

# 141 Tailwheel Program Written Exam

## FAA-H-8083-3

1. With the tailwheel-type airplane, the two main struts are attached to the airplane slightly ahead of the airplane's \_\_\_\_\_.
2. When taxiing in a quartering headwind, the wing on the upwind side will usually tend to be lifted by the wind unless aileron control is \_\_\_\_\_.
3. If a significant crosswind exists, the main wheels should be \_\_\_\_\_ than in a normal takeoff so that a smooth but definite lift-off can be made.
4. The roundout and touchdown should be timed so that the \_\_\_\_\_ and \_\_\_\_\_ touch down simultaneously (three-point landing).
5. Loss of \_\_\_\_\_ may lead to an aggravated, uncontrolled, tight turn on the ground, or a ground loop.
6. The weathervaning tendency is more prevalent in the tailwheel-type aircraft because the airplane's surface area behind the \_\_\_\_\_ is greater than in a nosewheel-type airplane.

## Compleat Taildragger

7. \_\_\_\_\_ is the inherent quality of an aircraft to correct for conditions that may disturb its equilibrium and return to, or continue on the original flight path.
8. Tailwheel aircraft are stable / unstable in the longitudinal axis?
9. Tricycle aircraft have the center of gravity \_\_\_\_\_ the main landing gear.
10. The Momentum Vector is defined as \_\_\_\_\_ times \_\_\_\_\_.
11. \_\_\_\_\_ is an opposite reaction to propellor rotation that tends to rotate the aircraft about the longitudinal axis.
12. P-factor is caused by the descending blade being at a higher AOA than the ascending blade and is most pronounced when the relative wind is not aligned with the \_\_\_\_\_.
13. A force applied to a spinning gyro is applied \_\_\_\_\_ of the plane of rotation.
14. Complete the following description of what occurs after touchdown during a bounce or jounce. As the aircraft touches down with excessive \_\_\_\_\_, the CG is located behind the \_\_\_\_\_, this causes the tail to \_\_\_\_\_, this increase in pitch attitude increases the \_\_\_\_\_ of the wing, causing a corresponding increase in \_\_\_\_\_ and the aircraft climbs back into the air.

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15. Except as provided in paragraph (e) of this section, no person may act as a pilot in command of an aircraft carrying passengers or of an aircraft certificated for more than one pilot flight crewmember unless that person has made at least three takeoffs and three landings within the preceding 90 days, and—
  - (i) The person acted as the sole manipulator of the flight controls; and
  - (ii) The required takeoffs and landings were performed in an aircraft of the same category, class, and type (if a type rating is required), and, if the aircraft to be flown is an airplane with a

tailwheel, the takeoffs and landings must have been made to a \_\_\_\_\_ in an airplane with \_\_\_\_\_.

**SPP**

- 15. Maximum sustained wind for tailwheel training is \_\_\_\_\_ kts. Maximum crosswind component is \_\_\_\_\_ kts. .
- 16. Minimum runway required following a stop and go landing is \_\_\_\_\_'.
- 17. Minimum runway length for a wheeled landing touch and go is \_\_\_\_\_'.
- 18. PIC will ensure tanks are filled to minimum required for flight plus Epix required reserve of \_\_\_\_\_.
- 19. Dual VFR weather minimums are:
  - a. VIS: \_\_\_\_\_ SM
  - b. CIG: \_\_\_\_\_'
  - c. Max Wind Velocity: \_\_\_\_\_ kts
  - d. Max Crosswind Component: \_\_\_\_\_ kts

**POH**

- 20. Maximum Takeoff Weight
  - a. Normal ..... \_\_\_\_\_ lbs
- 21. Maneuvering Speed
  - a. 1650 lbs ..... \_\_\_\_\_ mph
- 22. Never Exceed Speed (Vne) ..... \_\_\_\_\_ mph
- 23. Maximum window open speed:..... \_\_\_\_\_ mph
- 24. Precautionary Landing Approach
  - a. Airspeed Recommended..... \_\_\_\_\_ mph
  - b. Airspeed Minimum..... \_\_\_\_\_ mph
- 25. Takeoff (Normal)
  - a. Lift Off..... \_\_\_\_\_ mph
  - b. Climb..... \_\_\_\_\_ mph
- 26. Takeoff (Short Field)
  - a. Lift off..... \_\_\_\_\_ mph
  - b. Climb..... \_\_\_\_\_ mph Vx
- 27. Climb
  - a. Normal ..... \_\_\_\_\_ mph
  - b. Best Rate of Climb (Vy) ..... \_\_\_\_\_ mph
  - c. Best Angle of Climb (Vx) ..... \_\_\_\_\_ mph
- 28. Normal Landing
  - a. Approach Airspeed ..... \_\_\_\_\_ mph
- 29. Short Field Landing
  - a. Approach Airspeed..... \_\_\_\_\_ mph
- 30. What are the following Oil System limitations?
  - a. Minimum oil level for normal flight ?..... \_\_\_\_\_ qts
  - b. Normal operating range of the oil pressure ?..... \_\_\_\_\_ psi
  - c. Normal operating range of the oil temperature?..... \_\_\_\_\_ - \_\_\_\_\_ F
- 31. What is the Emergency Procedure for a Engine Fire In Flight?

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_
- d. \_\_\_\_\_
- e. \_\_\_\_\_
- f. \_\_\_\_\_

32. What type of electrical system does the aircraft have?

- a. \_\_\_\_\_

33. What type of fuel system does the aircraft have, and how is it vented?

- a. \_\_\_\_\_

34. What will your landing ground roll be given the following conditions?

- a. Pressure Altitude..... 2000'
- b. Outside Air Temp..... 80F
- c. Takeoff Distance (Ft) \_\_\_\_\_'
- d. 50 Ft. Obstacle (Ft) \_\_\_\_\_'

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Score: \_\_\_\_\_

CFI: \_\_\_\_\_