Note: ACS Standards listed below are a brief SUMMARY and are not 100% complete. The key takeaway standards are listed. Be sure to review ACS Standards in full for each maneuver.

Slow Flight

Slow Flight (Clean, No flaps)

1. Cruise flight above 1500ft AGL
2. Pre Maneuver Checks: Clearing, Lights, Visual Reference/desired altitude established
3. Power to 3800-3900
4. Keep nose slightly up to reduce speed and maintain altitude
5. Adjust pitch to maintain airspeed around 55-65 knots (About 5 knots above stall warning)
6. Adjust power to maintain altitude
7. Proceed to make turns, climbs, and descents using minor power adjustments (Note: Keep turns to a standard rate)
8. Recover by increasing power to full and simultaneously lowering the nose to build speed
9. Resume cruise flight (cruise checklist)

ACS Standards: (+10 -0 for airspeed meaning 55+10), +-10 degrees on desired heading, +-100 feet on altitude.

Slow Flight (Dirty, w/Flaps 20 degrees)

1.Cruise flight above 1500ft AGL

2.Pre Maneuver Checks: Clearing, Lights, Visual Reference/desired altitude established

3. Power to 3800-3900

4. Keep nose slightly up to reduce speed and maintain altitude

5. Below 82 knots, lower flaps 1st notch, then 2nd notch

6. RPM will drop as your speed/windmilling effect decreases so increase power back to ~3800-3900 rpm to maintain altitude

7. Adjust pitch to maintain airspeed around 55-65 knots (About 5 knots above stall warning)

8. Adjust power to maintain altitude

9. Proceed to make turns, climbs, and descents

10. Recover by increasing power to full and simultaneously lowering the nose to build speed

11. Retract flaps incrementally.

12. Resume cruise flight (cruise checklist)

ACS Standards: (+10 -0 for airspeed meaning 55+10), +-10 degrees on desired heading, +-100 feet on altitude.

Stalls

Power-Off Stall (Landing stall)

1. Achieve cruising altitude where a recovery can be made above 1500ft AGL

2. Pre Maneuver Checks: Clearing, Lights, Visual Reference/starting altitude established

3. Begin setting up for slow flight dirty configuration

4. Reduce Power ~3800-3900

5. Keep nose up to reduce speed and maintain altitude

5. Below 82 knots, lower flaps 1st notch, then 2nd notch

6. Descend 150-200 feet at 60-65 knots

7. Once an altitude of 150-200ft is lost, reduce power completely

8. Maintain slightly nose high angle of attack until stall (About 10° nose up)

9. Upon stall, lower nose slightly below horizon and increase power to full

10. Once stall is broken, raise nose to begin a Vx climb and reduce flaps to 10, when positive rate of climb is assured retract to flaps 0.

11. Resume cruise flight (cruise checklist)

ACS Standards: Stabilized descent established, +-10 degrees on desired heading, proper configuration/procedures completed properly in accordance with POH/AFM, Vx or Vy established in recovery.

Power-On Stall (Takeoff stall)

1. Cruise flight above 1500ft AGL

2. Pre Maneuver Checks: Clearing, Lights, Visual Reference/desired altitude established

3. Power to 3000rpm

4. Keep nose up to reduce speed and maintain altitude

5. When airspeed reaches 55-65 knots increase power to full

6. Raise nose to an angle of just above 25° and hold it there until stall

7. Upon stall, lower the nose and initiate a Vx climb once stall is broken

8. Resume cruise flight (cruise checklist)

ACS Standards: +-10 degrees on desired heading, proper

configuration/procedures completed properly in accordance with POH/AFM,

Vx or Vy established in recovery.

Steep Turns

1. Cruise flight above 1500ft AGL

2. Pre Maneuver Checks: Clearing, Lights, Visual Reference/desired altitude/airspeed established

3. Airspeed to 85-90 (4600~rpm)

4. Verify altitude, airspeed, and heading (Reference point)

5. Roll into a 45° bank increasing power slightly (4800~) when

rolling through 30°.

6. Increase elevator back pressure to account for loss of vertical lift

component.

7. When approaching initial heading (reference point) roll wings

level

8. Roll directly into the opposite direction turn and repeat process.

9. Resume cruise flight (cruise checklist)

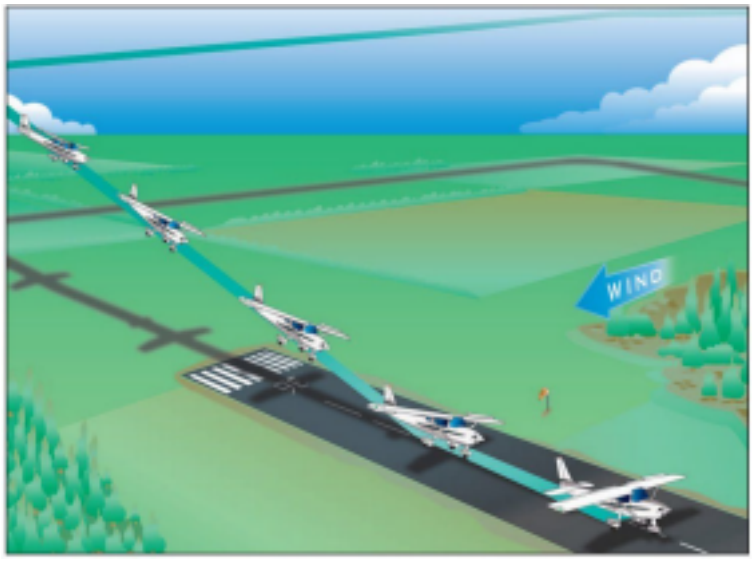
ACS Standards: +-10 degrees on desired heading, +-10 from initial airspeed,

+-100 from initial altitude

Takeoff and Landing Procedures

Forward Slip to Landing

1. Complete pre-landing checklist (W/Flaps 20)
2. Once aligned with the runway reduce power to idle and smoothly apply full rudder in the direction opposite of the wind
3. Counteract rolling tendency with opposite aileron (wing down into the wind).
4. Maintain 60-65kts in descent
5. Use ailerons to maintain centerline of the runway
6. When approaching flaring point, smoothly reduce rudder input and maintain control over the runway
7. Proceed with planned landing
8. Complete after landing checklist



ACS Standards: Configure the airplane correctly. Correlate crosswind with direction of forward slip and transition to side slip before touchdown. Touch down at a proper pitch attitude, within 400 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. Maintain a ground track aligned with the runway center/landing path.

Soft-Field Takeoff

1. Complete before takeoff checklist with first detent of flaps

2. Hold stick full back taxiing onto the runway and apply crosswind correction as necessary

3. Increase throttle to full as aircraft is aligned with center of the runway (Check engine indications)

4. Adjust nose pitch to maintain an attitude in which the nose wheel is off the ground but tail is not scraping

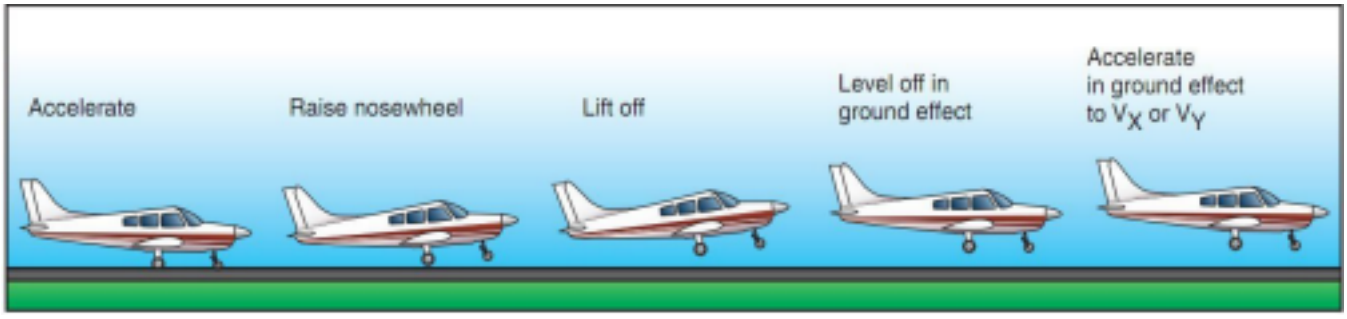
5. When the aircraft lifts off (will be prior to Vr) lower nose slightly to maintain ground effect and accelerate to Vx or Vy

6. Establish a climb at Vx if clearing an obstacle or Vy if no obstacles are ahead

7. Once clear of obstacles pitch for Vy and retract flaps

8. Complete climb checklist

ACS Standards: Lift off at the lowest possible airspeed and remain in ground effect while accelerating to VX or VY , as appropriate. Establish a pitch attitude for VX or VY , as appropriate, and maintain selected airspeed +10/-5 knots during the climb.



Soft-Field Landing

1. Complete Pre-Landing checklist

2. Abeam touch down point at pattern altitude, set power below 3000rpm and adjust as needed for glide

3. Below 82kts lower flaps to first notch

4. Establish a descent at 70-75kts until touch down point is 45° over your shoulder then turn base

5. Once base turn is complete, set flaps to second notch and establish 65-70kts descent

6. Begin final turn when approaching runway extended centerline and establish 60kt descent

7. Approaching runway (final), slow approach speed to 55kts

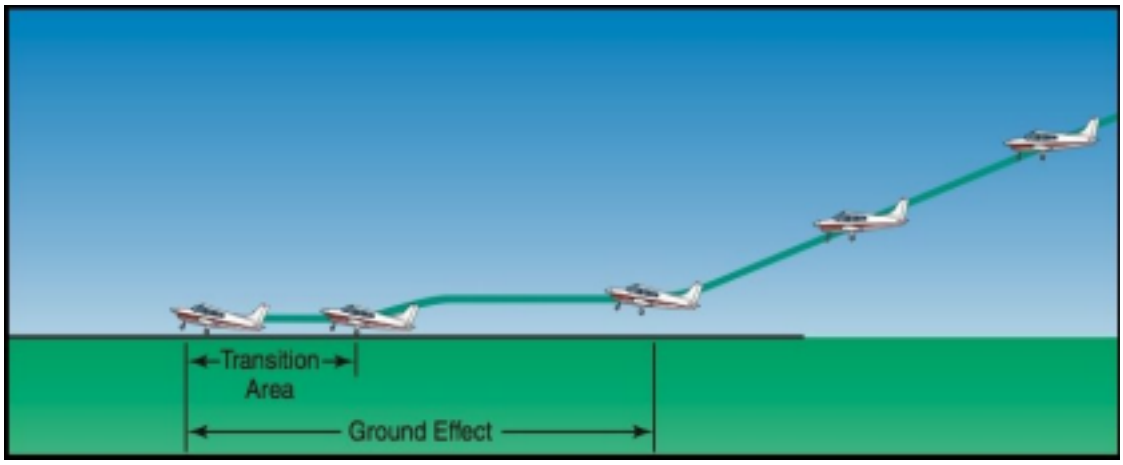
8. Once in ground effect raise the nose to continue to lose speed so the aircraft touches down at the slowest possible speed with the nose high off the ground (you'll hear the stall warning)

9. After touchdown, gradually apply full stick back to keep weight off the nosewheel as long as possible

10. Use minimal brakes to slow to taxiing speed

11. Once clear of the runway, complete after landing checklist

ACS Standards: Maintain approach speed. 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. Keep the nose wheel off the surface until loss of elevator effectiveness. Maintain safe taxi speed that would preclude the aircraft from sinking into the "soft" surface.



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Short- Field Takeoff

1. Complete before takeoff checklist with first notch of flaps

2. Align aircraft on the runway utilizing all available runway

3. Once aligned, hold brakes firmly and apply full power (check engine instruments)

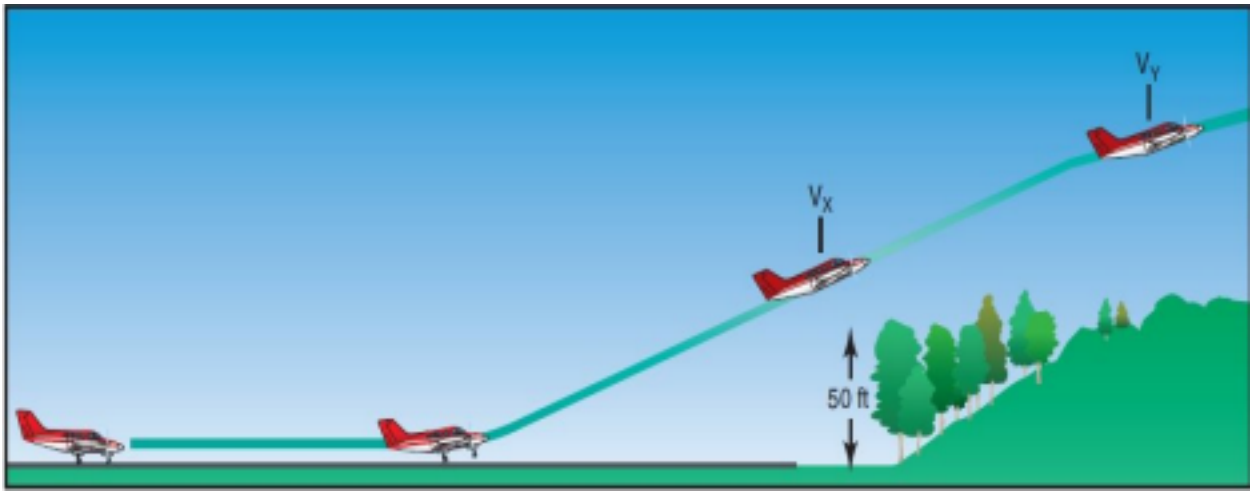
4. Release the brakes

5. Rotate at 50 knots and continue pitch up to maintain a Vx climb

6. Once obstacles are clear lower the nose for Vy and retract flaps

7. Complete climb checklist

ACS Standards: Runway centerline established. Maximum amount of runway used for takeoff. Power set with brakes held and engine/flight instruments in check. Rotate at the recommended airspeed and maintain Vx after liftoff within +10-5 airspeed until obstacle is cleared or until 50 AGL. Vy established after obstacle or 50 AGL if simulated obstacle.



Short-Field Landing

1. Complete Pre-Landing checklist
2. Select a touch down point
3. Abeam touch down point at pattern altitude, set power below 3000rpm and adjust as needed for glide
4. Below 82kts lower flaps to first notch
5. Establish a descent at 70-75kts until touch down point is 45° over your shoulder then turn base
6. Once base turn is complete flaps to second notch and establish 60-65kts descent
7. Begin final turn when approaching runway extended centerline and establish 55kt descent

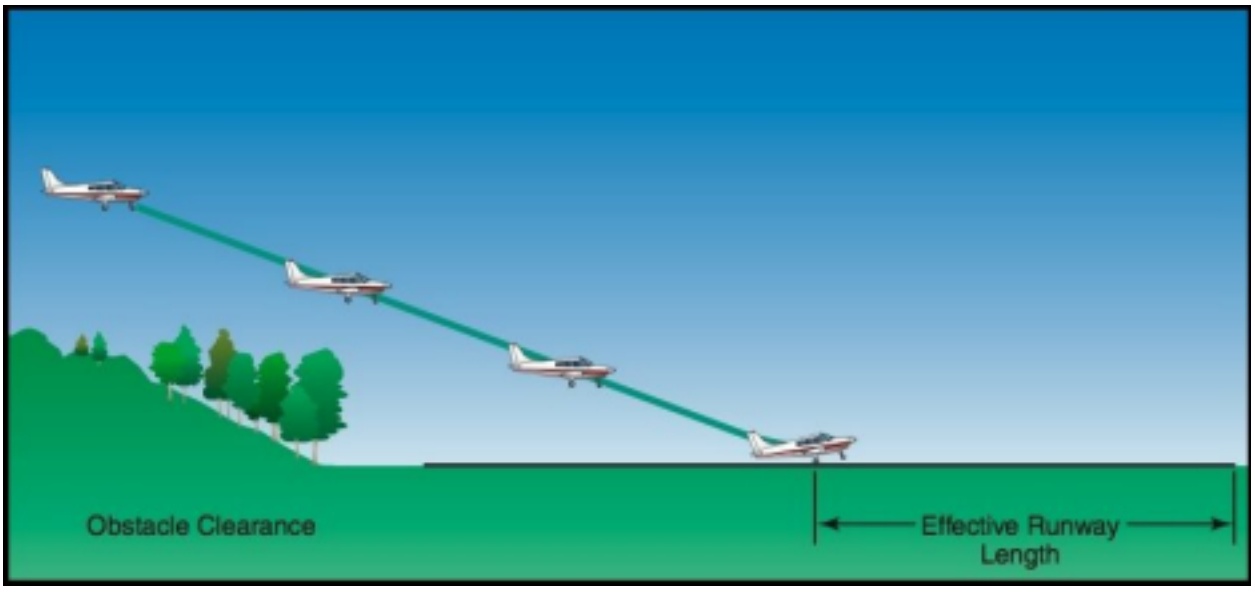
8. When touch down point is achieved and obstacles cleared, power to idle and lower nose to maintain 55kts

9. Begin flaring to achieve a touch down at or around stall speed

10. Once wheels are down, smoothly increase braking intensity, retract flaps, then add full stick back for aerodynamic braking

11. Once clear of the runway complete after landing checklist

ACS Standards: Select and aim for a suitable touchdown point, maintain manufacturers recommended approach speed +10/-5, touch down at a proper pitch attitude within 200 feet beyond or on the specified point. Use manufacturer's recommended procedures for airplane configuration and braking (Flaps retract upon touchdown, maximum braking without skidding, and stick back for aerodynamic braking)



Ground Reference Maneuvers

S-turns

1. Complete cruise checklist
2. Select a road that is perpendicular to wind direction
3. Establish an altitude between 600 and 1000ft AGL (Depends on emg.

landing area, obstacles, how populated the area is)

4. Clear the area by overflying the road and selecting an emergency landing area

5. Set up to enter the maneuver on the downwind at 90kts

6. Upon crossing the road, enter the steepest bank of the maneuver (cannot exceed 45° of bank)

7. As the aircraft changes direction relative to wind groundspeed changes and less bank is required to ensure equal distance to the road

8. Cross the road perpendicular with wings level

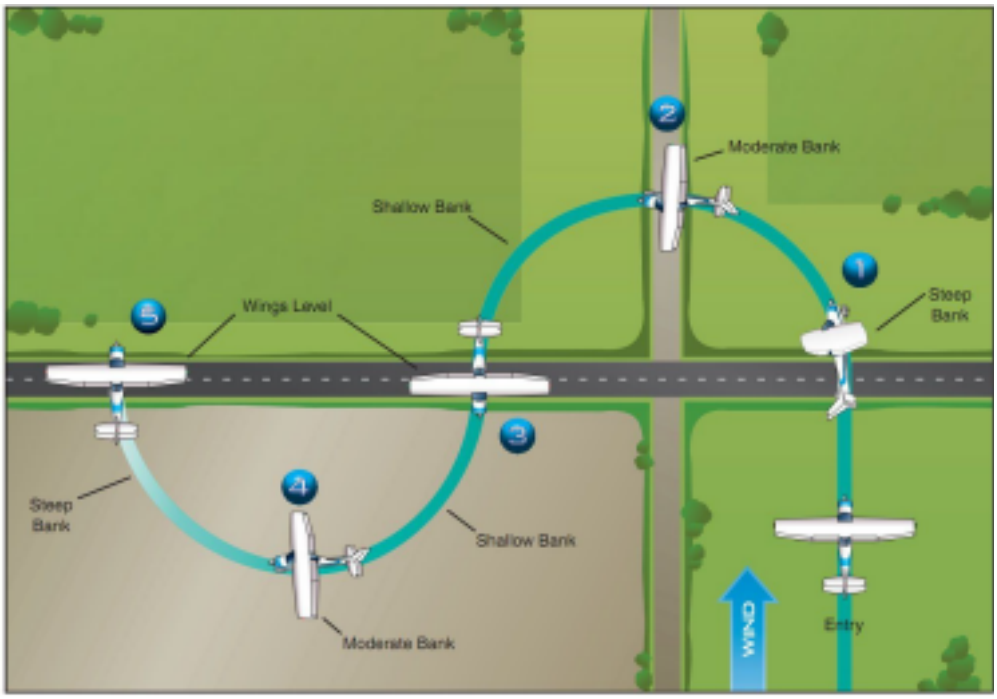
9. Begin opposite turn with shallowest bank of the maneuver

10. As the aircraft changes direction relative to the wind ground speed changes and more bank is required to ensure equal distance to the road/powerlines

11. Cross the road/powerlines perpendicular with wings level

12. Once complete, resume more turns or exit on the downwind and resume cruise flight

ACS Standards: Maintain altitude ±100 feet; maintain airspeed ±10 knots. Reverse the turn directly over the selected reference line. Maintain a constant radius turn on each side of a selected reference line. Max bank of 45 degrees according to AFH (not listed in ACS). Enter and exit on a downwind.



Maneuvers

Turns Around A Point

1. Complete cruise checklist
2. Select a point in open space to maneuver around
3. Establish an altitude between 600 and 1000ft AGL (Depends on landing area and obstacles)
4. Clear the area by overflying the point and selecting an emergency landing area
5. Set up to enter the maneuver on the downwind at 90kts
6. Upon passing the point enter the steepest bank of the maneuver (cannot exceed 45° of bank)
7. As the aircraft changes direction relative to wind, groundspeed changes and

less bank is required to ensure equal distance to the point

8. Adjust bank as necessary to maintain equidistant from the

selected point

9. Complete a full 360° around the point

10. Once complete, resume more turns or exit on the downwind and resume cruise flight

ACS Standards: Maintain a constant radius turn on each side of a selected reference point. Maintain altitude ±100 feet; maintain airspeed ±10 knots. Enter on a downwind and exit on downwind.