FAA 107 Unmanned Aircraft General (UAG) – Small Practice Test (Sample)

Study Guide

Everything you need from our exam experts!

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Introduction

Preparing for a certification exam can feel overwhelming, but with the right tools, it becomes an opportunity to build confidence, sharpen your skills, and move one step closer to your goals. At Examzify, we believe that effective exam preparation isn't just about memorization, it's about understanding the material, identifying knowledge gaps, and building the test-taking strategies that lead to success.

This guide was designed to help you do exactly that.

Whether you're preparing for a licensing exam, professional certification, or entry-level qualification, this book offers structured practice to reinforce key concepts. You'll find a wide range of multiple-choice questions, each followed by clear explanations to help you understand not just the right answer, but why it's correct.

The content in this guide is based on real-world exam objectives and aligned with the types of questions and topics commonly found on official tests. It's ideal for learners who want to:

- **Practice answering questions under realistic conditions,**
- **Improve accuracy and speed,**
- **Review explanations to strengthen weak areas, and**
- **Approach the exam with greater confidence.**

We recommend using this book not as a stand-alone study tool, but alongside other resources like flashcards, textbooks, or hands-on training. For best results, we recommend working through each question, reflecting on the explanation provided, and revisiting the topics that challenge you most.

Remember: successful test preparation isn't about getting every question right the first time, it's about learning from your mistakes and improving over time. Stay focused, trust the process, and know that every page you turn brings you closer to success.

Let's begin.

How to Use This Guide

This guide is designed to help you study more effectively and approach your exam with confidence. Whether you're reviewing for the first time or doing a final refresh, here’s how to get the most out of your Examzify study guide:

1. Start with a Diagnostic Review

Skim through the questions to get a sense of what you know and what you need to focus on. Your goal is to identify knowledge gaps early.

2. Study in Short, Focused Sessions

Break your study time into manageable blocks (e.g. 30 – 45 minutes). Review a handful of questions, reflect on the explanations.

3. Learn from the Explanations

After answering a question, always read the explanation, even if you got it right. It reinforces key points, corrects misunderstandings, and teaches subtle distinctions between similar answers.

4. Track Your Progress

Use bookmarks or notes (if reading digitally) to mark difficult questions. Revisit these regularly and track improvements over time.

5. Simulate the Real Exam

Once you're comfortable, try taking a full set of questions without pausing. Set a timer and simulate test-day conditions to build confidence and time management skills.

6. Repeat and Review

Don’t just study once, repetition builds retention. Re-attempt questions after a few days and revisit explanations to reinforce learning. Pair this guide with other Examzify tools like flashcards, and digital practice tests to strengthen your preparation across formats.

There’s no single right way to study, but consistent, thoughtful effort always wins. Use this guide flexibly, adapt the tips above to fit your pace and learning style. You've got this!

Questions

1. What weather conditions are indicated by a low-level temperature inversion with high relative humidity?

A. Smooth air, poor visibility, fog, haze, or low clouds

B. Clear skies, excellent visibility

C. Turbulence and very low humidity

D. Stormy and windy conditions

2. What is meant by the term 'Visibility' in aviation?

A. The distance a pilot can see during takeoff

B. The horizontal distance prominent objects can be seen with the naked eye

C. The height at which an aircraft can be safely flown

D. The area under air traffic control

3. What components are included in a Small Unmanned Aircraft System (sUAS)?

A. Only the aircraft itself

B. Aircraft and its associated elements, including communication links

C. GPS systems and navigation software only

D. Remote pilot licenses and certifications

4. Which factor influences the stability of the atmosphere?

A. Vertical motion resistance

B. Humidity levels

C. Presence of fog

D. Solar radiation

5. What is the purpose of Aeronautical Decision Making (ADM)?

A. To simplify air traffic control

B. To develop standard operating procedures

C. To systematically determine the best course of action

D. To verify pilot qualifications

6. Which of the following is NOT a part of Visual Flight Rules (VFR)?

A. Maintaining visual contact with the aircraft

B. Flying at night without any instruments

C. Weather minimums for visibility

D. Using visual references to navigate

7. Which term corresponds to the abbreviation AIS in aviation?

A. Abbreviated Injury Scale

B. Aircraft Information System

C. Automated Inspection Standard

D. Aerial Impact Survey

8. What is the primary focus of the MULTICOM frequency?

A. Communication between pilots and air traffic control

B. Advisories from the FAA regarding airspace

C. Self-announcement by pilots near uncontrolled airports

D. Emergency communications during flights

9. What does a Remote Pilot Certificate allow an individual to do?

A. Control any type of manned aircraft

B. Serve as the Remote Pilot in Command for a sUAS

C. Conduct drone repairs and maintenance

D. Provide weather forecasts for pilots

10. Which factor contributes to poor visibility during certain atmospheric conditions?

A. Unstable air

B. Stable air

C. Heavy rain

D. High cloud cover

Answers

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

Explanations

1. What weather conditions are indicated by a low-level temperature inversion with high relative humidity?

A. Smooth air, poor visibility, fog, haze, or low clouds

B. Clear skies, excellent visibility

C. Turbulence and very low humidity

D. Stormy and windy conditions

A low-level temperature inversion with high relative humidity typically leads to specific weather phenomena. During a temperature inversion, the temperature increases with altitude in a layer of the atmosphere, which can trap cooler air and pollutants near the surface. When high relative humidity is present, it often results in the formation of fog, haze, or low clouds. This occurs because the moisture in the cooler air condenses into tiny water droplets, significantly reducing visibility. Consequently, the combination of these factors — smooth air at lower altitudes due to the stable conditions caused by the inversion, alongside the presence of high humidity resulting in misty or cloudy conditions — creates an environment where visibility can be very poor and conditions are generally characterized by calm or smooth air. In contrast, the other options depict scenarios that do not align with the effects of a low-level temperature inversion combined with high humidity; they suggest clear skies, turbulence, or stormy weather, which are not characteristics associated with such stable and moist conditions.

2. What is meant by the term 'Visibility' in aviation?

A. The distance a pilot can see during takeoff

B. The horizontal distance prominent objects can be seen with the naked eye

C. The height at which an aircraft can be safely flown

D. The area under air traffic control

The term 'Visibility' in aviation refers to the horizontal distance at which prominent objects can be seen with the naked eye. This is a critical factor for pilots, as it impacts their ability to navigate and maintain safe operations, particularly during takeoff, landing, and while flying in less-than-ideal weather conditions. Visibility is often measured in statute miles and can significantly influence flight operations and decision-making. For example, low visibility conditions can necessitate adjustments in flight plans or require pilots to rely more on instruments rather than visual cues. Understanding visibility helps ensure that pilots maintain adequate distances from other aircraft and obstacles, contributing to overall safety in aviation operations. The concept encompasses more than just how far you can see; it involves assessing the clarity of the air and the presence of obstructions such as fog, rain, or smoke that might diminish that distance. This understanding is essential for drone pilots, as it can affect how they manage their flights within the regulations of the FAA.

3. What components are included in a Small Unmanned Aircraft System (sUAS)?

A. Only the aircraft itself

B. Aircraft and its associated elements, including communication links

C. GPS systems and navigation software only

D. Remote pilot licenses and certifications

The correct answer includes the aircraft and its associated elements, emphasizing the complete system necessary for the operation of a small unmanned aircraft. A Small Unmanned Aircraft System (sUAS) consists not only of the physical drone but also includes essential components such as communication links and ground control stations. These elements work together to ensure that the drone can be operated safely and effectively. The integration of communication links is crucial for maintaining control over the sUAS, allowing the remote pilot to send commands and receive telemetry data. Additionally, the presence of support equipment, such as batteries and payloads, is fundamental as they enable the sUAS to fulfill its intended operations, whether they be for commercial, recreational, or other purposes. Other choices focus on partial aspects of the sUAS, such as only the aircraft itself or specific supporting technologies like GPS systems. However, these do not encompass the full system as defined by the FAA, which is comprehensive and includes all necessary components for flight operations. The mention of remote pilot licenses and certifications relates to the legal and operational oversight required for operating an sUAS but does not form part of the system itself.

4. Which factor influences the stability of the atmosphere?

A. Vertical motion resistance

B. Humidity levels

C. Presence of fog

D. Solar radiation

The stability of the atmosphere is primarily influenced by how temperature and density of air masses change with altitude, which is closely related to vertical motion resistance. In stable atmospheric conditions, air parcels resist vertical displacement—meaning that if an air parcel is pushed upward, it tends to return to its original position rather than continuing to rise. This property is essential for understanding weather patterns, as stable air is typically associated with clear skies and calm weather. While humidity levels can affect atmospheric stability by altering the buoyancy of air parcels, they do not inherently indicate the stability itself. Similarly, the presence of fog is a result of high humidity and is not a direct factor in determining the stability of the atmosphere. Solar radiation influences temperature and weather patterns but is more of an indirect factor in stability rather than a direct influencing factor itself. Thus, vertical motion resistance plays a crucial role in defining whether an air mass will continue to rise or sink, influencing weather conditions and atmospheric stability.

5. What is the purpose of Aeronautical Decision Making (ADM)?

A. To simplify air traffic control

B. To develop standard operating procedures

C. To systematically determine the best course of action

D. To verify pilot qualifications

The purpose of Aeronautical Decision Making (ADM) is to systematically determine the best course of action in various situations that a pilot or UAV (Unmanned Aerial Vehicle) operator might encounter. ADM involves assessing various factors such as weather conditions, equipment status, and operational limitations to make informed and safe decisions. This process enhances situational awareness and helps mitigate risks associated with flight operations. By relying on a structured method to approach decision-making, pilots can improve their ability to respond effectively in dynamic or complex scenarios, leading to safer flight outcomes. While simplifying air traffic control, developing standard operating procedures, and verifying pilot qualifications are important aspects of aviation operations, they do not directly define the core purpose of ADM, which is focused on enabling operators to think critically and make informed choices in the air.

6. Which of the following is NOT a part of Visual Flight Rules (VFR)?

A. Maintaining visual contact with the aircraft

B. Flying at night without any instruments

C. Weather minimums for visibility

D. Using visual references to navigate

Flying at night without any instruments is not a part of Visual Flight Rules (VFR) because VFR guidelines primarily apply to operations conducted in clear conditions where pilots maintain visual reference to the ground and other landmarks. Under VFR, it is essential for pilots to have the appropriate visibility and weather conditions to avoid relying on instruments entirely. Additionally, VFR regulations often include specific requirements for visibility and cloud clearance, particularly when flying at night. In contrast, the other aspects mentioned align with VFR principles. Maintaining visual contact with the aircraft ensures that pilots can constantly assess their position and surroundings. Weather minimums for visibility dictate the required conditions for safe VFR flight, ensuring pilots have adequate sightlines to navigate effectively. Using visual references to navigate is a fundamental component of VFR, as it emphasizes the pilot's ability to "see and avoid" obstacles and other air traffic.

7. Which term corresponds to the abbreviation AIS in aviation?

A. Abbreviated Injury Scale

B. Aircraft Information System

C. Automated Inspection Standard

D. Aerial Impact Survey

The correct term that corresponds to the abbreviation AIS in aviation is "Aircraft Information System." This system encompasses various data and information management components that assist in the safety, efficiency, and effective monitoring of aircraft operations. The AIS plays a crucial role in providing pilots, air traffic controllers, and aviation personnel with timely and accurate information regarding flight operations, airspace conditions, weather alerts, and other essential data. The other terms listed are related to different fields or concepts within aviation or safety but do not accurately reflect the meaning of AIS within the context of aviation. The Abbreviated Injury Scale, for example, pertains to medicine and injury classification, whereas Automated Inspection Standard relates more to regulatory compliance and procedural checks, not specifically to an aircraft's operational data. Aerial Impact Survey relates to environmental studies or assessments and does not align with the context of aircraft operation information systems. Understanding the distinction and relevance of "Aircraft Information System" helps highlight its importance in aviation safety and communication.

8. What is the primary focus of the MULTICOM frequency?

A. Communication between pilots and air traffic control

B. Advisories from the FAA regarding airspace

C. Self-announcement by pilots near uncontrolled airports

D. Emergency communications during flights

The primary focus of the MULTICOM frequency is indeed self-announcement by pilots near uncontrolled airports. This frequency serves as a means for pilots to communicate their intentions, positions, and movements to other pilots operating in the same vicinity, especially when there is no air traffic control service available. By using this frequency, pilots can enhance situational awareness for themselves and others, which helps prevent collisions and fosters more efficient operations at airports that do not have a control tower. In contexts where air traffic control is not present, such as at uncontrolled airports, self-announcement is crucial because it allows pilots to convey their actions—such as taxiing, taking off, and landing—thereby providing important information to other pilots who might be in the area. This level of communication is particularly important in maintaining safety in these environments, where visual observation is the primary means of situational awareness. The other options focus on different aspects of aviation communication. Communication between pilots and air traffic control pertain to controlled airspace operations, while advisories from the FAA about airspace are different functions related to regulatory communications. Emergency communications are essential but typically occur on designated emergency frequencies and do not encompass the broader self-announcement functions served by MULTICOM.

9. What does a Remote Pilot Certificate allow an individual to do?

A. Control any type of manned aircraft

B. Serve as the Remote Pilot in Command for a sUAS

C. Conduct drone repairs and maintenance

D. Provide weather forecasts for pilots

A Remote Pilot Certificate specifically authorizes an individual to serve as the Remote Pilot in Command (RPIC) for a small Unmanned Aircraft System (sUAS). This certification is a requirement under FAA regulations for operating a drone for commercial purposes, ensuring the pilot has a necessary understanding of airspace regulations, weather, and safe operating practices. The role of the RPIC includes being responsible for the safety of the flight, making critical decisions during the operation, and ensuring compliance with all FAA regulations. This certification validates that the pilot has met the training requirements and has passed a knowledge test covering relevant aviation topics. The other options refer to activities that do not fall under the capabilities granted by the Remote Pilot Certificate. For example, controlling manned aircraft requires a separate certification and training specific to those aircraft types, while conducting drone repairs and maintenance, or providing weather forecasts, do not fall under the purview of remote pilot operations as per FAA guidelines.

10. Which factor contributes to poor visibility during certain atmospheric conditions?

A. Unstable air

B. Stable air

C. Heavy rain

D. High cloud cover

Heavy rain significantly reduces visibility due to the large water droplets that scatter light and create a curtain of water between the observer and the object being viewed. This effect can obscure objects, making it difficult for pilots, including those operating unmanned aircraft, to see the ground, other aircraft, or obstacles clearly. Rain can also create distracting glare under certain conditions, further impacting a pilot's ability to navigate safely. In addition to the immediate obstruction caused by the precipitation itself, heavy rain can lead to other issues such as reduced contrast and increased likelihood of fog formation afterward, both of which compound poor visibility conditions. Therefore, heavy rain is a primary contributing factor to reduced visibility during certain atmospheric conditions.

Next Steps

Congratulations on reaching the final section of this guide. You've taken a meaningful step toward passing your certification exam and advancing your career.

As you continue preparing, remember that consistent practice, review, and self-reflection are key to success. Make time to revisit difficult topics, simulate exam conditions, and track your progress along the way.

If you need help, have suggestions, or want to share feedback, we'd love to hear from you. Reach out to our team at hello@examzify.com.

Or visit your dedicated course page for more study tools and resources:

https://faa107uagsmall.examzify.com

We wish you the very best on your exam journey. You've got this!