

The Roo Project Live Ground Instruction

PAR Checkride Prep: Cross-Country Preparation



Session ID	ACC-PCC
Type	Live
Location	Remote
Estimated Timing	1–3h (This lesson may be split up into multiple sessions)
Timing Breakdown	1–3h Theory / Discussion

Lesson Overview

This lesson is designed to prepare you for the Private Pilot Airplane Oral Exam, focusing on cross-country planning. Depending on time constraints, this lesson may be split into multiple sessions.

Learning Objectives

By the end of this lesson, the student will be able to:

- Identify and apply airspace classifications and SUA restrictions to a cross-country route.
- Select an appropriate VFR route and cruising altitude using the hemispheric rule and terrain avoidance.
- Complete a NavLog with accurate headings, times, and fuel calculations using an E6B or app.
- Interpret a sectional aeronautical chart including airspace, MEFs, and symbology.
- Extract airport data from the Chart Supplement and read a standard taxi diagram.
- Identify hot spots and non-movement areas to support safe ground operations at unfamiliar airports.
- Correctly apply 14 CFR 91.113, 91.117, 91.119, and 91.151 to flight planning scenarios.
- Obtain and apply a standard weather briefing including winds aloft, METARs, TAFs, and NOTAMs.
- Execute a diversion and apply lost procedures using the 5 C's.

Session Preparation

The student should familiarize themselves with the following prior to the session:

TRP Private Pilot Ground School

N/A

PHAK

Chapter 15: Navigation

Chapter 14: Airport Operations

Chapter 16: Navigation Systems

AFH

Chapter 16: Cross Country Flying

Session Tasks

Theory Tasks	ACS Ref
Airspace & Special Use Airspace (SUA) - Class A, B, C, D, E, G boundaries and requirements - Special Use Airspace: Prohibited, Restricted, Warning, MOA, Alert, TFR - Airspace entry requirements, communication, and equipment	PA.I.D.K1
Sectional Chart Interpretation - Airspace depiction, MEF, magnetic variation, scale - Airport symbols, nav aids, obstacles, and terrain shading - VFR waypoints, Victor airways, and special symbols	PA.I.E.K2
Chart Supplement, Taxi Diagram, Hotspots - Airport remarks, CTAF/ATIS frequencies, runway data - Hours of operation, lighting, services, and NOTAMS - Reading and interpreting standard taxi diagrams - Definition and location of runway incursion hot spots - Non-movement area boundaries and right-of-way - LAHSO operations awareness	PA.II.D.K2 PA.II.D.K5 PA.II.D.K6a PA.II.D.K6c PA.II.D.K6d PA.II.D.K6e
MSA, Speed Limits, Right of Way - Minimum safe altitudes - Aircraft speed limits - Below 10,000ft - Class C or D surface area - Class B - Right-of-way rules - Aircraft priority - Converging, overtaking, head-on rules - Approaching to land	PA.I.G.K1h PA.III.B.K3
Cross Country Flight Planning XC Route Planning - Checkpoint selection and landmark identification - Preferred vs. alternate routing considerations - Terrain, obstacle, and airspace avoidance in route planning XC Flight Planning - Completing a NavLog: headings, distances, time, fuel - E6B / app: wind correction angle, GS, fuel burn - Weight & balance and density altitude for departure/destination - Performance charts: takeoff, cruise, landing distances - VFR fuel requirements	PA.I.D.K1a PA.I.D.K3 PA.I.D.K4 PA.I.F.K1 PA.I.F.K2
Weather & NOTAMS for XC Flight - Obtaining a standard weather briefing (1800wxbrief / Leidos) - METARs, TAFs, PIREPs, winds aloft forecast - NOTAMS: TFRs, runway closures, GPS outages	PA.II.D.K1 PA.I.C.K1
Lost Procedures & Diversion - The 5 C's - Identifying position using sectional, pilotage, and VOR - Diverting to an alternate: revised heading, time, and fuel	PA.VI.C.K1 PA.VI.C.K2

Theory Tasks	ACS Ref
Scenario-Based Applications - Plan a navlog and flight - Evaluate safety and risk management considerations - Calculate aircraft performance and weight & balance	

Completion Standards

- **Identify and correctly describe each class of airspace**, including entry requirements, equipment, communication requirements, and cloud clearances, without reference to notes.
- **Select a legal VFR cruising altitude** using the hemispheric rule and explain route deviations required to avoid airspace or terrain.
- **Complete a NavLog from scratch** with accurate magnetic heading, wind correction angle, estimated groundspeed, time en route, and fuel for each leg.
- Calculate required fuel reserves for both day and night VFR and confirm compliance.
- **Interpret a sectional chart** and correctly identify airspace boundaries, MEFs, airport symbology, nav aids, and obstacles.
- **Extract destination airport data from the Chart Supplement**, including CTAF/ATIS frequency, runway dimensions, pattern altitude, services, and hours.
- Read and interpret a taxi diagram, identifying the non-movement area boundary, hold short lines, and any published hot spots.
- **Recite and apply 14 CFR 91.113 right-of-way priority order** and correctly resolve at least two converging/landing conflict scenarios.
- Apply minimum safe altitude requirements correctly to congested areas, non-congested areas, and open water.
- **Describe what constitutes a standard weather briefing** and explain how winds aloft, METARs, TAFs, PIREPs, and NOTAMs influence go/no-go decision-making.
- Demonstrate a diversion to an alternate airport: re-plot heading, estimate revised ETE, and recompute fuel remaining.