

SPORT PILOT TRAINING SYLLABUS

FAA Sport Pilot Practical Test Standards (FAA-S-8081-29)

Student: _____

Instructor: _____

Start Date: _____

INTRODUCTION

This syllabus provides a structured training program for earning a Sport Pilot certificate. The program is organized into three phases and consists of approximately 25 flight lessons, with flexibility to adjust based on individual student progress.

Each lesson includes: (1) Read Ahead materials with estimated study time, (2) Discussion topics linking to specific PTS tasks, (3) Flight Maneuvers with PTS performance standards and proficiency level (Demo/Practice/Checkride Ready), and (4) Debrief items with preview of next lesson.

This syllabus is designed to meet all FAA requirements for Sport Pilot certification per 14 CFR Part 61, Subpart J, and follows the Sport Pilot Practical Test Standards (FAA-S-8081-29).

Training Phases

Phase 1: Pre-Solo (Flights 1-12)

Foundational flight skills, maneuvers, and procedures leading to first solo flight. Includes pre-solo stage check.

Phase 2: Solo Practice and Skill Refinement (Flights 13-18)

Building proficiency through supervised solo practice, ground reference maneuvers, navigation introduction, and FAA Knowledge Test completion.

Phase 3: Cross-Country and Checkride Preparation (Flights 19-25)

Solo cross-country flight, comprehensive checkride preparation, pre-checkride stage check, and final polish for practical test.

Maneuver Proficiency Levels

DEMO: Instructor demonstrates maneuver, student observes and assists.

PRACTICE: Student performs maneuver with instructor guidance and correction.

CHECKRIDE READY: Student performs maneuver consistently to PTS standards.

SOLO: Student performs maneuver or procedures during solo flight.

Required Documents and Endorsements

Throughout this training, the instructor will provide required endorsements per 14 CFR Part 61. A separate endorsements document is provided with this syllabus. Key milestones requiring endorsements include:

- Pre-solo flight training (§61.87)
- Solo flight (§61.87)
- Solo cross-country flight (§61.93)
- Knowledge test (§61.35, §61.309)
- Practical test (§61.313)

PHASE 1: PRE-SOLO

Flight 1: Introduction to Flight / Orientation

Flight Time: 1.0 hours **Briefing:** 0.5 hours **Study:** 2.0 hours

1. READ AHEAD

- FAA-H-8083-25B (Pilot's Handbook of Aeronautical Knowledge - PHAK): Chapter 1 (Introduction to Flying)
- FAA-H-8083-3C (Airplane Flying Handbook - AFH): Chapter 1 (Introduction to Flight Training)
- 14 CFR Part 61 Subpart J (Sport Pilots): §61.309, §61.311, §61.313
- Aircraft Pilot's Operating Handbook (POH): All sections
- Airport Diagram and Local Procedures

2. DISCUSSION

- Sport Pilot privileges and limitations (PTS Task I.A)
- Systems overview: engine, fuel, electrical, controls
- Preflight inspection procedures and checklist usage
- Cockpit familiarization and control effects
- Communication procedures and radio phraseology basics
- Airport signs, markings, and lighting (PTS Task I.H)
- Traffic patterns and arrival/departure procedures

3. FLIGHT MANEUVERS

Preflight Inspection (Task VIII.A)

Level: DEMO

Standard: Inspects airplane with reference to POH/checklist

Cockpit Management (Task VIII.B)

Level: DEMO

Standard: Organizes and arranges materials, ensures clear access to controls

Engine Starting (Task VIII.C)

Level: DEMO

Standard: Positions airplane properly, uses checklist, ensures area is clear

Taxiing (Task VIII.D)

Level: DEMO

Standard: Maintains proper speed and track, uses flight controls for wind

Before Takeoff Check (Task VIII.E)

Level: DEMO

Standard: Uses checklist, verifies flight controls, completes runup

Normal Takeoff (Task IX.A)

Level: DEMO

Standard: Proper alignment, smooth application of power, maintains directional control, lifts off at proper airspeed

Straight and Level Flight (Task III.A)

Level: DEMO

Standard: ± 150 feet altitude, $\pm 15^\circ$ heading

Climbs and Descents (Task III.C, III.D)

Level: DEMO

Standard: ± 150 feet, $\pm 15^\circ$ heading, proper airspeeds

Normal Approach and Landing (Task X.A)

Level: DEMO

Standard: Proper pattern, stabilized approach, touchdown in first 1/3 of runway

After Landing/Parking/Securing (Task XI.A)

Level: DEMO

Standard: Proper taxi procedures, parking, shutdown per checklist

4. DEBRIEF

- Review first flight experience and answer questions
- Discuss sensations of flight and control responses
- Review traffic pattern procedures
- Preview next lesson: four fundamentals practice
- Emphasize importance of chair flying and visualization
- Assign Sport Pilot knowledge test preparation to begin

Flight 2: Four Fundamentals / Aircraft Control

Flight Time: 1.5 hours **Briefing:** 0.5 hours **Study:** 2.5 hours

1. READ AHEAD

- AFH Chapter 4: Maintaining Aircraft Control
- AFH Chapter 5: Takeoffs and Departure Climbs (review)
- PHAK Chapter 5: Aerodynamics of Flight (basic principles)
- POH: Performance section, V-speeds
- Review traffic pattern procedures and radio communications

2. DISCUSSION

- Four fundamentals: straight and level, climbs, descents, turns (PTS Task III.A-D)
- Power, pitch, and trim relationships
- Visual references for altitude and heading control
- Proper scan technique and outside references
- Coordination: rudder use in turns and climbs
- Airspeed control and power management
- Tailwheel considerations: P-factor, torque effects

3. FLIGHT MANEUVERS

Preflight, Starting, Taxi (Task VIII.A-E)

Level: PRACTICE

Standard: Per previous standards

Normal Takeoff and Climb (Task IX.A)

Level: PRACTICE

Standard: Directional control $\pm 10^\circ$, proper climb attitude and airspeed

Straight and Level Flight (Task III.A)

Level: PRACTICE

Standard: ± 150 feet, $\pm 15^\circ$ heading

Level Turns (shallow, medium) (Task III.B)

Level: PRACTICE

Standard: ± 150 feet, $\pm 15^\circ$ heading/bank, coordinated

Climbs (cruise and Vy) (Task III.C)

Level: PRACTICE

Standard: ± 150 feet, $\pm 15^\circ$ heading, ± 10 knots airspeed

Descents (cruise and approach) (Task III.D)

Level: PRACTICE

Standard: ± 150 feet, $\pm 15^\circ$ heading, ± 10 knots airspeed

Traffic Pattern (Task X.A)

Level: PRACTICE

Standard: Proper spacing, altitude ± 100 feet, airspeeds ± 10 knots

Normal Landing (Task X.A)

Level: PRACTICE

Standard: Stabilized approach, proper roundout, touchdown first 1/3

4. DEBRIEF

- Evaluate progress on four fundamentals
- Discuss coordination challenges and corrections
- Review power settings for various flight regimes
- Emphasize the importance of looking outside
- Preview next lesson: more pattern work and landings
- Recommend chair flying the pattern procedures at home

Flight 3: Traffic Pattern Operations / Takeoffs and Landings

Flight Time: 1.5 hours **Briefing:** 0.5 hours **Study:** 2.0 hours

1. READ AHEAD

- AFH Chapter 9: Approaches and Landings (all normal landing sections)
- AFH Chapter 5: Normal Takeoff (review)
- PHAK Chapter 15: Airport Operations
- AIM Chapter 4, Section 3: Airport Operations
- Review local airport procedures and noise abatement

2. DISCUSSION

- Traffic pattern components and dimensions (PTS Task X.A)
- Stabilized approach concept and parameters
- Landing sight picture and roundout technique
- Wheel landing vs. three-point landing
- Go-around procedures and when to execute (PTS Task X.D)
- Radio communication in the pattern
- Wind correction in the pattern

3. FLIGHT MANEUVERS

Normal Takeoffs (multiple) (Task IX.A)

Level: PRACTICE

Standard: Directional control $\pm 10^\circ$, rotate at proper airspeed, establish $V_y \pm 5$ knots

Traffic Pattern Work (Task X.A)

Level: PRACTICE

Standard: Proper altitude ± 100 ft, proper spacing, coordinated turns

Normal Landings (5-7 landings) (Task X.A)

Level: PRACTICE

Standard: Proper approach speed ± 10 knots, touchdown in first 1/3, maintain directional control

Go-Around (simulated or actual) (Task X.D)

Level: DEMO

Standard: Prompt decision, full power smoothly, proper pitch attitude, positive climb

4. DEBRIEF

- Review landing performance: what went well, areas to improve
- Discuss common landing errors and corrections
- Evaluate traffic pattern consistency
- Review go-around decision making
- Preview next lesson: crosswind operations
- Encourage continued knowledge test study

Flight 4: Crosswind Operations / Slow Flight Introduction

Flight Time: 1.5 hours **Briefing:** 0.5 hours **Study:** 2.5 hours

1. READ AHEAD

- AFH Chapter 9: Crosswind Approaches and Landings
- AFH Chapter 5: Crosswind Takeoff and Climb
- AFH Chapter 5: Short-Field Takeoff and Climb
- AFH Chapter 12: Slow Flight
- PHAK Chapter 5: Left-Turning Tendencies, Aerodynamic Forces in Flight Maneuvers

2. DISCUSSION

- Crosswind takeoff and landing techniques (PTS Task IX.A, X.B)
- Slip vs. crab methods for crosswind landings
- Tailwheel considerations in crosswind conditions
- Wind correction angles and drift correction
- Introduction to slow flight: purpose and procedures (PTS Task IV.A)
- Stall warning recognition
- Power-on vs. power-off characteristics

3. FLIGHT MANEUVERS

Crosswind Takeoff (Task IX.A)

Level: PRACTICE

Standard: Proper aileron deflection, maintains centerline, lifts off at proper speed

Slow Flight (Intro) (Task IV.A)

Level: DEMO

Standard: ± 100 feet, $\pm 10^\circ$ heading/bank, ± 10 knots

Traffic Pattern with Wind (Task X.A, X.B)

Level: PRACTICE

Standard: Proper wind correction on each leg, coordinated turns

Crosswind Landing (Task X.B)

Level: PRACTICE

Standard: Maintains centerline, side slip as needed, touchdown on upwind wheel first

Go-Around (Task X.D)

Level: PRACTICE

Standard: Proper procedure, positive climb established

4. DEBRIEF

- Evaluate crosswind technique in takeoffs and landings
- Discuss wing-low method vs. crab method
- Review slow flight introduction and stall awareness
- Preview next lesson: slow flight mastery and power-off stalls
- Discuss the importance of recognizing approaching stalls

Flight 5: Slow Flight and Power-Off Stalls

Flight Time: 1.5 hours **Briefing:** 0.5 hours **Study:** 2.5 hours

1. READ AHEAD

- AFH Chapter 5: Slow Flight (complete)
- AFH Chapter 6: Stalls (Power-Off Stalls section)
- PHAK Chapter 5: Stalls and Spins
- PHAK Chapter 6: Weight and Balance
- POH: Weight and Balance section, CG limits

2. DISCUSSION

- Slow flight: purpose, procedures, and recovery (PTS Task IV.A)
- Stall theory: angle of attack, critical AOA, stall indicators
- Power-off stalls: setup, recognition, recovery (PTS Task IV.B)
- Importance of coordination during stalls
- Weight and balance: importance for stall characteristics (PTS Task I.F)
- Computing weight and balance
- Clearing procedures before maneuvering

3. FLIGHT MANEUVERS

Slow Flight (Power-On and Power-Off) (Task IV.A)

Level: PRACTICE

Standard: ± 100 feet, $\pm 10^\circ$ heading/bank, ± 10 knots, specified configuration

Power-Off Stalls (Approach to Landing) (Task IV.B)

Level: DEMO

Standard: Recognition at first indication, recovery with minimal altitude loss, $\pm 10^\circ$ heading

Steep Turns (Introduction) (Task III.E)

Level: DEMO

Standard: 45° bank, ± 150 feet, $\pm 15^\circ$ heading, coordinated

Pattern Work and Landings (Task X.A)

Level: PRACTICE

Standard: Continued proficiency building

4. DEBRIEF

- Evaluate slow flight proficiency and control coordination
- Review power-off stall recognition and recovery technique
- Discuss sensations during stall: buffet, sink rate, control response
- Preview next lesson: power-on stalls and continued pattern work
- Emphasize the safety implications of stall awareness

Flight 6: Power-On Stalls and Steep Turns

Flight Time: 1.5 hours **Briefing:** 0.5 hours **Study:** 2.0 hours

1. READ AHEAD

- AFH Chapter 6: Power-On Stalls section
- AFH Chapter 10: Performance Maneuvers - Steep Turns
- PHAK Chapter 5: Load Factor and Stalls
- Review 14 CFR §91.119 (Minimum Safe Altitudes)
- Review 14 CFR §91.155 (VFR Weather Minimums)

2. DISCUSSION

- Power-on stalls: purpose, setup, recovery (PTS Task IV.C)
- Differences between power-on and power-off stalls
- Torque effects during power-on stalls
- Steep turns: purpose, procedures, load factor (PTS Task III.E)
- Maintaining altitude and coordinated flight in steep turns
- VFR weather minimums and cloud clearances (PTS Task I.D)
- Minimum safe altitudes for practice areas

3. FLIGHT MANEUVERS

Power-On Stalls (Departure) (Task IV.C)

Level: DEMO

Standard: Recognition at first indication, recovery with minimal altitude loss, $\pm 10^\circ$ heading

Power-Off Stalls (Review) (Task IV.B)

Level: PRACTICE

Standard: Per previous standards

Steep Turns (45° bank) (Task III.E)

Level: PRACTICE

Standard: ± 150 feet, $\pm 15^\circ$ rollout heading, 45° bank $\pm 5^\circ$, coordinated

Pattern Work and Landings (Task X.A, X.B)

Level: PRACTICE

Standard: Continued proficiency, include crosswind as available

4. DEBRIEF

- Evaluate power-on stall recognition and recovery
- Review coordination during steep turns and altitude control
- Discuss differences felt between power-on and power-off stalls
- Preview next lesson: emergency procedures and systems/equipment malfunctions
- Review solo prerequisites and performance standards

Flight 7: Emergency Procedures / Systems and Equipment Malfunctions

Flight Time: 1.5 hours **Briefing:** 0.8 hours **Study:** 3.0 hours

1. READ AHEAD

- AFH Chapter 17: Emergency Procedures (all sections)
- PHAK Chapter 8: Flight Instruments (Basic operations)
- POH: Emergency Procedures section (complete)
- POH: Systems descriptions
- Review 14 CFR §91.3 (Responsibility and Authority of PIC)
- Review 14 CFR §91.7 (Civil Aircraft Airworthiness)

2. DISCUSSION

- Emergency approach and landing procedures (PTS Task V.A)
- Systems and equipment malfunctions (PTS Task V.B)
- Engine failure after takeoff: immediate actions
- Emergency landing site selection criteria
- Forced landing pattern and approach
- Use of Emergency Checklist
- Pilot in Command authority and responsibility (PTS Task I.B)
- Airworthiness requirements (PTS Task I.C)

3. FLIGHT MANEUVERS

Emergency Approach and Landing (simulated) (Task V.A)

Level: DEMO

Standard: Establishes best glide, selects suitable field, completes emergency checklist, reaches intended landing area

Systems/Equipment Malfunctions (simulated) (Task V.B)

Level: DEMO

Standard: Analyzes situation, maintains aircraft control, follows proper procedures, lands safely

Slow Flight (Task IV.A)

Level: PRACTICE

Standard: ± 100 feet, $\pm 10^\circ$ heading, ± 10 knots

Power-On and Power-Off Stalls (Task IV.B, IV.C)

Level: PRACTICE

Standard: Prompt recognition and recovery

Pattern Work and Landings (Task X.A)

Level: PRACTICE

Standard: Building consistency for solo

4. DEBRIEF

- Review emergency procedures and decision-making process
- Discuss importance of maintaining aircraft control first
- Evaluate emergency landing site selection
- Preview next lesson: pre-solo stage check preparation
- Review all maneuvers and procedures required for solo
- Schedule pre-solo stage check

Flight 8: Pre-Solo Stage Check Preparation

Flight Time: 1.5 hours **Briefing:** 0.5 hours **Study:** 2.0 hours

1. READ AHEAD

- Review all previous ground topics
- Review 14 CFR §61.87 (Solo Requirements for Student Pilots)
- Review 14 CFR §91.126 (Operating on or in vicinity of airport)
- Review 14 CFR §91.127 (Operating in Class E airspace)
- Local airport procedures and emergency procedures review

2. DISCUSSION

- Comprehensive review of all maneuvers and procedures
- Solo flight requirements and limitations (PTS Task I.A)
- Student pilot endorsements and solo requirements
- Traffic pattern procedures and emergencies in the pattern
- Decision-making scenarios: go-around situations
- Personal minimums and risk management
- Post-solo procedures and limitations

3. FLIGHT MANEUVERS

Preflight through After Landing (Task VIII.A - XI.A)

Level: PRACTICE

Standard: Demonstrate proficiency in all normal procedures

Normal and Crosswind Takeoffs and Landings (Task IX.A, X.A, X.B)

Level: PRACTICE

Standard: Consistent performance within PTS standards

Slow Flight (Task IV.A)

Level: PRACTICE

Standard: ± 100 feet, $\pm 10^\circ$ heading, ± 10 knots

Power-Off Stalls (Task IV.B)

Level: PRACTICE

Standard: Prompt recognition and recovery, $\pm 10^\circ$ heading

Power-On Stalls (Task IV.C)

Level: PRACTICE

Standard: Prompt recognition and recovery, $\pm 10^\circ$ heading

Emergency Procedures (simulated) (Task V.A)

Level: PRACTICE

Standard: Proper procedures, maintains control, good judgment

Go-Around (Task X.D)

Level: PRACTICE

Standard: Timely decision, proper execution

4. DEBRIEF

- Comprehensive evaluation of readiness for stage check
- Identify any areas needing additional practice
- Review stage check standards and procedures
- Discuss stage check format and expectations
- Mental preparation for stage check and solo
- Confirm date/time for pre-solo stage check

Flight 9: PRE-SOLO STAGE CHECK

Flight Time: 1.5 hours **Briefing:** 0.8 hours **Study:** 1.0 hours

1. READ AHEAD

- Review all previous ground topics
- Review POH thoroughly
- Review normal and emergency procedures
- Review local airport and airspace information

2. DISCUSSION

- ****STAGE CHECK** - Conducted by different CFI**
- Comprehensive oral on all topics covered to date
- Aircraft systems and limitations
- Weather minimums and decision making
- Emergency procedures and scenarios
- Regulations relevant to student solo flight
- Solo flight procedures and limitations

3. FLIGHT MANEUVERS

All Pre-Solo Maneuvers and Procedures (All Tasks I-V, VIII-XI)

Level: CHECKRIDE READY

Standard: Meet or exceed Sport Pilot PTS standards for all pre-solo items

4. DEBRIEF

- Stage check instructor provides comprehensive feedback
- Identifies areas of strength and any deficiencies
- Makes endorsement recommendation to primary instructor
- If passed: prepare for first solo flight
- If additional training needed: develop remedial training plan
- Review expectations and procedures for solo flight

Flight 10: Pre-Solo Review / Final Preparation

Flight Time: 1.0 hours **Briefing:** 0.5 hours **Study:** 1.0 hours

1. READ AHEAD

- Review stage check feedback and notes
- Review solo flight procedures one more time
- 14 CFR §61.87 - Solo requirements (re-read)
- Local airport diagram and procedures
- Emergency procedures review

2. DISCUSSION

- Address any items from stage check feedback
- Final review of solo procedures and limitations
- Emergency procedures review and scenarios
- Radio communication in solo environment
- Decision-making for go-arounds
- Post-solo taxi and shutdown procedures
- When to ask for help or advice

3. FLIGHT MANEUVERS

Normal Takeoffs and Landings (Task IX.A, X.A)

Level: CHECKRIDE READY

Standard: Demonstrate consistent, safe performance

Go-Around Practice (Task X.D)

Level: CHECKRIDE READY

Standard: Confident, proper execution

All Normal Procedures (Task VIII.A-XI.A)

Level: CHECKRIDE READY

Standard: Smooth, confident operation

4. DEBRIEF

- Final evaluation for solo readiness
- Student must demonstrate confidence and competence
- If ready: conduct first solo flight same day or next flight
- Review solo flight plan: 3 takeoffs and landings minimum
- Instructor will monitor from ground
- Emphasize: fly the airplane first, communicate second

Flight 11: FIRST SOLO FLIGHT

Flight Time: 0.5 hours **Briefing:** 0.5 hours **Study:** 0.5 hours

1. READ AHEAD

- Review normal procedures one final time
- Visualize the entire solo flight from start to finish
- Review go-around procedures and emergency procedures
- Review radio communications

2. DISCUSSION

- ****Pre-solo endorsement provided by CFI**** (14 CFR §61.87)
- Final briefing on solo flight procedures
- Weather conditions evaluation
- Review: when in doubt, go around
- Emergency procedures if needed
- Post-flight procedures and parking
- CFI monitoring and light gun signals if needed

3. FLIGHT MANEUVERS

Solo Flight: 3 Takeoffs and 3 Full-Stop Landings (Task IX.A, X.A)

Level: SOLO

Standard: Safe, controlled operation. Maintain pattern altitude ± 100 ft, proper speeds, safe landings

4. DEBRIEF

- ****CONGRATULATIONS ON FIRST SOLO!****
- Student describes experience and feelings
- Review each takeoff and landing
- Discuss what went well and any challenges
- Instructor provides positive feedback and encouragement
- Log solo time and provide endorsements
- Preview next phase: expanding solo privileges and refining skills
- Continue knowledge test preparation - aim to complete by Flight 18

Flight 12: Post-Solo Refinement / Short-Field Operations Introduction

Flight Time: 1.5 hours **Briefing:** 0.5 hours **Study:** 2.0 hours

1. READ AHEAD

- AFH Chapter 5: Short-Field Takeoff and Maximum Performance Climb
- AFH Chapter 9: Short-Field Approach and Landing
- PHAK Chapter 5: Ground Effect
- POH: Short-field performance data
- Review airport operations at unfamiliar airports

2. DISCUSSION

- Post-solo debriefing and continued development
- Short-field takeoff and landing techniques (PTS Task IX.B, X.C)
- Maximum performance procedures
- Ground effect and its implications
- Obstacle clearance considerations
- Performance planning using POH data
- Tailwheel considerations for short-field operations

3. FLIGHT MANEUVERS

Normal Operations Review (Task IX.A, X.A)

Level: PRACTICE

Standard: Continued refinement and consistency

Short-Field Takeoff (Task IX.B)

Level: DEMO

Standard: Maximum power before brake release, V_x until obstacle cleared, ± 5 knots

Short-Field Landing (Task X.C)

Level: DEMO

Standard: Stabilized approach at proper speed, touchdown at specified point ± 100 ft, minimum rollout

Steep Turns (Task III.E)

Level: PRACTICE

Standard: ± 150 feet, $\pm 15^\circ$ heading, $45^\circ \pm 5^\circ$

4. DEBRIEF

- Evaluate progress with short-field operations
- Discuss performance considerations and limitations
- Review obstacle clearance techniques
- Preview next phase: expanding maneuvers and solo practice
- Plan for additional supervised solo flights
- Continue knowledge test preparation

PHASE 2: SOLO PRACTICE AND SKILL REFINEMENT

Flight 13: Ground Reference Maneuvers Introduction

Flight Time: 1.5 hours **Briefing:** 0.5 hours **Study:** 2.5 hours

1. READ AHEAD

- AFH Chapter 7: Ground Reference Maneuvers (all sections)
- PHAK Chapter 5: Wind and its Effects on Flight
- Review 14 CFR §91.119 (Safe Altitudes)
- Review traffic pattern wind correction techniques
- Study wind drift correction principles

2. DISCUSSION

- Purpose of ground reference maneuvers
- Rectangular course procedures and wind correction (PTS Task VII.A)
- S-turns across a road (PTS Task VII.B)
- Turns around a point (PTS Task VII.C)
- Maintaining altitude and ground track
- Division of attention: inside and outside
- Practical application to traffic patterns

3. FLIGHT MANEUVERS

Rectangular Course (Task VII.A)

Level: DEMO

Standard: 600-1000 ft AGL, maintain altitude ± 100 ft, uniform ground track

S-Turns Across a Road (Task VII.B)

Level: DEMO

Standard: 600-1000 ft AGL, maintain altitude ± 100 ft, constant radius, $\pm 10^\circ$ rollout

Turns Around a Point (Task VII.C)

Level: DEMO

Standard: 600-1000 ft AGL, maintain altitude ± 100 ft, constant radius

Short-Field Operations (Task IX.B, X.C)

Level: PRACTICE

Standard: Per previous standards

4. DEBRIEF

- Evaluate understanding of wind correction principles
- Discuss challenges with maintaining altitude while correcting for wind
- Review practical applications to normal flight
- Preview next lesson: continued ground reference practice
- Plan supervised solo practice session

Flight 14: Ground Reference Maneuvers Practice / Solo Practice Session

Flight Time: 1.5 hours **Briefing:** 0.5 hours **Study:** 2.0 hours

1. READ AHEAD

- Review AFH Chapter 7: Ground Reference Maneuvers
- Review solo practice requirements and limitations
- Study traffic pattern operations with crosswinds
- Review emergency procedures

2. DISCUSSION

- Review ground reference maneuver techniques
- Common errors and how to correct them
- Self-evaluation and critique during solo practice
- Practice area boundaries and limitations
- Emergency procedures during solo practice
- Radio communication when practicing solo

3. FLIGHT MANEUVERS

Rectangular Course (Task VII.A)

Level: PRACTICE

Standard: 600-1000 ft AGL, ± 100 ft altitude, uniform track

S-Turns (Task VII.B)

Level: PRACTICE

Standard: 600-1000 ft AGL, ± 100 ft altitude, constant radius

Turns Around a Point (Task VII.C)

Level: PRACTICE

Standard: 600-1000 ft AGL, ± 100 ft altitude, constant radius

Solo Practice Session (0.5-1.0 hour) (Various)

Level: SOLO

Standard: Student practices pattern work, ground reference maneuvers as assigned

4. DEBRIEF

- Student self-evaluation of solo practice
- Instructor review and feedback
- Identify areas of improvement and strengths
- Assign specific items for next solo practice
- Preview next lesson: navigation introduction
- Check progress on knowledge test preparation

Flight 15: Navigation Systems and Flight Planning Introduction

Flight Time: 1.5 hours **Briefing:** 1.0 hours **Study:** 3.0 hours

1. READ AHEAD

- PHAK Chapter 16: Navigation (Dead Reckoning and Pilotage sections)
- PHAK Chapter 14: Airport Operations and Charts (Chart reading)
- AIM Chapter 5, Section 1: Preflight Planning
- 14 CFR §91.103 (Preflight Action)
- VFR Sectional Chart - study local area and chart symbols
- Chart Supplement (formerly A/FD) - local airports

2. DISCUSSION

- Dead reckoning and pilotage principles (PTS Task VI.A)
- VFR sectional chart reading and interpretation
- Chart symbols, airspace depictions, terrain features
- Flight planning: route selection, checkpoints, timing
- Navigation log preparation
- Diversion procedures during flight (PTS Task VI.B)
- Lost procedures (PTS Task VI.C)
- Preflight action requirements (PTS Task I.E)

3. FLIGHT MANEUVERS

Navigation Flight (Dual - Local Area) (Task VI.A)

Level: DEMO

Standard: Maintains course $\pm 10^\circ$, identifies checkpoints, maintains altitude ± 150 ft

Pilotage and Dead Reckoning (Task VI.A)

Level: DEMO

Standard: Arrival at checkpoints within 5 minutes, $\pm 10^\circ$ heading

Diversion (simulated) (Task VI.B)

Level: DEMO

Standard: Prompt decision, accurate course to alternate, arrival estimate within 5 min

Pattern Work (Task X.A)

Level: PRACTICE

Standard: Continued proficiency

4. DEBRIEF

- Evaluate navigation planning and chart reading skills
- Review checkpoint selection and timing
- Discuss in-flight decision making for diversions
- Preview next lesson: solo cross-country preparation
- Assign cross-country flight planning for next lesson
- Recommend FAA Knowledge Test scheduling (target: within 2-3 lessons)

Flight 16: Cross-Country Flight Planning and Preparation

Flight Time: 1.5 hours **Briefing:** 1.0 hours **Study:** 3.0 hours

1. READ AHEAD

- PHAK Chapter 16: Navigation (complete chapter)
- AIM Chapter 5, Section 1: Preflight (complete)
- AIM Chapter 5, Section 2: Departure Procedures
- 14 CFR §91.151 (Fuel Requirements for VFR Flight)
- 14 CFR §91.203 (Civil Aircraft: Certifications Required)
- Study sectional chart for planned cross-country route

2. DISCUSSION

- Detailed cross-country flight planning (PTS Task I.E)
- Weather briefing procedures and interpretation (PTS Task II.A)
- Cross-country risk assessment and go/no-go decisions (PTS Task II.B)
- Fuel planning and requirements
- Weight and balance for cross-country flight (PTS Task I.F)
- Airport and airspace requirements at destination
- Communication procedures at unfamiliar airports

3. FLIGHT MANEUVERS

Dual Cross-Country Flight (>25nm) (Task VI.A)

Level: PRACTICE

Standard: Maintains planned altitude ± 150 ft, heading $\pm 10^\circ$, arrival within 5 minutes

Pilotage and Dead Reckoning (Task VI.A)

Level: PRACTICE

Standard: Identifies checkpoints, adjusts for wind, accurate ETA

Diversion to Alternate (Task VI.B)

Level: PRACTICE

Standard: Prompt decision, accurate heading and ETA to alternate

Operations at Unfamiliar Airport (Task X.A)

Level: PRACTICE

Standard: Proper procedures, communication, pattern entry

4. DEBRIEF

- Evaluate cross-country flight planning and execution
- Review navigation accuracy and checkpoint identification
- Discuss in-flight decision making and adaptability
- Review procedures at unfamiliar airports
- Preview: prepare for knowledge test completion
- Plan for solo cross-country preparation after knowledge test

Flight 17: Advanced Maneuvers Review / Knowledge Test Preparation

Flight Time: 1.5 hours **Briefing:** 0.5 hours **Study:** 3.0 hours

1. READ AHEAD

- ****Complete all Sport Pilot Knowledge Test study****
- Review all previous flight maneuvers and procedures
- Review Sport Pilot PTS all tasks
- FAA-CT-8080-6 (Sport Pilot Knowledge Test Guide)
- Take multiple practice knowledge tests

2. DISCUSSION

- ****Target: Knowledge Test completion within 1 week****
- Comprehensive review of all aeronautical knowledge areas
- Knowledge test format, procedures, and tips
- Review any weak areas from practice tests
- Discuss coordination between knowledge test and practical test prep
- Review all flight maneuvers and their underlying aerodynamic principles

3. FLIGHT MANEUVERS

Slow Flight (both configurations) (Task IV.A)

Level: PRACTICE

Standard: ± 100 ft, $\pm 10^\circ$ heading, ± 10 knots

Power-Off and Power-On Stalls (Task IV.B, IV.C)

Level: PRACTICE

Standard: Recognition and recovery per PTS

Steep Turns (Task III.E)

Level: PRACTICE

Standard: ± 150 ft, $\pm 15^\circ$ heading, $45^\circ \pm 5^\circ$

Ground Reference Maneuvers (review) (Task VII.A, VII.B, VII.C)

Level: PRACTICE

Standard: ± 100 ft altitude, proper wind correction

Emergency Procedures (review) (Task V.A)

Level: PRACTICE

Standard: Proper procedures, good judgment

4. DEBRIEF

- Comprehensive review of all maneuvers
- Evaluate readiness for continued solo practice
- Confirm knowledge test scheduled
- Preview: post-knowledge test focus on practical test preparation
- Plan for additional dual cross-country after knowledge test
- Discuss timeline to Sport Pilot checkride

Flight 18: Solo Practice and Maneuvers Review

Flight Time: 1.5 hours **Briefing:** 0.5 hours **Study:** 2.0 hours

1. READ AHEAD

- ****Knowledge Test should be completed before or during this lesson****
- Review all maneuvers and normal procedures
- Study solo cross-country requirements: 14 CFR §61.93
- Review flight planning for upcoming solo cross-country
- Review lost procedures and emergency diversion

2. DISCUSSION

- ****Knowledge Test debrief**** (if completed)
- Review areas of difficulty from knowledge test
- Solo practice session briefing and limitations
- Self-evaluation techniques during solo practice
- Emergency procedures and decision-making when solo
- Begin planning for solo cross-country flight

3. FLIGHT MANEUVERS

Dual Flight: All Maneuvers Review (Tasks III-VII)

Level: PRACTICE

Standard: Evaluate consistency across all maneuvers

Solo Practice Session (0.5-1.0 hour) (Various)

Level: SOLO

Standard: Pattern work, maneuvers practice, self-evaluation

4. DEBRIEF

- Knowledge test debrief and discussion
- Student self-evaluation of solo practice
- Instructor feedback on observed progress
- Identify areas for continued focus
- Preview Phase 3: Solo cross-country preparation
- Begin detailed planning for solo cross-country

PHASE 3: CROSS-COUNTRY AND CHECKRIDE PREPARATION

Flight 19: Solo Cross-Country Preparation and Planning

Flight Time: 1.5 hours **Briefing:** 1.0 hours **Study:** 3.0 hours

1. READ AHEAD

- 14 CFR §61.93 (Solo Cross-Country Requirements)
- AIM Chapter 7, Section 5: Weather Reporting and Forecasting
- Review POH for cross-country planning
- Study sectional chart for planned solo cross-country route
- Review Chart Supplement for destination airports
- Review emergency procedures and lost procedures

2. DISCUSSION

- ****Solo cross-country endorsement requirements**** (14 CFR §61.93)
- Detailed route planning for solo cross-country (>75nm total, 25nm legs minimum)
- Weather planning and decision making (PTS Task II.A, II.B)
- Fuel planning with reserves
- Communication at towered and non-towered airports
- Emergency planning: diversion airports, lost procedures
- Solo cross-country limitations and requirements

3. FLIGHT MANEUVERS

Dual Cross-Country Flight (Simulate Solo Route) (Task VI.A)

Level: PRACTICE

Standard: ± 150 ft altitude, $\pm 10^\circ$ heading, ETA within 5 minutes

Pilotage and Dead Reckoning (Task VI.A)

Level: PRACTICE

Standard: Accurate checkpoint identification and timing

Diversion Practice (Task VI.B)

Level: PRACTICE

Standard: Prompt decision, accurate heading to alternate

Operations at Multiple Airports (Task X.A)

Level: PRACTICE

Standard: Proper procedures, communication, safe operations

4. DEBRIEF

- Evaluate readiness for solo cross-country
- Review flight planning accuracy and decision making
- Discuss any concerns or questions about solo cross-country
- Finalize solo cross-country route and checkpoints
- Schedule solo cross-country flight (weather permitting)
- Provide solo cross-country endorsement if ready

Flight 20: SOLO CROSS-COUNTRY FLIGHT

Flight Time: 2.5 hours **Briefing:** 1.0 hours **Study:** 2.0 hours

1. READ AHEAD

- Final review of cross-country route and planning
- Weather briefing for day of flight
- Review all emergency procedures
- Review communication procedures at each airport
- Visualize entire cross-country flight

2. DISCUSSION

- ****Solo cross-country endorsement verified**** (14 CFR §61.93)
- Final weather briefing and go/no-go decision
- Review of flight plan and checkpoints
- Emergency procedures and alternates
- Communication with CFI during flight (if possible)
- Post-flight procedures at each destination
- Time limits and expectations

3. FLIGHT MANEUVERS

Solo Cross-Country Flight (>75nm total distance) (Task VI.A)

Level: SOLO

Standard: Complete planned route, landings at 2 airports, safe return. Navigation $\pm 10^\circ$ heading, ETA within 5 min at checkpoints

4. DEBRIEF

- ****CONGRATULATIONS ON SOLO CROSS-COUNTRY!****
- Comprehensive debrief of entire flight
- Navigation accuracy and checkpoint identification
- Decision-making throughout the flight
- Operations at different airports
- Any challenges or lessons learned
- Log solo cross-country time and endorsements
- Preview Phase 3 continuation: checkride preparation

Flight 21: Checkride Preparation - Maneuvers Polish

Flight Time: 1.5 hours **Briefing:** 0.5 hours **Study:** 2.0 hours

1. READ AHEAD

- Sport Pilot PTS (FAA-S-8081-29) - complete review
- Review all special emphasis areas in PTS
- Review Sport Pilot practical test procedures
- Study systems for oral exam
- Review all regulatory requirements for Sport Pilots

2. DISCUSSION

- Sport Pilot practical test overview and format
- Oral examination topics and expectations (PTS Area I, II)
- Special emphasis areas: positive aircraft control, collision avoidance, situational awareness
- Common checkride errors and how to avoid them
- Checkride day procedures and timeline
- Practical test standards vs. real-world performance

3. FLIGHT MANEUVERS

All Maneuvers to PTS Standards (Tasks III-VII)

Level: CHECKRIDE READY

Standard: Demonstrate all maneuvers meeting or exceeding PTS standards

Particular Focus: Steep Turns (Task III.E)

Level: CHECKRIDE READY

Standard: ± 100 ft, $\pm 10^\circ$ heading, $45^\circ \pm 5^\circ$

Particular Focus: Stalls (Task IV.B, IV.C)

Level: CHECKRIDE READY

Standard: Prompt recognition, minimal altitude loss, $\pm 10^\circ$ heading

Ground Reference Maneuvers (Task VII.A, VII.B, VII.C)

Level: CHECKRIDE READY

Standard: ± 100 ft, constant ground track, proper wind correction

4. DEBRIEF

- Evaluate checkride readiness for flight maneuvers
- Identify any areas needing additional polish
- Discuss oral exam preparation strategy
- Assign oral exam study topics for next lesson
- Preview next lesson: takeoffs, landings, and emergency procedures polish
- Discuss timeline for scheduling practical test

Flight 22: Checkride Preparation - Takeoffs, Landings, and Emergencies

Flight Time: 1.5 hours **Briefing:** 0.5 hours **Study:** 2.0 hours

1. READ AHEAD

- Review PTS Areas VIII-XI (Pre/Post Flight, Takeoffs, Landings)
- Review PTS Area V (Emergency Operations)
- Study all emergency procedures in POH
- Review all normal procedures and checklists
- Review airspace and weather minimums

2. DISCUSSION

- Checkride standards for all takeoffs and landings
- Normal, crosswind, and short-field operations to PTS
- Emergency procedures: presentation and execution on checkride
- Systems and equipment malfunctions: likely scenarios
- Decision-making and judgment demonstrations
- Oral exam: emergency procedures discussion

3. FLIGHT MANEUVERS

Normal and Crosswind Takeoffs and Landings (Task IX.A, X.A, X.B)

Level: CHECKRIDE READY

Standard: Consistent performance to PTS standards (directional control $\pm 10^\circ$, altitude ± 100 ft in pattern, touchdown first 1/3)

Short-Field Takeoff and Landing (Task IX.B, X.C)

Level: CHECKRIDE READY

Standard: Maximum performance, ± 5 knots, touchdown at specified point ± 100 ft

Go-Around (Task X.D)

Level: CHECKRIDE READY

Standard: Timely decision, proper procedure, positive climb

Emergency Approach and Landing (Task V.A)

Level: CHECKRIDE READY

Standard: Best glide, proper checklist use, reaches intended area, safe approach

Systems/Equipment Malfunctions (Task V.B)

Level: CHECKRIDE READY

Standard: Proper analysis, maintains control, follows procedures

4. DEBRIEF

- Evaluate consistency in takeoffs and landings
- Review emergency procedures performance
- Assess decision-making and judgment
- Discuss oral exam preparation progress
- Assign mock oral exam preparation for next lesson
- Preview next lesson: mock checkride stage check

Flight 23: Pre-Checkride Stage Check Preparation

Flight Time: 1.5 hours **Briefing:** 0.8 hours **Study:** 2.5 hours

1. READ AHEAD

- Complete review of all PTS areas and tasks
- Prepare for comprehensive oral examination
- Review all aircraft systems and limitations
- Study all regulatory requirements
- Review all normal and emergency procedures
- Prepare cross-country flight plan for stage check

2. DISCUSSION

- Comprehensive review of all aeronautical knowledge
- Mock oral examination practice
- Review of all maneuvers and procedures
- Stage check format and expectations
- Final preparation checklist for practical test
- Examiner expectations and checkride environment

3. FLIGHT MANEUVERS

Complete Flight from Start to Finish (All Areas I-XI)

Level: CHECKRIDE READY

Standard: Demonstrate all required tasks to PTS standards with consistency and professionalism

Simulated Checkride Scenario (Various)

Level: CHECKRIDE READY

Standard: Perform as if on actual practical test

4. DEBRIEF

- Comprehensive evaluation of checkride readiness
- Identify any final areas needing refinement
- Review stage check standards and procedures
- Schedule pre-checkride stage check
- Mental preparation techniques for checkride
- Confirm understanding of all PTS areas

Flight 24: PRE-CHECKRIDE STAGE CHECK

Flight Time: 2.0 hours **Briefing:** 1.0 hours **Study:** 2.0 hours

1. READ AHEAD

- Final comprehensive review of Sport Pilot PTS
- Review all aircraft systems and POH
- Review all regulations applicable to Sport Pilots
- Prepare cross-country flight plan
- Review weather services and decision making
- Mental preparation for stage check

2. DISCUSSION

- ****STAGE CHECK - Conducted by different CFI or designated examiner****
- Comprehensive oral examination covering all PTS Area I and II
- Aircraft systems, performance, and limitations
- Regulations, airspace, and weather
- Cross-country flight planning presentation
- Emergency procedures and decision-making scenarios
- Aeronautical decision making and risk management

3. FLIGHT MANEUVERS

Complete Practical Test Profile (All PTS Areas I-XI)

Level: CHECKRIDE READY

Standard: Meet or exceed Sport Pilot PTS standards in all tasks, demonstrate aeronautical decision making and professionalism

4. DEBRIEF

- Stage check instructor provides comprehensive feedback
- Review of oral examination performance
- Review of flight performance and areas of strength
- Identifies any final areas for improvement before checkride
- Makes recommendation for practical test scheduling
- If passed: schedule Sport Pilot practical test
- If additional training needed: develop focused remedial plan
- Discuss practical test day procedures and expectations

Flight 25: Final Checkride Polish / Practical Test Preparation

Flight Time: 1.5 hours **Briefing:** 0.5 hours **Study:** 2.0 hours

1. READ AHEAD

- Final review of any items from stage check feedback
- Review Sport Pilot practical test logistics
- Review PTS standards one final time
- Prepare all required documents for checkride
- Review checkride day procedures and timeline
- Mental preparation and visualization

2. DISCUSSION

- Address any final items from stage check
- Practical test day procedures and timeline
- Required documents and paperwork for checkride
- Examiner expectations and test environment
- Handling checkride nerves and stress
- What to expect during oral and flight portions
- Final questions and confidence building

3. FLIGHT MANEUVERS

Final Flight: Any Areas Needing Polish (Various)

Level: CHECKRIDE READY

Standard: Demonstrate confidence and consistency in all maneuvers

One Final Pattern Session (Task IX.A, X.A, X.B, X.C)

Level: CHECKRIDE READY

Standard: Smooth, professional takeoffs and landings

4. DEBRIEF

- Final evaluation and confidence check
- Review practical test standards one last time
- Discuss test day logistics and procedures
- ****Schedule Sport Pilot Practical Test with DPE****
- Review required documents and preparation
- Confirm aircraft is ready and airworthy for checkride
- Mental preparation and positive reinforcement
- ****YOU ARE READY - GO PASS THAT CHECKRIDE!****
-
- ****AFTER CHECKRIDE:****
- - Celebrate new Sport Pilot certificate!
- - Review privileges and limitations as Sport Pilot
- - Discuss insurance and rental requirements
- - Plan for continued proficiency and safety
- - Consider future training: additional endorsements, advanced ratings