



U.S. Department  
of Transportation

**Federal Aviation  
Administration**

# **Commercial Pilot for Airplane Category Airman Certification Standards**

**November 2023**

Flight Standards Service  
Washington, DC 20591

- CA.IV.A.S5 Position the flight controls for the existing wind, if applicable.
- CA.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).
- CA.IV.A.S6a a. Retract the water rudders, as appropriate (ASES, AMES)
- CA.IV.A.S7 Advance the throttle smoothly to takeoff power and confirm proper engine and flight instrument indications prior to rotation.
- CA.IV.A.S7a a. Establish and maintain the most efficient planing/lift-off attitude, and correct for porpoising or skipping (ASES, AMES)
- CA.IV.A.S8 Avoid excessive water spray on the propeller(s) (ASES, AMES).
- CA.IV.A.S9 Rotate and lift off at the recommended airspeed and accelerate to  $V_Y$ .
- CA.IV.A.S10 [Archived]
- CA.IV.A.S11 Establish a pitch attitude to maintain the manufacturer's recommended speed or  $V_Y \pm 5$  knots.
- CA.IV.A.S12 Configure the airplane in accordance with manufacturer's guidance.
- CA.IV.A.S13 Maintain  $V_Y \pm 5$  knots to a safe maneuvering altitude.
- CA.IV.A.S14 Maintain directional control and proper wind-drift correction throughout takeoff and climb.
- CA.IV.A.S15 Comply with noise abatement procedures, as applicable.

### Task B. Normal Approach and Landing

References: AIM; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-23, FAA-H-8083-25; POH/AFM

**Objective:** To determine the applicant exhibits satisfactory knowledge, risk management, and skills associated with normal approach and landing with emphasis on proper use and coordination of flight controls.

**Note:** If a crosswind condition does not exist, the applicant's knowledge of crosswind elements must be evaluated through oral testing.

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**Knowledge:** The applicant demonstrates understanding of:

- CA.IV.B.K1 A stabilized approach, including energy management concepts.
- CA.IV.B.K2 Effects of atmospheric conditions, including wind, on approach and landing performance.
- CA.IV.B.K3 Wind correction techniques on approach and landing.

### Risk

**Management:** The applicant is able to identify, assess, and mitigate risk associated with:

- CA.IV.B.R1 Selection of runway/landing surface, approach path, and touchdown area based on pilot capability, aircraft performance and limitations, available distance, and wind.
- CA.IV.B.R2 Effects of:
  - CA.IV.B.R2a a. Crosswind
  - CA.IV.B.R2b b. Windshear
  - CA.IV.B.R2c c. Tailwind

CA.IV.B.R2d	d. Wake turbulence
CA.IV.B.R2e	e. Landing surface/condition
CA.IV.B.R3	Planning for:
CA.IV.B.R3a	a. Rejected landing and go-around
CA.IV.B.R3b	b. Land and hold short operations (LAHSO)
CA.IV.B.R4	Collision hazards.
CA.IV.B.R5	Low altitude maneuvering, including stall, spin, or controlled flight into terrain (CFIT).
CA.IV.B.R6	Distractions, task prioritization, loss of situational awareness, or disorientation.

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<b>Skills:</b>	The applicant exhibits the skill to:
CA.IV.B.S1	Complete the appropriate checklist(s).
CA.IV.B.S2	Make radio calls as appropriate.
CA.IV.B.S3	Ensure the airplane is aligned with the correct/assigned runway or landing surface.
CA.IV.B.S4	Scan the runway or landing surface and adjoining area for traffic and obstructions.
CA.IV.B.S5	Select and aim for a suitable touchdown point considering the wind conditions, landing surface, and obstructions.
CA.IV.B.S6	Establish the recommended approach and landing configuration, airspeed, and trim, and adjust pitch attitude and power as required to maintain a stabilized approach.
CA.IV.B.S7	Maintain manufacturer's published approach airspeed or in its absence not more than 1.3 times the stalling speed or the minimum steady flight speed in the landing configuration ( $V_{SO}$ ), $\pm 5$ knots with gust factor applied.
CA.IV.B.S8	Maintain directional control and appropriate crosswind correction throughout the approach and landing.
CA.IV.B.S9	Make smooth, timely, and correct control application during round out and touchdown.
CA.IV.B.S10	Touch down at a proper pitch attitude, within 200 feet beyond or on the specified point, with no side drift, and with the airplane's longitudinal axis aligned with and over the runway center/landing path.
CA.IV.B.S11	Execute a timely go-around if the approach cannot be made within the tolerances specified above or for any other condition that may result in an unsafe approach or landing.
CA.IV.B.S12	Use runway incursion avoidance procedures, if applicable.

### Task C. Soft-Field Takeoff and Climb (ASEL)

References: AIM; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-25; POH/AFM

**Objective:** To determine the applicant exhibits satisfactory knowledge, risk management, and skills associated with soft-field takeoff, climb operations, and rejected takeoff procedures.

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<b>Knowledge:</b>	The applicant demonstrates understanding of:
CA.IV.C.K1	Effects of atmospheric conditions, including wind, on takeoff and climb performance.
CA.IV.C.K2	Best angle of climb speed ( $V_X$ ) and best rate of climb speed ( $V_Y$ ).

- CA.IV.C.S11 Configure the airplane after a positive rate of climb has been verified or in accordance with airplane manufacturer's instructions.
- CA.IV.C.S12 Maintain  $V_x$  or  $V_y$ , as appropriate,  $\pm 5$  knots to a safe maneuvering altitude.
- CA.IV.C.S13 Maintain directional control and proper wind-drift correction throughout takeoff and climb.
- CA.IV.C.S14 Comply with noise abatement procedures, as applicable.

#### Task D. Soft-Field Approach and Landing (ASEL)

References: AIM; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-25; POH/AFM

**Objective:** To determine the applicant exhibits satisfactory knowledge, risk management, and skills associated with soft-field approach and landing with emphasis on proper use and coordination of flight controls.

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**Knowledge:** The applicant demonstrates understanding of:

- CA.IV.D.K1 A stabilized approach, including energy management concepts.
- CA.IV.D.K2 Effects of atmospheric conditions, including wind, on approach and landing performance.
- CA.IV.D.K3 Wind correction techniques on approach and landing.

#### Risk

**Management:** The applicant is able to identify, assess, and mitigate risk associated with:

- CA.IV.D.R1 Selection of runway based on pilot capability, airplane performance and limitations, available distance, and wind.
- CA.IV.D.R2 Effects of:
  - CA.IV.D.R2a a. Crosswind
  - CA.IV.D.R2b b. Windshear
  - CA.IV.D.R2c c. Tailwind
  - CA.IV.D.R2d d. Wake turbulence
  - CA.IV.D.R2e e. Landing surface/condition
- CA.IV.D.R3 Planning for:
  - CA.IV.D.R3a a. Rejected landing and go-around
  - CA.IV.D.R3b b. Land and hold short operations (LAHSO)
- CA.IV.D.R4 Collision hazards.
- CA.IV.D.R5 Low altitude maneuvering, including stall, spin, or controlled flight into terrain (CFIT).
- CA.IV.D.R6 Distractions, task prioritization, loss of situational awareness, or disorientation.

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**Skills:** The applicant exhibits the skill to:

- CA.IV.D.S1 Complete the appropriate checklist(s).
- CA.IV.D.S2 Make radio calls as appropriate.
- CA.IV.D.S3 Ensure the airplane is aligned with the correct/assigned runway.

- CA.IV.D.S4 Scan the landing runway and adjoining area for traffic and obstructions.
- CA.IV.D.S5 Select and aim for a suitable touchdown point considering the wind conditions, landing surface, and obstructions.
- CA.IV.D.S6 Establish the recommended approach and landing configuration, airspeed, and trim, and adjust pitch attitude and power as required to maintain a stabilized approach.
- CA.IV.D.S7 Maintain manufacturer's published approach airspeed or in its absence not more than 1.3 times the stalling speed or the minimum steady flight speed in the landing configuration ( $V_{SO}$ ),  $\pm 5$  knots with gust factor applied.
- CA.IV.D.S8 Maintain directional control and appropriate crosswind correction throughout the approach and landing.
- CA.IV.D.S9 Make smooth, timely, and correct control inputs during the round out and touchdown, and, for tricycle gear airplanes, keep the nose wheel off the surface until loss of elevator effectiveness.
- CA.IV.D.S10 Touch down at a proper pitch attitude with minimum sink rate, no side drift, and with the airplane's longitudinal axis aligned with the center of the runway.
- CA.IV.D.S11 Maintain elevator as recommended by manufacturer during rollout and exit the "soft" area at a speed that would preclude sinking into the surface.
- CA.IV.D.S12 Execute a timely go-around if the approach cannot be made within the tolerances specified above or for any other condition that may result in an unsafe approach or landing.
- CA.IV.D.S13 Maintain proper position of the flight controls and sufficient speed to taxi while on the soft surface.

### Task E. Short-Field Takeoff and Maximum Performance Climb (ASEL, AMEL)

References: AIM; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-25; POH/AFM

**Objective:** To determine the applicant exhibits satisfactory knowledge, risk management, and skills associated with short-field takeoff, maximum performance climb operations, and rejected takeoff procedures.

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**Knowledge:** The applicant demonstrates understanding of:

- CA.IV.E.K1 Effects of atmospheric conditions, including wind, on takeoff and climb performance.
- CA.IV.E.K2 Best angle of climb speed ( $V_X$ ) and best rate of climb speed ( $V_Y$ ).
- CA.IV.E.K3 Appropriate airplane configuration.

#### Risk

**Management:** The applicant is able to identify, assess, and mitigate risk associated with:

- CA.IV.E.R1 Selection of runway based on pilot capability, airplane performance and limitations, available distance, and wind.
- CA.IV.E.R2 Effects of:
- CA.IV.E.R2a a. Crosswind
- CA.IV.E.R2b b. Windshear
- CA.IV.E.R2c c. Tailwind
- CA.IV.E.R2d d. Wake turbulence
- CA.IV.E.R2e e. Takeoff surface/condition

- CA.IV.E.R3 Abnormal operations, including planning for:
  - CA.IV.E.R3a a. Rejected takeoff
  - CA.IV.E.R3b b. Potential engine failure in takeoff/climb phase of flight
- CA.IV.E.R4 Collision hazards.
- CA.IV.E.R5 Low altitude maneuvering, including stall, spin, or controlled flight into terrain (CFIT).
- CA.IV.E.R6 Distractions, task prioritization, loss of situational awareness, or disorientation.

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<b>Skills:</b>	The applicant exhibits the skill to:
CA.IV.E.S1	Complete the appropriate checklist(s).
CA.IV.E.S2	Make radio calls as appropriate.
CA.IV.E.S3	Verify assigned/correct runway.
CA.IV.E.S4	Determine wind direction with or without visible wind direction indicators.
CA.IV.E.S5	Position the flight controls for the existing wind, if applicable.
CA.IV.E.S6	Clear the area, taxi into takeoff position, and align the airplane on the runway centerline utilizing maximum available takeoff area.
CA.IV.E.S7	Apply brakes while setting engine power to achieve maximum performance.
CA.IV.E.S8	Confirm takeoff power prior to brake release and verify proper engine and flight instrument indications prior to rotation.
CA.IV.E.S9	Rotate and lift off at the recommended airspeed and accelerate to the recommended obstacle clearance airspeed or $V_x$ , $\pm 5$ knots.
CA.IV.E.S10	Establish a pitch attitude to maintain the recommended obstacle clearance airspeed or $V_x$ , $\pm 5$ knots until the obstacle is cleared or until the airplane is 50 feet above the surface.
CA.IV.E.S11	Establish a pitch attitude for $V_y$ and accelerate to $V_y$ $\pm 5$ knots after clearing the obstacle or at 50 feet above ground level (AGL) if simulating an obstacle.
CA.IV.E.S12	Configure the airplane in accordance with the manufacturer's guidance after a positive rate of climb has been verified.
CA.IV.E.S13	Maintain $V_y$ $\pm 5$ knots to a safe maneuvering altitude.
CA.IV.E.S14	Maintain directional control and proper wind-drift correction throughout takeoff and climb.
CA.IV.E.S15	Comply with noise abatement procedures, as applicable.

### Task F. Short-Field Approach and Landing (ASEL, AMEL)

References: AIM; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-25; POH/AFM

**Objective:** To determine the applicant exhibits satisfactory knowledge, risk management, and skills associated with short-field approach and landing with emphasis on proper use and coordination of flight controls.

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<b>Knowledge:</b>	The applicant demonstrates understanding of:
CA.IV.F.K1	A stabilized approach, including energy management concepts.

- CA.IV.F.K2 Effects of atmospheric conditions, including wind, on approach and landing performance.
- CA.IV.F.K3 Wind correction techniques on approach and landing.

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**Risk**

**Management:** The applicant is able to identify, assess, and mitigate risk associated with:

- CA.IV.F.R1 Selection of runway based on pilot capability, airplane performance and limitations, available distance, and wind.
- CA.IV.F.R2 Effects of:
- CA.IV.F.R2a a. Crosswind
  - CA.IV.F.R2b b. Windshear
  - CA.IV.F.R2c c. Tailwind
  - CA.IV.F.R2d d. Wake turbulence
  - CA.IV.F.R2e e. Landing surface/condition
- CA.IV.F.R3 Planning for:
- CA.IV.F.R3a a. Rejected landing and go-around
  - CA.IV.F.R3b b. Land and hold short operations (LAHSO)
- CA.IV.F.R4 Collision hazards.
- CA.IV.F.R5 Low altitude maneuvering, including stall, spin, or controlled flight into terrain (CFIT).
- CA.IV.F.R6 Distractions, task prioritization, loss of situational awareness, or disorientation.

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**Skills:** The applicant exhibits the skill to:

- CA.IV.F.S1 Complete the appropriate checklist(s).
- CA.IV.F.S2 Make radio calls as appropriate.
- CA.IV.F.S3 Ensure the airplane is aligned with the correct/assigned runway.
- CA.IV.F.S4 Scan the landing runway and adjoining area for traffic and obstructions.
- CA.IV.F.S5 Select and aim for a suitable touchdown point considering the wind conditions, landing surface, and obstructions.
- CA.IV.F.S6 Establish the recommended approach and landing configuration, airspeed, and trim, and adjust pitch attitude and power as required to maintain a stabilized approach.
- CA.IV.F.S7 Maintain manufacturer's published approach airspeed or in its absence not more than 1.3 times the stalling speed or the minimum steady flight speed in the landing configuration ( $V_{SO}$ ),  $\pm 5$  knots with gust factor applied.
- CA.IV.F.S8 Maintain directional control and appropriate crosswind correction throughout the approach and landing.
- CA.IV.F.S9 Make smooth, timely, and correct control application before, during, and after touchdown.
- CA.IV.F.S10 Touch down at a proper pitch attitude within 100 feet beyond or on the specified point, threshold markings, or runway numbers, with no side drift, minimum float, and with the airplane's longitudinal axis aligned with and over the runway centerline.

- CA.IV.G.S4 Determine wind direction with or without visible wind direction indicators.
- CA.IV.G.S5 Position the flight controls for the existing wind, if applicable.
- CA.IV.G.S6 Clear the area, taxi into takeoff position utilizing maximum available takeoff area, and align the airplane on the takeoff path.
- CA.IV.G.S6a a. Retract the water rudders, as appropriate
- CA.IV.G.S7 Advance the throttle smoothly to takeoff power and confirm proper engine and flight instrument indications prior to rotation.
- CA.IV.G.S8 Establish a pitch attitude that maintains the most efficient planing/lift-off attitude and correct for porpoising and skipping.
- CA.IV.G.S9 Avoid excessive water spray on the propeller(s).
- CA.IV.G.S10 Rotate and lift off at the recommended airspeed, and accelerate to the recommended obstacle clearance airspeed or  $V_X$ .
- CA.IV.G.S11 Establish a pitch attitude to maintain the recommended obstacle clearance airspeed or  $V_X$ ,  $\pm 5$  knots until the obstacle is cleared or until the airplane is 50 feet above the surface.
- CA.IV.G.S12 Establish a pitch attitude for  $V_Y$  and accelerate to  $V_Y \pm 5$  knots after clearing the obstacle or at 50 feet above ground level (AGL) if simulating an obstacle.
- CA.IV.G.S13 Retract flaps, if extended, after a positive rate of climb has been verified or in accordance with airplane manufacturer's guidance.
- CA.IV.G.S14 Maintain  $V_Y \pm 5$  knots to a safe maneuvering altitude.
- CA.IV.G.S15 Maintain directional control and proper wind-drift correction throughout takeoff and climb.
- CA.IV.G.S16 Comply with noise abatement procedures, as applicable.

### Task H. Confined Area Approach and Landing (ASES, AMES)

References: AIM; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-23, FAA-H-8083-25; POH/AFM

**Objective:** To determine the applicant exhibits satisfactory knowledge, risk management, and skills associated with confined area approach and landing.

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**Knowledge:** The applicant demonstrates understanding of:

- CA.IV.H.K1 A stabilized approach, including energy management concepts.
- CA.IV.H.K2 Effects of atmospheric conditions, including wind, on approach and landing performance.
- CA.IV.H.K3 Wind correction techniques on approach and landing.

### Risk

**Management:** The applicant is able to identify, assess, and mitigate risk associated with:

- CA.IV.H.R1 Selection of approach path and touchdown area based on pilot capability, airplane performance and limitations, available distance, and wind.
- CA.IV.H.R2 Effects of:
  - CA.IV.H.R2a a. Crosswind
  - CA.IV.H.R2b b. Windshear



CA.IV.H.R2c	c. Tailwind
CA.IV.H.R2d	d. Wake turbulence
CA.IV.H.R2e	e. Water surface/condition
CA.IV.H.R3	Planning for a go-around and rejected landing.
CA.IV.H.R4	Collision hazards.
CA.IV.H.R5	Low altitude maneuvering, including stall, spin, or controlled flight into terrain (CFIT).
CA.IV.H.R6	Distractions, task prioritization, loss of situational awareness, or disorientation.

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<b>Skills:</b>	The applicant exhibits the skill to:
CA.IV.H.S1	Complete the appropriate checklist(s).
CA.IV.H.S2	Make radio calls as appropriate.
CA.IV.H.S3	Ensure the airplane is aligned for an approach to the correct/assigned landing surface.
CA.IV.H.S4	Scan the landing area for traffic and obstructions.
CA.IV.H.S5	Select and aim for a suitable touchdown point considering the wind conditions, landing surface, and obstructions.
CA.IV.H.S6	Establish the recommended approach and landing configuration, airspeed, and trim, and adjust pitch attitude and power as required to maintain a stabilized approach.
CA.IV.H.S7	Maintain manufacturer's published approach airspeed or in its absence not more than $1.3 V_{SO}$ , +10/-5 knots with gust factor applied.
CA.IV.H.S8	Maintain directional control and appropriate crosswind correction throughout the approach and landing.
CA.IV.H.S9	Make smooth, timely, and correct control application before, during, and after touchdown.
CA.IV.H.S10	Contact the water at the recommended airspeed with a proper pitch attitude for the surface conditions.
CA.IV.H.S11	Touch down at a proper pitch attitude, within 100 feet beyond or on the specified point, with no side drift, minimum float, and with the airplane's longitudinal axis aligned with the projected landing path.
CA.IV.H.S12	Execute a timely go-around if the approach cannot be made within the tolerances specified above or for any other condition that may result in an unsafe approach or landing.
CA.IV.H.S13	Apply elevator control as necessary to stop in the shortest distance consistent with safety.

### Task I. Glassy Water Takeoff and Climb (ASES, AMES)

References: AIM; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-23, FAA-H-8083-25; POH/AFM

**Objective:** To determine the applicant exhibits satisfactory knowledge, risk management, and skills associated with glassy water takeoff and climb.

**Note:** If a glassy water condition does not exist, the applicant must be evaluated by simulating the Task.

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<b>Knowledge:</b>	The applicant demonstrates understanding of:
CA.IV.I.K1	Effects of atmospheric conditions, including wind, on takeoff and climb performance.

### Task J. Glassy Water Approach and Landing (ASES, AMES)

References: AIM; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-23, FAA-H-8083-25; POH/AFM

**Objective:** To determine the applicant exhibits satisfactory knowledge, risk management, and skills associated with glassy water approach and landing.

**Note:** If a glassy water condition does not exist, the applicant must be evaluated by simulating the Task.

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**Knowledge:** The applicant demonstrates understanding of:

- CA.IV.J.K1 A stabilized approach, including energy management concepts.
- CA.IV.J.K2 Effects of atmospheric conditions, including wind, on approach and landing performance.
- CA.IV.J.K3 When and why glassy water techniques are used.
- CA.IV.J.K4 How a glassy water approach and landing is executed.

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#### Risk

**Management:** The applicant is able to identify, assess, and mitigate risk associated with:

- CA.IV.J.R1 Selection of approach path and touchdown area based on pilot capability, airplane performance and limitations, and available distance.
- CA.IV.J.R2 Water surface/condition.
- CA.IV.J.R3 Planning for a go-around and rejected landing.
- CA.IV.J.R4 Collision hazards.
- CA.IV.J.R5 Low altitude maneuvering, including stall, spin, or controlled flight into terrain (CFIT).
- CA.IV.J.R6 Distractions, task prioritization, loss of situational awareness, or disorientation.
- CA.IV.J.R7 Gear position in an amphibious airplane.

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**Skills:** The applicant exhibits the skill to:

- CA.IV.J.S1 Complete the appropriate checklist(s).
- CA.IV.J.S2 Make radio calls as appropriate.
- CA.IV.J.S3 Scan the landing area for traffic and obstructions.
- CA.IV.J.S4 Select a proper approach and landing path considering the landing surface, visual attitude references, water depth, and collision hazards.
- CA.IV.J.S5 Establish the recommended approach and landing configuration, airspeed, and trim, and adjust pitch attitude and power as required to maintain a stabilized approach.
- CA.IV.J.S6 Maintain manufacturer's published approach airspeed or in its absence not more than  $1.3 V_{SO}$ ,  $\pm 5$  knots.
- CA.IV.J.S7 Make smooth, timely, and correct power and control adjustments to maintain proper pitch attitude and rate of descent to touchdown.
- CA.IV.J.S8 Contact the water in a proper pitch attitude, and slow to idle taxi speed.
- CA.IV.J.S9 Maintain directional control throughout the approach and landing.

CA.IV.K.S6	Clear the area, select an appropriate takeoff path considering wind, swells, surface hazards, or vessels.
CA.IV.K.S6a	a. Retract the water rudders, as appropriate
CA.IV.K.S6b	b. Advance the throttle smoothly to takeoff power and confirm proper engine and flight instrument indications prior to rotation
CA.IV.K.S7	[Archived]
CA.IV.K.S8	Establish and maintain an appropriate planing attitude, directional control, and correct for porpoising, skipping, and increase in water drag.
CA.IV.K.S9	Avoid excessive water spray on the propeller(s).
CA.IV.K.S10	Lift off at minimum airspeed and accelerate to $V_Y \pm 5$ knots before leaving ground effect.
CA.IV.K.S11	Configure the airplane after a positive rate of climb has been verified or in accordance with airplane manufacturer's instructions.
CA.IV.K.S12	Maintain $V_Y \pm 5$ knots to a safe maneuvering altitude.
CA.IV.K.S13	Maintain directional control and proper wind-drift correction throughout takeoff and climb.

### Task L. Rough Water Approach and Landing (ASES, AMES)

References: AIM; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-23, FAA-H-8083-25; POH/AFM

**Objective:** To determine the applicant exhibits satisfactory knowledge, risk management, and skills associated with rough water approach and landing.

**Note:** If a rough water condition does not exist, the applicant must be evaluated by simulating the Task.

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**Knowledge:** The applicant demonstrates understanding of:

CA.IV.L.K1	A stabilized approach, including energy management concepts.
CA.IV.L.K2	Effects of atmospheric conditions, including wind, on approach and landing performance.
CA.IV.L.K3	Wind correction techniques on approach and landing.
CA.IV.L.K4	When and why rough water techniques are used.
CA.IV.L.K5	How to perform a proper rough water approach and landing.

### Risk

**Management:** The applicant is able to identify, assess, and mitigate risk associated with:

CA.IV.L.R1	Selection of approach path and touchdown area based on pilot capability, airplane performance and limitations, available distance, and wind.
CA.IV.L.R2	Effects of:
CA.IV.L.R2a	a. Crosswind
CA.IV.L.R2b	b. Windshear
CA.IV.L.R2c	c. Tailwind
CA.IV.L.R2d	d. Wake turbulence
CA.IV.L.R2e	e. Water surface/condition

- CA.IV.L.R3 Planning for a go-around and rejected landing.
- CA.IV.L.R4 Collision hazards.
- CA.IV.L.R5 Low altitude maneuvering, including stall, spin, or controlled flight into terrain (CFIT).
- CA.IV.L.R6 Distractions, task prioritization, loss of situational awareness, or disorientation.
- CA.IV.L.R7 Gear position in an amphibious airplane.

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**Skills:** The applicant exhibits the skill to:

- CA.IV.L.S1 Complete the appropriate checklist(s).
- CA.IV.L.S2 Make radio calls as appropriate.
- CA.IV.L.S3 Ensure the airplane is aligned with the correct/assigned waterway.
- CA.IV.L.S4 Scan the landing area for traffic and obstructions.
- CA.IV.L.S5 Select and aim for a suitable touchdown point considering the wind conditions, landing surface, and obstructions.
- CA.IV.L.S6 Establish the recommended approach and landing configuration, airspeed, and trim, and adjust pitch attitude and power as required to maintain a stabilized approach.
- CA.IV.L.S7 Maintain manufacturer's published approach airspeed or in its absence not more than 1.3 times the stalling speed or the minimum steady flight speed in the landing configuration ( $V_{SO}$ ),  $\pm 5$  knots with gust factor applied.
- CA.IV.L.S8 Maintain directional control and appropriate crosswind correction throughout the approach and landing.
- CA.IV.L.S9 Make smooth, timely, and correct power and control adjustments to maintain proper pitch attitude and rate of descent to touchdown.
- CA.IV.L.S10 Contact the water in a proper pitch attitude, considering the type of rough water.

### Task M. Power-Off 180° Accuracy Approach and Landing (ASEL, ASES)

*References: AIM; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-25; POH/AFM*

**Objective:** To determine the applicant exhibits satisfactory knowledge, risk management, and skills associated with power-off 180° accuracy approach and landing.

**Note:** See Appendix 3: Aircraft, Equipment, and Operational Requirements & Limitations for information related to this Task.

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**Knowledge:** The applicant demonstrates understanding of:

- CA.IV.M.K1 A stabilized approach, including energy management concepts.
- CA.IV.M.K2 Effects of atmospheric conditions, including wind, on approach and landing.
- CA.IV.M.K3 Wind correction techniques on approach and landing.
- CA.IV.M.K4 Purpose of power-off accuracy approach.

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**Risk**

**Management:** The applicant is able to identify, assess, and mitigate risk associated with:

- CA.IV.M.R1 Selection of runway/landing surface, approach path, and touchdown area based on pilot capability, aircraft performance and limitations, available distance, and wind.
- CA.IV.M.R2 Effects of:
- CA.IV.M.R2a a. Crosswind
  - CA.IV.M.R2b b. Windshear
  - CA.IV.M.R2c c. Tailwind
  - CA.IV.M.R2d d. Wake turbulence
  - CA.IV.M.R2e e. Landing surface/condition
- CA.IV.M.R3 Planning for:
- CA.IV.M.R3a a. Rejected landing and go-around
  - CA.IV.M.R3b b. Land and hold short operations (LAHSO)
- CA.IV.M.R4 Collision hazards.
- CA.IV.M.R5 Low altitude maneuvering, including stall, spin, or controlled flight into terrain (CFIT).
- CA.IV.M.R6 Distractions, task prioritization, loss of situational awareness, or disorientation.
- CA.IV.M.R7 Forward slip operations, including fuel flowage, tail stalls with flaps, and airspeed control.

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**Skills:** The applicant exhibits the skill to:

- CA.IV.M.S1 Complete the appropriate checklist(s).
- CA.IV.M.S2 Make radio calls as appropriate.
- CA.IV.M.S3 Plan and follow a flightpath to the selected landing area considering altitude, wind, terrain, and obstructions.
- CA.IV.M.S4 Select the most suitable touchdown point based on wind, landing surface, obstructions, and aircraft limitations.
- CA.IV.M.S5 Position airplane on downwind leg, parallel to landing runway.
- CA.IV.M.S6 Correctly configure the airplane.
- CA.IV.M.S7 As necessary, correlate crosswind with direction of forward slip and transition to side slip before touchdown.
- CA.IV.M.S8 Touch down at a proper pitch attitude, within 200 feet beyond or on the specified point with no side drift and with the airplane's longitudinal axis aligned with and over the runway centerline or landing path, as applicable.

### **Task N. Go-Around/Rejected Landing**

*References:* AIM; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-23, FAA-H-8083-25; POH/AFM

**Objective:** To determine the applicant exhibits satisfactory knowledge, risk management, and skills associated with go-around/rejected landing with emphasis on factors that contribute to landing conditions that may require a go-around.

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**Knowledge:** The applicant demonstrates understanding of: