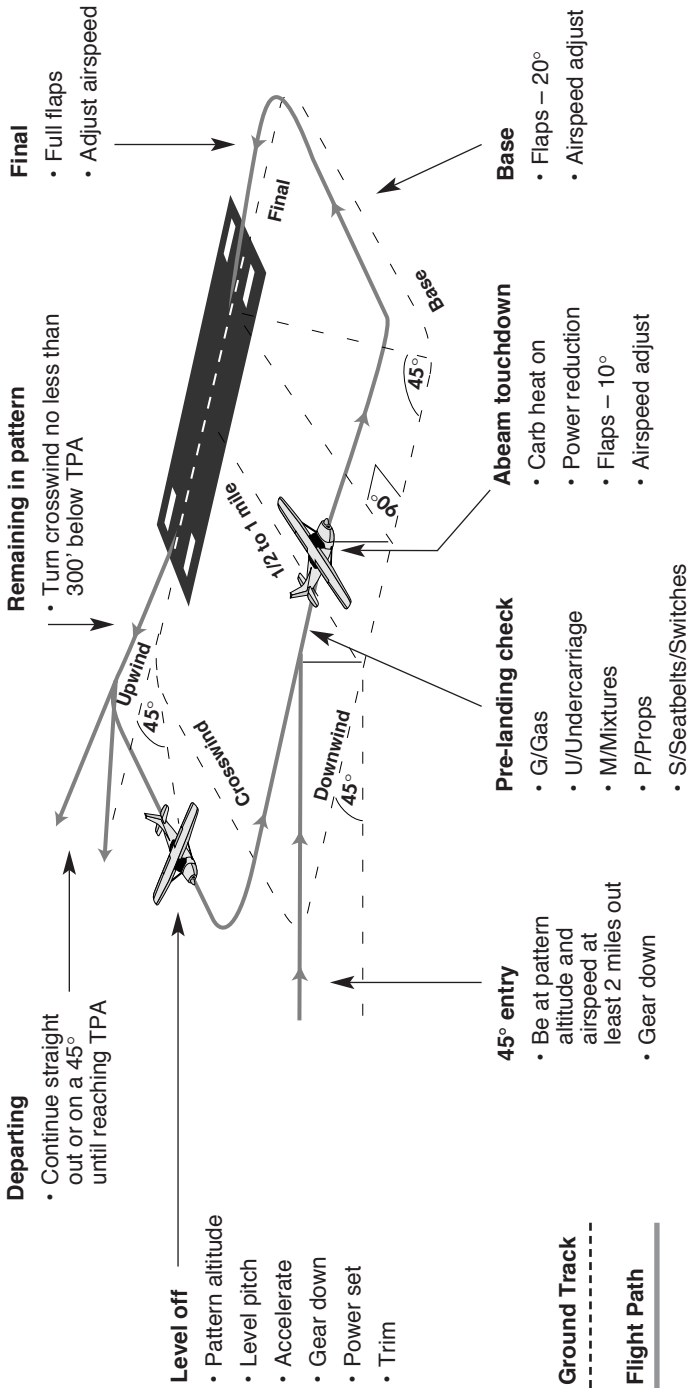
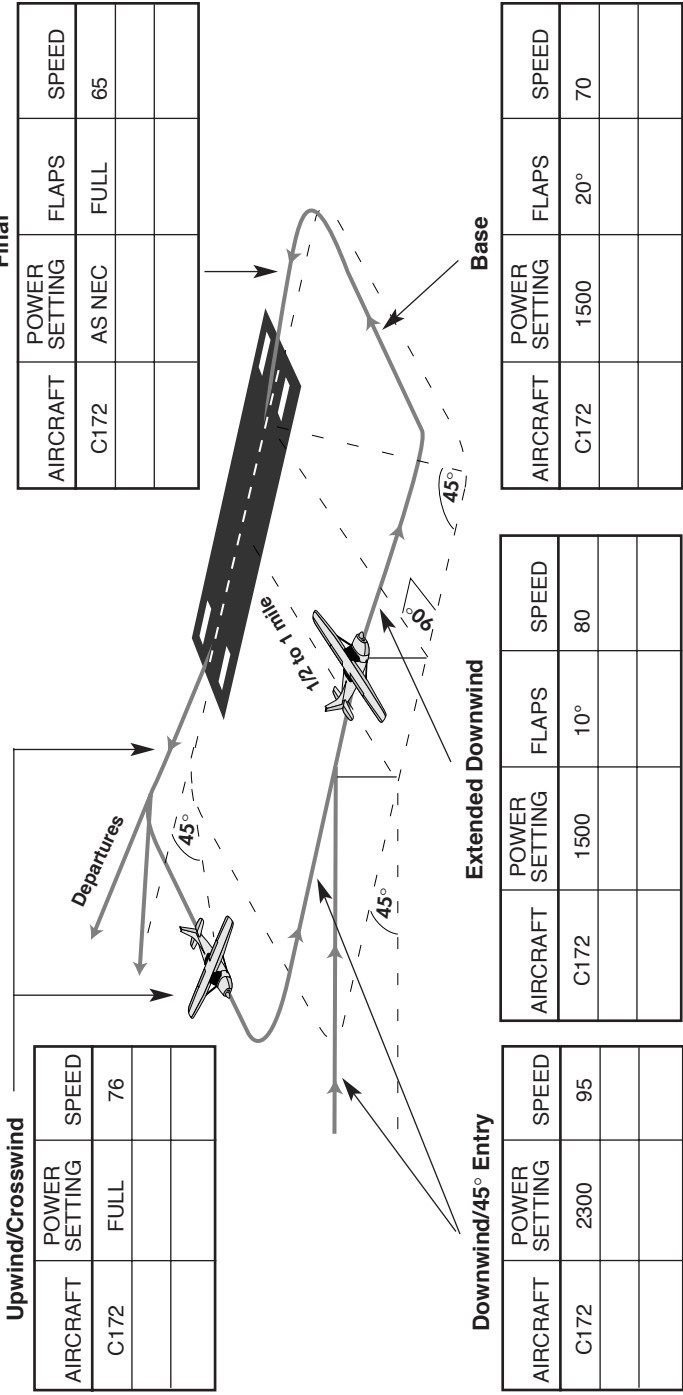


TRAFFIC PATTERN OPERATIONS — 1



TRAFFIC PATTERN OPERATIONS — 2



NORMAL APPROACH AND LANDING

OBJECTIVE

To teach the private student the knowledge of the elements related to a normal approach and landing.

COMPLETION STANDARDS

1. Considers the wind conditions, landing surface, obstructions, and selects a suitable touchdown point.
2. Establishes the recommended approach and landing configuration and airspeed, and adjusts pitch attitude and power as required.
3. Maintains a stabilized approach and the recommended airspeed, or in its absence, not more than $1.3 V_{SO}$, $+10/-5$ knots, with gust factor applied.
4. Makes smooth, timely, and correct control application during the roundout and touchdown.
5. Remains aware of the possibility of wind shear and/or wake turbulence.
6. Touches down at or within 400 feet (120 meters) beyond a specified point, with no drift, and with the airplane's longitudinal axis aligned with and over the runway center/landing path.
7. Maintains crosswind correction and directional control throughout the approach and landing sequence.
8. Completes the appropriate checklist.

DESCRIPTION

The airplane is aligned and stabilized on final approach with final flap setting. Pitch and power are coordinated to remain stabilized on the desired glide path. At an appropriate altitude a transition to the landing attitude is made to allow a power off touchdown on the main gear. After touchdown, the airplane will be slowed to normal taxi speed on the runway centerline.

PROCEDURE

1. Prior to 300 feet AGL on final approach, stabilize the airplane with the final flap settings and recommended airspeed.
2. With the airplane stabilized, trim off control pressures.

3. During gusty conditions increase final approach speed by one-half the gust factor. So, if the wind is gusting to 12 knots, add 6 knots to your final approach speed.
4. Coordinate pitch and power to maintain the glide path that permits touchdown near stalling speed beyond and within 400 feet of a specified point.
5. At the appropriate flare altitude (10 to 20 feet AGL), slow the airplane descent rate by raising the pitch attitude and gradually reducing power to idle. The airplane will then settle onto the runway on the main gear in the landing attitude.
6. Maintain back pressure on the yoke throughout the landing roll.
7. Slow the airplane to taxi speed before leaving the runway centerline.

Note: FAR 91.103 requires takeoff and landing performance data to be computed prior to all flights.

References

Private Pilot Practical Test Standards FAA-S-8081-14A, pg. 1-11.
Airplane Flying Handbook FAA-H-8083-3, pg. 8-1 ⇒ 8-17.

CROSSWIND APPROACH AND LANDING

OBJECTIVE

To teach the private student the knowledge of the elements related to a crosswind approach and landing.

COMPLETION STANDARDS

1. Considers the wind conditions, landing surface, obstructions, and selects a suitable touchdown point.
2. Establishes the recommended approach and landing configuration and airspeed, and adjusts pitch attitude and power as required.
3. Maintains a stabilized approach and the recommended airspeed, or in its absence, not more than $1.3 V_{SO}$, $+10/-5$ knots, with gust factor applied.
4. Makes smooth, timely, and correct control application during the roundout and touchdown.
5. Remains aware of the possibility of wind shear and/or wake turbulence.
6. Touches down at or within 400 feet (120 meters) beyond a specified point, with no drift, and with the airplane's longitudinal axis aligned with and over the runway center/landing path.
7. Maintains crosswind correction and directional control throughout the approach and landing sequence.
8. Completes the appropriate checklist.

DESCRIPTION

The airplane is aligned on final approach with final flap setting as dictated by wind conditions. Pitch and power are coordinated to remain stabilized on the desired glide path. At a point prior to round out, a crosswind correction is established using the side-slip method. At an appropriate altitude, a round out is made to the landing attitude. A power off touchdown on the upwind main gear first occurs, followed by normal deceleration and slow application of full aileron into the wind.

PROCEDURE

1. Once established on final approach, maintain runway alignment by use of an appropriate crab angle or side slip and extend the flaps to the final setting. The degree of flap setting will be determined by the existing conditions.
2. Use a final approach airspeed as recommended by the manufacturer. During gusty conditions increase final approach speed by one-half the gust factor. So, if the wind is gusting to 12 knots, add 6 knots to your final approach speed.
3. At a point prior to round out, drift correction will be maintained by establishing a side slip (wing-low) method of drift correction. (Apply aileron to control drift and opposite rudder to keep the airplane's longitudinal axis aligned with and over the runway centerline.)
4. Proper technique will result in a touchdown at approximate stall speed on the upwind main wheel first, followed by the downwind main wheel, then finally the nose wheel. Aileron deflection into the wind is increased to full during the landing roll out to prevent drift while rudder is used to maintain directional control.

Note: FAR 91.103 requires takeoff and landing performance data to be computed prior to all flights.

References

Private Pilot Practical Test Standards FAA-S-8081-14A, pg. 1-11.
Airplane Flying Handbook FAA-H-8083-3, pg. 8-1 ⇒ 8-17.