

VI. Navigation

Task	B. Navigation Systems and Radar Services
References	FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-6, FAA-H-8083-25; AIM Note: <i>The evaluator should reference the manufacturer's equipment supplement(s) as necessary.</i>
Objective	To determine that the applicant exhibits satisfactory knowledge, risk management, and skills associated with navigation systems and radar services.
Knowledge	The applicant demonstrates understanding of:
<i>PA.VI.B.K1</i>	Ground-based navigation (orientation, course determination, equipment, tests, and regulations).
<i>PA.VI.B.K2</i>	Satellite-based navigation (e.g., equipment, regulations, database considerations, and limitations of satellite navigation).
<i>PA.VI.B.K3</i>	Radar assistance to VFR aircraft (e.g., operations, equipment, available services, traffic advisories).
<i>PA.VI.B.K4</i>	Transponder (Mode(s) A, C, and S).
Risk Management	The applicant demonstrates the ability to identify, assess and mitigate risks, encompassing:
<i>PA.VI.B.R1</i>	Failure to manage automated navigation and autoflight systems.
<i>PA.VI.B.R2</i>	Distractions, loss of situational awareness, or improper task management.
<i>PA.VI.B.R3</i>	Limitations of the navigation system in use.
<i>PA.VI.B.R4</i>	Loss of a navigation signal.
Skills	The applicant demonstrates the ability to:
<i>PA.VI.B.S1</i>	Use an airborne electronic navigation system.
<i>PA.VI.B.S2</i>	Determine the airplane's position using the navigation system.
<i>PA.VI.B.S3</i>	Intercept and track a given course, radial, or bearing, as appropriate.
<i>PA.VI.B.S4</i>	Recognize and describe the indication of station or waypoint passage, if appropriate.
<i>PA.VI.B.S5</i>	Recognize signal loss or interference and take appropriate action, if applicable.
<i>PA.VI.B.S6</i>	Use proper communication procedures when utilizing radar services.
<i>PA.VI.B.S7</i>	Maintain the appropriate altitude ± 200 feet and heading $\pm 15^\circ$.