

VI. Navigation

Task	A. Pilotage and Dead Reckoning
References	14 CFR part 61; FAA-H-8083-2, FAA-H-8083-25; Navigation Charts
Objective	To determine that the applicant exhibits satisfactory knowledge, risk management, and skills associated with pilotage and dead reckoning.
Knowledge	The applicant demonstrates understanding of:
<i>PA.VI.A.K1</i>	Pilotage and dead reckoning.
<i>PA.VI.A.K2</i>	Magnetic compass errors.
<i>PA.VI.A.K3</i>	Topography.
<i>PA.VI.A.K4</i>	Selection of appropriate:
<i>PA.VI.A.K4a</i>	a. Route
<i>PA.VI.A.K4b</i>	b. Altitude(s)
<i>PA.VI.A.K4c</i>	c. Checkpoints
<i>PA.VI.A.K5</i>	Plotting a course, to include:
<i>PA.VI.A.K5a</i>	a. Determining heading, speed, and course
<i>PA.VI.A.K5b</i>	b. Wind correction angle
<i>PA.VI.A.K5c</i>	c. Estimating time, speed, and distance
<i>PA.VI.A.K5d</i>	d. True airspeed and density altitude
<i>PA.VI.A.K6</i>	Power setting selection.
<i>PA.VI.A.K7</i>	Planned versus actual flight plan calculations and required corrections.
Risk Management	The applicant demonstrates the ability to identify, assess and mitigate risks, encompassing:
<i>PA.VI.A.R1</i>	Collision hazards, to include aircraft, terrain, obstacles, and wires.
<i>PA.VI.A.R2</i>	Distractions, loss of situational awareness, or improper task management.
Skills	The applicant demonstrates the ability to:
<i>PA.VI.A.S1</i>	Prepare and use a flight log.
<i>PA.VI.A.S2</i>	Navigate by pilotage.
<i>PA.VI.A.S3</i>	Navigate by means of pre-computed headings, groundspeeds, and elapsed time.
<i>PA.VI.A.S4</i>	Use the magnetic direction indicator in navigation, to include turns to headings.
<i>PA.VI.A.S5</i>	Verify position within three nautical miles of the flight-planned route.
<i>PA.VI.A.S6</i>	Arrive at the en route checkpoints within five minutes of the initial or revised estimated time of arrival (ETA) and provide a destination estimate.
<i>PA.VI.A.S7</i>	Maintain the appropriate altitude ± 200 feet and heading $\pm 15^\circ$.