T-6A Transition Check Practice Test (Sample)

Study Guide

Everything you need from our exam experts!

Questions

1. **What altitude should you climb to when departing from 35R?**
   - A. 5000 feet MSL
   - B. 5500 feet MSL
   - C. 6000 feet MSL
   - D. 4500 feet MSL

2. **At what altitude should aircrews fly when between NTAs under VFR?**
   - A. 2,500 feet AGL
   - B. 3,000 feet AGL
   - C. 4,000 feet AGL
   - D. 5,000 feet AGL

3. **What can downdrafts in microbursts exceed in feet per minute?**
   - A. 3000 fpm
   - B. 4000 fpm
   - C. 5000 fpm
   - D. 6000 fpm

4. **What is the breakout altitude at Eastside and Dogface?**
   - A. 2,500 feet at both locations
   - B. 3,000 feet at Eastside and Dogface
   - C. 4,000 feet at Eastside and 2,500 feet at Dogface
   - D. 3,500 feet at Eastside only

5. **What is the capacity of the hydraulic system in the T-6A?**
   - A. 3 quarts
   - B. 4 quarts
   - C. 5 quarts
   - D. 6 quarts

6. What component controls the propeller pitch in the T-6 aircraft?

A. Mechanical pitch control unit

B. Propeller interface unit (PIU)

C. Electronic flight control system

D. Throttle control module

7. At what altitude should the slip be removed during an ELP?

A. 200 feet AGL

B. 300 feet AGL

C. 400 feet AGL

D. 500 feet AGL

8. With ice accumulation, maneuvers are restricted to what maximum bank angle and G forces, up to stall warning system activation?

A. 20 degrees bank and 0 to 2 Gs

B. 30 degrees bank and 0 to 2 Gs

C. 45 degrees bank and 1 to 3 Gs

D. 60 degrees bank and 0 to 3 Gs

9. What is the voltage requirement for external ground power?

A. 24-24.5 VDC

B. 28-28.5 VDC

C. 30-30.5 VDC

D. 22-22.5 VDC

10. When calling for taxi clearance after landing, what signal is crucial to note?

A. Steady red light

B. Flashing green light

C. Steady green light

D. Flashing red light

Answers

1. B
2. B
3. D
4. B
5. C
6. B
7. B
8. B
9. B
10. C

Explanations

1. What altitude should you climb to when departing from 35R?

A. 5000 feet MSL

B. 5500 feet MSL

C. 6000 feet MSL

D. 4500 feet MSL

When departing from runway 35R, the proper altitude to climb to is 5500 feet MSL (Mean Sea Level). This altitude is typically in accordance with standard departure procedures designed to ensure safe, obstacle-free flight immediately after takeoff. It provides sufficient clearance over terrain and obstacles in the area, aligning with air traffic control protocols. In many airspace configurations, such as those surrounding busy airports, specific altitudes are designated for departures to facilitate traffic management and maintain separation between departing and arriving flights. Climbing to 5500 feet allows for safe transit into en route airspace, ensuring compliance with regulations and enhancing safety. It's important to consult the relevant Standard Terminal Arrivals and Departures (STARs and SIDs) for the specific airport, as these will define the correct climb altitudes and procedures based on the current air traffic and geographical considerations.

2. At what altitude should aircrews fly when between NTAs under VFR?

A. 2,500 feet AGL

B. 3,000 feet AGL

C. 4,000 feet AGL

D. 5,000 feet AGL

When flying under Visual Flight Rules (VFR) between National Training Areas (NTAs), it is important to adhere to altitude regulations that enhance safety and situational awareness. The guideline of flying at 3,000 feet AGL (Above Ground Level) provides an altitude that is sufficiently high to allow for obstacle clearance while also facilitating effective communication and visual separation from other aircraft. At this altitude, crews are better positioned to manage terrain avoidance and maintain visual references, which is crucial for VFR operations. Additionally, flying at 3,000 feet AGL aligns with common practices in airspace management, ensuring that aircrews are outside the influence of lower traffic operations and maintaining a safer vertical separation from typical ground-level activities and potential obstacles. Choosing any altitude lower than this may increase the risk of collisions with terrain or other VFR traffic, while higher altitudes could reduce overall operational efficiency and situational awareness, particularly in a training environment where visual references and interactions with other aircraft are essential. Thus, 3,000 feet AGL strikes a balance between safety and operational effectiveness for aircrews operating in NTAs under VFR conditions.

3. What can downdrafts in microbursts exceed in feet per minute?

A. 3000 fpm

B. 4000 fpm

C. 5000 fpm

D. 6000 fpm

Downdrafts in microbursts can indeed exceed 6000 feet per minute. A microburst is a potent and localized downdraft that occurs within a thunderstorm and is characterized by strong, rapidly descending air. When this downdraft strikes the ground, it can spread out in all directions, creating hazardous conditions for aircraft, especially during takeoff and landing. The intensity of microbursts is notable; they can produce extremely high rates of descent that significantly exceed those typical of standard downdrafts found in larger storm systems. This rapid descent can lead to sudden and severe changes in wind speed and direction, making microbursts particularly dangerous for pilots. Understanding that these downdrafts can exceed such excessive rates helps in the awareness and mitigation of risks associated with flying in areas prone to microbursts.

4. What is the breakout altitude at Eastside and Dogface?

A. 2,500 feet at both locations

B. 3,000 feet at Eastside and Dogface

C. 4,000 feet at Eastside and 2,500 feet at Dogface

D. 3,500 feet at Eastside only

The breakout altitude at both Eastside and Dogface is set at 3,000 feet. This altitude is established to ensure safe separation between airspace users during training operations, allowing for adequate time and space to maneuver, especially in a busy airspace environment. Maintaining a consistent breakout altitude supports effective communication, enhances situational awareness for both pilots and air traffic control, and aligns with operational safety standards. It helps to streamline procedures, reducing the potential for confusion during training missions and ensuring that all pilots are adhering to the same parameters for breakout altitudes across these specific locations.

5. What is the capacity of the hydraulic system in the T-6A?

A. 3 quarts

B. 4 quarts

C. 5 quarts

D. 6 quarts

The hydraulic system in the T-6A has a capacity of 5 quarts. This capacity is essential for the proper functioning of various hydraulic systems on the aircraft, such as flight controls, landing gear, and brakes. Having the correct hydraulic fluid level is crucial to ensure that all hydraulic components operate efficiently and reliably during flight operations. When the system is filled to this capacity, it helps to maintain pressure, prevent air contamination, and ensure smooth operation of hydraulic systems, which are vital for safe flight.

6. What component controls the propeller pitch in the T-6 aircraft?

A. Mechanical pitch control unit

B. Propeller interface unit (PIU)

C. Electronic flight control system

D. Throttle control module

The propeller pitch in the T-6 aircraft is controlled by the propeller interface unit (PIU). The PIU is an essential component that manages the blade angle of the propeller, enabling adjustments to optimize performance across various phases of flight. It operates automatically to maintain the desired RPM and ensures efficient propulsion by altering the pitch of the propeller blades, allowing for both increased thrust during takeoff and landing, as well as optimized fuel efficiency during cruise. The mechanical pitch control unit is not the main component for pitch control in this aircraft as the T-6 utilizes a more advanced system. The electronic flight control system primarily focuses on the aircraft's overall flight characteristics and stability rather than directly controlling propeller pitch. The throttle control module manages engine power rather than pitch, making it critical for thrust management but not for pitch adjustments. Thus, the identification of the propeller interface unit as the correct answer stems from its dedicated function in controlling propeller pitch effectively.

7. At what altitude should the slip be removed during an ELP?

A. 200 feet AGL

B. 300 feet AGL

C. 400 feet AGL

D. 500 feet AGL

Removing the slip at 300 feet AGL (Above Ground Level) during an Engine Failure with a Glide in the T-6A is critical for ensuring a smooth and controlled landing. At this altitude, pilots have enough time to assess their landing environment and make any necessary adjustments to their flight path. The timing is crucial because at this stage of the Emergency Landing Pattern (ELP), the aircraft is transitioning from a controlled glide towards the landing site. Removing the slip helps optimize the aircraft's performance, allowing for improved airspeed management, reduced drag, and better control of the descent rate. By removing the slip at this altitude, pilots can ensure the aircraft is properly configured for landing, which enhances safety and increases the likelihood of a successful outcome during an emergency landing scenario. This altitude provides a balance between allowing sufficient reaction time while minimizing the potential for disruption in the descent profile, which is vital for a successful recovery and landing.

8. With ice accumulation, maneuvers are restricted to what maximum bank angle and G forces, up to stall warning system activation?

A. 20 degrees bank and 0 to 2 Gs

B. 30 degrees bank and 0 to 2 Gs

C. 45 degrees bank and 1 to 3 Gs

D. 60 degrees bank and 0 to 3 Gs

When flying in conditions that could lead to ice accumulation, safety protocols dictate specific limitations to mitigate the risk associated with loss of control. The correct answer indicates a maximum bank angle of 30 degrees and a G force limit of 0 to 2 Gs as safe parameters up to the activation of the stall warning system. This limit ensures that pilots maintain sufficient control authority and recovery capability despite the impaired performance characteristics that ice can impose on an aircraft. Excessive bank angles or G forces in icy conditions can lead to a higher likelihood of stall or loss of control, especially if the aircraft's handling is adversely affected by ice accumulation. By restricting maneuvers to these parameters, pilots can reduce the risk of exceeding the critical angle of attack and can maintain better awareness of the aircraft's performance, which is crucial in maintaining flight safety during adverse conditions.

9. What is the voltage requirement for external ground power?

A. 24-24.5 VDC

B. 28-28.5 VDC

C. 30-30.5 VDC

D. 22-22.5 VDC

The requirement for external ground power in the T-6A is set at a voltage range of 28 to 28.5 VDC. This voltage specification is critical for ensuring that the aircraft's electrical systems function properly while on the ground and is compatible with the internal systems of the aircraft, which are designed to operate effectively on this particular voltage. Choosing a voltage that falls within this specified range ensures adequate power to start the engines and run various systems without causing damage or operational issues. This standard aligns with the aircraft's design and operational guidelines, ensuring reliability and safety during ground operations.

10. When calling for taxi clearance after landing, what signal is crucial to note?

A. Steady red light

B. Flashing green light

C. Steady green light

D. Flashing red light

When calling for taxi clearance after landing, the steady green light signal is crucial to note because it indicates that the aircraft is cleared to taxi. This signal is an essential aspect of airport operations, ensuring that pilots understand when they can safely move on the ground without conflicting with other aircraft or ground vehicles. The steady green light signifies that air traffic control has authorized the pilot to proceed with taxiing, making it a key component in safely managing traffic on the runway and taxiways. Proper recognition and response to this signal are vital for maintaining safety and efficiency during taxi operations.