

IV. Takeoffs, Landings, and Go-Arounds

Task	A. Normal Takeoff and Climb
References	FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-23; POH/AFM; AIM
Objective	To determine that the applicant exhibits satisfactory knowledge, risk management, and skills associated with a normal takeoff, climb operations, and rejected takeoff procedures. Note: <i>If a crosswind condition does not exist, the applicant's knowledge of crosswind elements must be evaluated through oral testing.</i>
Knowledge	The applicant demonstrates understanding of:
PA.IV.A.K1	Effects of atmospheric conditions, including wind, on takeoff and climb performance.
PA.IV.A.K2	V_X and V_Y .
PA.IV.A.K3	Appropriate airplane configuration.
Risk Management	The applicant demonstrates the ability to identify, assess and mitigate risks, encompassing:
PA.IV.A.R1	Selection of runway based on pilot capability, airplane performance and limitations, available distance, and wind.
PA.IV.A.R2	Effects of:
PA.IV.A.R2a	a. Crosswind
PA.IV.A.R2b	b. Windshear
PA.IV.A.R2c	c. Tailwind
PA.IV.A.R2d	d. Wake turbulence
PA.IV.A.R2e	e. Runway surface/condition
PA.IV.A.R3	Abnormal operations, to include planning for:
PA.IV.A.R3a	a. Rejected takeoff
PA.IV.A.R3b	b. Engine failure in takeoff/climb phase of flight
PA.IV.A.R4	Collision hazards, to include aircraft, terrain, obstacles, wires, vehicles, vessels, persons, and wildlife.
PA.IV.A.R5	Low altitude maneuvering including stall, spin, or CFIT.
PA.IV.A.R6	Distractions, loss of situational awareness, or improper task management.
Skills	The applicant demonstrates the ability to:
PA.IV.A.S1	Complete the appropriate checklist.
PA.IV.A.S2	Make radio calls as appropriate.
PA.IV.A.S3	Verify assigned/correct runway.
PA.IV.A.S4	Ascertain wind direction with or without visible wind direction indicators.
PA.IV.A.S5	Position the flight controls for the existing wind.
PA.IV.A.S6	Clear the area; taxi into takeoff position and align the airplane on the runway centerline (ASEL, AMEL) or takeoff path (ASES, AMES).
PA.IV.A.S7	Confirm takeoff power and proper engine and flight instrument indications prior to rotation (ASEL, AMEL).
PA.IV.A.S8	Avoid excessive water spray on the propeller(s) (ASES, AMES).
PA.IV.A.S9	Rotate and lift off at the recommended airspeed and accelerate to V_Y .
PA.IV.A.S10	Retract the water rudders, as appropriate, establish and maintain the most efficient planing/lift-off attitude, and correct for porpoising and skipping (ASES, AMES).
PA.IV.A.S11	Establish a pitch attitude to maintain the manufacturer's recommended speed or V_Y , +10/-5 knots.
PA.IV.A.S12	Configure the airplane in accordance with manufacturer's guidance.
PA.IV.A.S13	Maintain V_Y +10/-5 knots to a safe maneuvering altitude.
PA.IV.A.S14	Maintain directional control and proper wind-drift correction throughout takeoff and climb.
PA.IV.A.S15	Comply with noise abatement procedures.

Know how to handle effects listed above.