airspace System, Weather, and performance takeoffs and landings.

References-Current FAA Airmen Certification Standards, Jeppesen Private Pilot Textbook, Pilot's Handbook of Aeronautical Knowledge, Airplane Flying Handbook, MIAS Checklist, MIAS Maneuvers Manual, Aviation Weather, Aviation Weather Services

Evaluate-Ground

- National Airspace System
- Weather Information
- Cross Country Flight Planning
- Performance and Limitations

Evaluate-Flight

- Use of Checklists
- Preflight Inspection
- Cockpit Management
- Operation of Systems
- Engine Starting
- Taxing
- Radio Communication
- Airport, Runway, and Taxiway Signs, Markings, and Lighting
- Runway Incursion Avoidance
- Short-Field Takeoff and Climb
- Soft-Field Takeoff and Climb
- Positive Aircraft Control
- Stall/Spin Awareness
- Departure
- Course Interception
- VOR, GPS Navigation
- Pilotage and Dead Reckoning
- Collision Avoidance Procedures
- Diversion to Alternates
- Lost Procedures
- Emergency Operations
- Short-Field Approach and Landing
- Soft-Field Approach and Landing

Completion Standards

Completion is determined by the student's ability to explain and conduct cross-country flights using sound knowledge of flight planning, preflight action, weather analysis, and the appropriate aeronautical publications to current Airmen Certification Standards.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Review Student Solo Procedures in preparation for students Supervised Solo's.

Stage 3

Objectives: For the student to complete all Supervised Solo, and Solo Cross-Country Flights and preparation required in order to pass the End of Course Exam and take the FAA Practical test.

Completion Standards

Completion will be determined by the student successfully completing the End of Course Exam in order to graduate from the course and take the FAA Practical Exam.

Flight Lesson 16-1st Supervised Solo

Objective: For the student to complete three takeoffs and landings in the traffic pattern as solo pilot while the instructor supervises.

References: Airplane Flying Handbook, MIAS Maneuvers Manual, MIAS Checklist

Review-Dual

- Certificates and Documents
- Student's Questions
- Engine Starting
- Radio Communications
- Use of Checklists
- Normal Takeoff and Climb
- Traffic Patterns
- Go Around/Rejected Landing
- Normal Approach and Landing

Introduce-Solo

- Task Management
- Engine Starting
- Taxing
- Radio Communication
- Normal Takeoff and Climb
- Maneuvering During Slow Flight
- Traffic Patterns
- Go Around/Rejected Landings
- Normal Approach and Landing
- Crosswind Approach and Landings

Completion Standards

Completion is determined by the student's ability to successfully complete 3 takeoffs and landings to a full stop with each involving a flight in the traffic pattern.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Review all procedures in preparation for Flight Lesson 17.

Flight Lesson 17-2nd Supervised Solo

Objective: For the student to complete three takeoffs and landings in the traffic pattern as solo pilot while the instructor supervises.

References: Airplane Flying Handbook, MIAS Maneuvers Manual, MIAS Checklist, POH for aircraft to be used

Review-Dual

- Certificates and Documents
- Student's Questions
- Engine Starting
- Radio Communications
- Use of Checklists
- Normal Takeoff and Climb
- Traffic Patterns
- Go Around/Rejected Landing
- Normal Approach and Landing

Review-Solo

- Task Management
- Engine Starting
- Taxing
- Radio Communication
- Normal Takeoff and Climb
- Maneuvering During Slow Flight
- Traffic Patterns
- Go Around/Rejected Landings
- Normal Approach and Landing
- Crosswind Approach and Landings

Completion Standards

Completion is determined by the student's ability to successfully complete 3 takeoffs and landings to a full stop with a flight in the traffic pattern

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Review all procedures in preparation for Flight Lesson 18.

Flight Lesson 18-3rd Supervised Solo

Objective: For the student to complete three takeoffs and landings in the traffic pattern as solo pilot while the instructor supervises.

References: Airplane Flying Handbook, MIAS Maneuvers Manual, MIAS Checklist, POH for aircraft to be used

Review-Dual

- Certificates and Documents
- Student's Questions
- Engine Starting
- Radio Communications
- Use of Checklists
- Normal Takeoff and Climb
- Traffic Patterns
- Go Around/Rejected Landing
- Normal Approach and Landing

Review-Solo

- Task Management
- Engine Starting
- Taxing
- Radio Communication
- Normal Takeoff and Climb
- Maneuvering During Slow Flight
- Traffic Patterns
- Go Around/Rejected Landings
- Normal Approach and Landing
- Crosswind Approach and Landings

Completion Standards

Completion is determined by the student's ability to successfully complete 4 takeoffs and landings to a full stop with a flight in the traffic pattern

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Review all procedures in preparation for Flight Lesson 19.

Flight Lesson 19

Objective: For the student to practice basic flight maneuvers in the practice area to increase proficiency in preparation for the practical exam.

References: Airplane Flying Handbook, MIAS Maneuvers Manual, MIAS Checklist, POH for Aircraft to be used

Review

- Radio Communications
- Normal Takeoff and Climb
- Crosswind Takeoff and Climb
- Maneuvering During Slow Flight
- Stall/Spin Awareness
- Traffic Patterns
- Normal Approach and Landing
- Crosswind Approach and Landing
- Go Arouns and Rejected Landings
- Risk Management

Completion Standards

Completion is determined by the student's ability to perform the basic flight maneuvers while maintaining the altitude within 100 feet, heading within 10 degrees, and airspeed within 10 knots.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Review all procedures in preparation for Flight Lesson 20

Flight Lesson 20

Objective: For the student to practice basic flight maneuvers in the practice area to increase proficiency in preparation for the practical exam.

References: Airplane Flying Handbook, MIAS Maneuvers Manual, MIAS Checklist, POH for aircraft to be used

Review

- Radio Communications
- Normal Takeoff and Climb
- Crosswind Takeoff and Climb
- Maneuvering During Slow Flight
- Stall/Spin Awareness
- Traffic Patterns
- Normal Approach and Landing
- Crosswind Approach and Landing
- Go Arouns and Rejected Landings

Completion Standards

Completion is determined by the student's ability to perform the basic flight maneuvers while maintaining the altitude within 100 feet, heading within 10 degrees, and airspeed within 10 knots.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Prepare a Cross Country to an airport of the instructors choosing in preparation of Flight Lesson 21.

Flight Lesson 21

Objective: For the student to perform their first cross country solo without the aid of the instructor.

References: Airplane Flying Handbook, MIAS Maneuvers Manual, MIAS Checklist, Appropriate Aircraft POH

Review

- Flight Plan Considerations
- National Airspace System
- Sectional Charts
- Flight Publications
- Route Selection
- Weather Information
- Fuel Requirements
- Performance and Limitations
- Weight and Balance
- Navigation Log
- FAA Flight Plan
- Aeromedical Factors
- Opening the Flight Plan
- VOR, GPS Navigation
- Position Fix by Navigation Facilities
- Pilotage
- Dead Reckoning
- Flight on Federal Airways
- Use of Unfamiliar Airports
- Estimates of Groundspeed
- Estimates of ETA
- Closing the Flight Plan

Completion Standards

Completion of this lesson occurs once the student has performed a cross country flight solo and has made a landing at an airport more than 50NM from the departure airport, to ACS standards.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Prepare another Cross Country Flight that meets the requirements of 14 CFR Part 61 that includes three points of landing and a total distance of more than 150 NM.

Flight Lesson 22

Objective: For the student to perform their long cross country solo without the aid of the instructor.

References: Airplane Flying Handbook, MIAS Maneuvers Manual, MIAS Checklist, Appropriate Aircraft POH

Review

- Flight Plan Considerations
- National Airspace System
- Sectional Charts
- Flight Publications
- Route Selection
- Weather Information
- Fuel Requirements
- Performance and Limitations
- Weight and Balance
- Navigation Log
- FAA Flight Plan
- Aeromedical Factors
- Opening the Flight Plan
- VOR, GPS Navigation
- Position Fix by Navigation Facilities
- Pilotage
- Dead Reckoning
- Flight on Federal Airways
- Use of Unfamiliar Airports
- Estimates of Groundspeed
- Estimates of ETA
- Closing the Flight Plan

Completion Standards

Completion of this lesson occurs once the student has performed a cross country flight solo and has made a landing at an airport more than 50NM from the departure airport and a total distance of 150 NM with a landing at 3 airports.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Review preflight preparation area of the current Airmen Certification Standards in preparation for Ground Lesson 14

Ground Lesson 14

Objective: For the student to review all areas of preflight preparation of the current FAA Airmen Certification Standards in preparation for the student's FAA Practical Exam Oral Portion.

References: Jeppesen Private Pilot Textbook, Pilot's Handbook of Aeronautical Knowledge, Aircraft POH

Review

- Certificates and Documents
- Airworthiness Requirements
- Weather Information
- Cross Country Flight Planning
- National Airspace System
- Performance and Limitations
- Operations of Systems
- Aeromedical Factors

Completion Standards

This lesson is complete when the student is able to explain each of the above areas satisfactorily to the instructor and the student would be able to pass the Oral portion of the FAA Practical Exam.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignment: Review all flight maneuvers in preparation for Flight Lesson 23

Flight Lesson 23

Objectives: For the student to demonstrate to current FAA Airmen Certification Standards the basic flight maneuvers to be performed during the FAA Practical Exam.

References: Airplane Flying Handbook, MIAS Maneuvers Manual, MIAS Checklist

Review

- Preflight Preparation
- Preflight Procedures
- Airport Operations
- Takeoffs-Normal, Crosswind, Short-Field and Soft Field
- Cross Country Flight Procedures
- Emergency Operations
- Basic Instrument Maneuvers (IR)
- Maneuvering During Slow Flight (IR/VR)
- Power Off and Power On Stalls (IR/VR)
- Steep Turns
- Ground References Maneuvers
- Using Radio Communications, Navigation Systems/Facilities, and Radar Services (IR)
- Recovery from Unusual Attitudes (IR)
- Landings-Normal, Crosswind, Short Field, Soft Field
- Forward Slips to Landing
- Go-Around/Rejected Landing
- After Landing, Parking, and Securing
- Specific maneuvers or procedures assigned by the flight instructor

Completion Standards

This lesson is complete when the student can perform all maneuvers to current FAA Airmen Certification Standards.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignments: Review procedures in preparation for Flight Lesson 24

Flight Lesson 24

Objectives: For the student to demonstrate to current FAA Airmen Certification Standards the basic flight maneuvers to be performed during the FAA Practical Exam.

References: Airplane Flying Handbook, MIAS Maneuvers Manual, MIAS Checklist.

Review

- Preflight Preparation
- Preflight Procedures
- Airport Operations
- Takeoffs-Normal, Crosswind, Short-Field and Soft Field
- Cross Country Flight Procedures
- Emergency Operations
- Basic Instrument Maneuvers (IR)
- Maneuvering During Slow Flight (IR/VR)
- Power Off and Power On Stalls (IR/VR)
- Steep Turns
- Ground References Maneuvers
- Using Radio Communications, Navigation Systems/Facilities, and Radar Services (IR)
- Recovery from Unusual Attitudes (IR)
- Landings-Normal, Crosswind, Short Field, Soft Field
- Forward Slips to Landing
- Go-Around/Rejected Landing
- After Landing, Parking, and Securing
- Specific maneuvers or procedures assigned by the flight instructor

Completion Standards

This lesson is complete when the student can perform all maneuvers to current FAA Airmen Certification Standards and the student has satisfactorily met all course minimums for the course.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignments: Review procedures and Aeronautical Knowledge in preparation for the End of Course Check.

End of Course Check

Objectives: For the student to demonstrate to current FAA Airmen Certification Standards the basic flight maneuvers to be performed during the FAA Practical Exam and satisfactory knowledge of all elements of preflight preparation areas as described in the current FAA Airmen Certification Standards for the Chief Flight Instructor or his or her designee.

References: FAA ACS, Pilot's Handbook of Aeronautical Knowledge, Airplane Flying Handbook, MIAS Maneuvers Manual, MIAS Checklist, POH of Aircraft to be used

Evaluate- Ground

- Certificates and Documents
- Airworthiness Requirements
- Weather Information
- Cross Country Flight Planning
- National Airspace System
- Performance and Limitations
- Operations of Systems
- Aeromedical Factors

Evaluate- Flight

- Preflight Preparation
- Preflight Procedures
- Airport Operations
- Takeoffs-Normal, Crosswind, Short-Field and Soft Field
- Cross Country Flight Procedures
- Emergency Operations
- Basic Instrument Maneuvers (IR)
- Maneuvering During Slow Flight (IR/VR)
- Power Off and Power On Stalls (IR/VR)
- Steep Turns
- Ground References Maneuvers
- Using Radio Communications, Navigation Systems/Facilities, and Radar Services (IR)
- Recovery from Unusual Attitudes (IR)
- Landings-Normal, Crosswind, Short Field, Soft Field
- Forward Slips to Landing
- Go-Around/Rejected Landing
- After Landing, Parking, and Securing
- Specific maneuvers or procedures assigned by the flight instructor

Completion Standards

This lesson is complete when the student can perform all maneuvers to current FAA Airmen Certification Standards and the Chief Flight Instructor or his or her designee feels the student will be able to pass their FAA Practical Exam on their first attempt.

Instructor Remarks: _____

Total time spent: _____ Date of Completion: _____

CFI Signature: _____ Student Signature: _____

Study Assignments: Study for FAA Practical Exam