Sheppard Air General Practice Test (Sample)

Study Guide

Everything you need from our exam experts!

Questions

1. What is the difference between a TAF and a METAR?

A. A TAF is a flight plan, while a METAR is a flight log

B. A TAF is a routine weather report, while a METAR is a terminal aerodrome forecast

C. A TAF is a terminal aerodrome forecast, while a METAR is a routine weather report

D. A TAF is a weather alert, while a METAR is a hazard report

2. What does the Emergency Locator Transmitter (ELT) primarily help with?

A. Monitoring engine performance.

B. Tracking aircraft speed and altitude.

C. Locating an aircraft in the event of a crash.

D. Indicating aircraft weight discrepancies.

3. What is the primary purpose of the flap system on an aircraft?

A. To enhance engine performance

B. To increase lift and drag during takeoff and landing

C. To stabilize the aircraft in flight

D. To reduce speed in cruise

4. How are airspaces classified from A to G?

A. Class A is uncontrolled airspace.

B. Class G is the most controlled airspace.

C. Class A is the most controlled and Class G is uncontrolled airspace.

D. Class E is restricted airspace.

5. What should a pilot do to prevent damage to the landing gear when departing from a snowy or slushy runway?

A. Fly a speed above the green arc of the airspeed indicator to remove snow

B. Immediately retract the landing gear to heat it in the gear wells

C. Do not retract the landing gear immediately to allow it to air dry

D. Increase throttle to minimize drag and enhance takeoff

6. What is an early step in the ADM process?

A. Taking a self-assessment hazardous attitude inventory test

B. Understanding the importance of having the "right stuff"

C. Obtaining proper flight instruction and experience

D. Conducting a pre-flight inspection

7. What are the three stages of a thunderstorm?

A. Cumulonimbus, mature, and dissipating.

B. Cumulus, mature, and dissipating.

C. Cumulus, active, and dissipating.

D. Forming, mature, and dying.

8. What should a pilot do in the event of an engine failure during climb?

A. Increase throttle and climb

B. Establish the best glide attitude and airspeed

C. Attempt an emergency landing immediately

D. Signal distress to air traffic control

9. What regulations govern the operation of Unmanned Aerial Vehicles (UAV)?

A. FAA Part 101.

B. FAA Part 107.

C. FAA Part 119.

D. FAA Part 135.

10. Which of the following best describes the term "advocacy" in the context of pilot organizations?

A. Offering commercial services to pilots

B. Promoting pilots' rights and interests

C. Providing weather updates to pilots

D. Enhancing commercial flights

Answers

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

Explanations

1. What is the difference between a TAF and a METAR?

A. A TAF is a flight plan, while a METAR is a flight log

B. A TAF is a routine weather report, while a METAR is a terminal aerodrome forecast

C. A TAF is a terminal aerodrome forecast, while a METAR is a routine weather report

D. A TAF is a weather alert, while a METAR is a hazard report

A TAF, or Terminal Aerodrome Forecast, provides a weather forecast specifically for the area around an airport for a set period, usually 24 or 30 hours. It anticipates expected weather conditions, such as visibility, wind, precipitation, and other meteorological phenomena that can impact flight operations. This forecast helps pilots and aviation personnel prepare for potential weather challenges during flight planning and operations. On the other hand, a METAR is a routine aviation weather report that provides current meteorological conditions at an airport. This includes observations about temperature, wind, visibility, clouds, and significant weather phenomena occurring at the time of the report. METARs are typically updated every hour. In summary, the distinction lies in the purpose and content of each report; a TAF forecasts future weather conditions, while a METAR reports on current conditions. Understanding this difference is vital for flight planning and ensuring safety in aviation operations.

2. What does the Emergency Locator Transmitter (ELT) primarily help with?

A. Monitoring engine performance.

B. Tracking aircraft speed and altitude.

C. Locating an aircraft in the event of a crash.

D. Indicating aircraft weight discrepancies.

The Emergency Locator Transmitter (ELT) is primarily designed to assist in locating an aircraft in the event of a crash. When activated, usually after a significant impact, the ELT transmits a distress signal on specific frequencies, enabling search and rescue teams to pinpoint the aircraft's location quickly. This capability is critical for enhancing the chances of survival for any occupants and facilitating a quicker response from rescue services. The ELT is an essential safety device mandated by regulations for most aircraft, and its design focuses specifically on emergency scenarios where the aircraft is lost. This distinguishes it from systems monitoring engine performance, tracking aircraft speed and altitude, or addressing weight discrepancies, which all serve different functions in aviation safety and operation.

3. What is the primary purpose of the flap system on an aircraft?

A. To enhance engine performance

B. To increase lift and drag during takeoff and landing

C. To stabilize the aircraft in flight

D. To reduce speed in cruise

The primary purpose of the flap system on an aircraft is to increase lift and drag during takeoff and landing. Flaps are movable surfaces located on the trailing edge of the wings, and when deployed, they change the wing's shape, allowing the aircraft to generate more lift at lower speeds. This increased lift enables the aircraft to safely take off and land in shorter distances, which is particularly important during these phases of flight when the aircraft is operating at slower speeds. By extending the flaps, pilots can also increase drag, which helps in slowing down the aircraft during the landing approach. This combination of increased lift and drag allows for safer and more efficient operations, making flaps a crucial component for aircraft performance during critical phases of flight.

4. How are airspaces classified from A to G?

A. Class A is uncontrolled airspace.

B. Class G is the most controlled airspace.

C. Class A is the most controlled and Class G is uncontrolled airspace.

D. Class E is restricted airspace.

Class A airspace is indeed the most controlled airspace, where operations require adherence to strict regulations and flight under instrument flight rules (IFR) is mandatory. This classification is primarily focused on ensuring the safety of aircraft flying at high altitudes, where they can operate above the weather and avoid conflicts with other air traffic. On the other hand, Class G airspace is classified as uncontrolled airspace. This type of airspace typically encompasses lower altitudes where pilots can operate under visual flight rules (VFR) without the necessity of air traffic control clearance, allowing for more freedom and flexibility in operations. Thus, the correct option effectively captures the hierarchical structure of airspace classification, which ranges from the highly regulated Class A down to the uncontrolled Class G. Additionally, the incorrect options misrepresent the nature and regulations surrounding each class, highlighting the importance of understanding the distinction between controlled and uncontrolled airspace in aviation.

5. What should a pilot do to prevent damage to the landing gear when departing from a snowy or slushy runway?

A. Fly a speed above the green arc of the airspeed indicator to remove snow

B. Immediately retract the landing gear to heat it in the gear wells

C. Do not retract the landing gear immediately to allow it to air dry

D. Increase throttle to minimize drag and enhance takeoff

To prevent damage to the landing gear when departing from a snowy or slushy runway, it is important for a pilot to allow the landing gear to air dry before retracting it. Snow and slush can freeze or cause moisture to accumulate on the landing gear components, and retracting the gear too soon could trap this moisture in the gear wells, leading to potential damage and operational issues. Leaving the gear extended allows airflow to help evaporate any moisture and reduces the risk of ice formation. This practice ensures that any residual snow or slush does not create problems later in the flight, such as inhibiting the deployment of the gear during landing or causing additional weight and drag if the gear begins to freeze. The other options focus on different actions that do not address the specific concerns of moisture and slush impacting the landing gear. While maintaining appropriate airspeed is crucial for other aspects of flight, the specific situation of a snowy or slushy runway requires special consideration for the landing gear.

6. What is an early step in the ADM process?

A. Taking a self-assessment hazardous attitude inventory test

B. Understanding the importance of having the "right stuff"

C. Obtaining proper flight instruction and experience

D. Conducting a pre-flight inspection

An early step in the Aeronautical Decision-Making (ADM) process involves assessing your personal attitudes and behaviors that might influence your decision-making as a pilot. Taking a self-assessment hazardous attitude inventory test is critical because it helps pilots identify their own potentially dangerous attitudes—such as impulsivity, invulnerability, macho behavior, or resignation. Recognizing these attitudes allows pilots to develop strategies to mitigate their effects on their decision-making processes. By understanding and acknowledging personal biases and hazardous attitudes early on, pilots can foster better judgment and make safer, more informed decisions throughout their flying endeavors. This foundational step is vital to developing the self-awareness necessary for effective ADM. Other options, while relevant to flying training and safety, occur at different stages of a pilot's development or involve different aspects of aviation safety.

7. What are the three stages of a thunderstorm?

A. Cumulonimbus, mature, and dissipating.

B. Cumulus, mature, and dissipating.

C. Cumulus, active, and dissipating.

D. Forming, mature, and dying.

The correct identification of the three stages of a thunderstorm is rooted in the typical development of convective systems, which are essential to understanding weather patterns. The stages involved are cumulus, mature, and dissipating. During the cumulus stage, the initial development of the thunderstorm occurs when warm, moist air rises and cools, leading to the formation of cumulus clouds. This is characterized by significant vertical growth as the cloud matures with updrafts transporting moisture upward. As the storm reaches the mature stage, it exhibits intense activity with both updrafts and downdrafts. This stage is marked by heavy precipitation, strong winds, and the potential for severe weather phenomena such as hail and lightning. The mature stage is critical because it showcases the storm at its most powerful and organized state. The final dissipating stage occurs when the storm begins to weaken. The downdrafts dominate as the supply of warm, moist air is cut off, leading to a reduction in convective activity. This stage is characterized by a decrease in precipitation and cloud activity, ultimately resulting in the storm's dissipation. Understanding these stages is vital for weather forecasting and safety, as each phase presents different risks and characteristics associated with thunderstorms. The terminology used in the other

8. What should a pilot do in the event of an engine failure during climb?

A. Increase throttle and climb

B. Establish the best glide attitude and airspeed

C. Attempt an emergency landing immediately

D. Signal distress to air traffic control

In the event of an engine failure during climb, establishing the best glide attitude and airspeed is crucial for a pilot to manage the situation effectively. The best glide speed allows the aircraft to maximize its distance over the ground while descending safely. This technique is especially important because, during the climb phase, the aircraft may lose significant altitude and airspeed quickly, and the pilot needs to maintain control and optimize the aircraft's performance to find a suitable landing area. By entering the best glide attitude, the pilot can maximize the aircraft's lift-to-drag ratio, allowing it to cover more ground and potentially reach a safe landing site. This action helps avoid stalling and ensures that the pilot has the best chance of controlling the descent and maintaining as much lift as possible during this critical phase. Additionally, using the proper glide speed aids in keeping the aircraft stable, providing an opportunity to assess the situation and prepare for an emergency landing if necessary.

9. What regulations govern the operation of Unmanned Aerial Vehicles (UAV)?

A. FAA Part 101.

B. FAA Part 107.

C. FAA Part 119.

D. FAA Part 135.

The operation of Unmanned Aerial Vehicles (UAV) is primarily governed by FAA Part 107. This regulation specifically outlines the rules for the commercial use of small unmanned aircraft systems (sUAS). Part 107 includes requirements for pilot certification, operational limitations, and safety protocols that must be followed when flying UAVs for commercial purposes. It is designed to ensure the safety of the national airspace while allowing for the integration of drones into various industries. FAA Part 101 deals with model aircraft operations and does not cover commercial UAV operations, while Parts 119 and 135 pertain to air carrier certification and operations, which are not applicable to UAVs. Each regulation serves a distinct purpose within aviation law, but for the commercial operation of UAVs, Part 107 is the relevant governing framework.

10. Which of the following best describes the term "advocacy" in the context of pilot organizations?

A. Offering commercial services to pilots

B. Promoting pilots' rights and interests

C. Providing weather updates to pilots

D. Enhancing commercial flights

In the context of pilot organizations, "advocacy" primarily refers to the action of promoting and supporting the rights and interests of pilots. This can include a range of activities such as lobbying for legislative changes that benefit pilots, working to improve safety regulations, and addressing pilots' concerns and needs within the aviation industry. Advocacy aims to ensure that the voices of pilots are heard and that their professional interests are represented in discussions that affect their work and safety. Understanding the significance of advocacy helps in recognizing how pilot organizations work relentlessly to create a favorable environment for pilots, ensuring they have the support and resources necessary for their professional activities. This commitment to promoting pilots' rights is essential to the overall health of the aviation community.