Instrument GL:6 – Holding and Instrument Approaches 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. **Which type of fixes are classified as initial approach fixes on the IAP Charts?**

   A. Any fix labeled as IAF

   B. Fixes within the terminal area

   C. All visual flight rules waypoints

   D. Only fixes identified as VOR

2. **When cleared for the ILS RWY 18 at Lincoln Municipal and crossing the Lincoln VORTAC at 5,000 feet MSL, when can descent to 3,200 feet commence?**

   A. At the Lincoln VORTAC

   B. Immediately

   C. When reaching the decision altitude

   D. After passing the final approach fix

3. **What factors are used to determine the visibility for a category B airplane during an ILS approach?**

   A. Weather conditions during approach

   B. The runway length

   C. The published ILS visibility minimums

   D. Control tower directives

4. **What is the recommended entry procedure for a holding pattern at the XYZ VORTAC, holding north on the 360 radial with left turns?**

   A. Direct entry

   B. Teardrop entry

   C. Parallel entry

   D. Circle entry

5. **What is the minimum rate of climb required for takeoff on RWY 9 with a groundspeed of 140 knots?**

   A. 870 feet per minute

   B. 970 feet per minute

   C. 1,050 feet per minute

   D. 1,200 feet per minute

6. What entry procedure should be utilized for an ATC clearance to hold with left turns?

A. Teardrop only

B. Parallel only

C. Direct only

D. Circle only

7. What is usually the initial action when a pilot reaches the DH without visual references?

A. Continue the approach

B. Initiate a missed approach

C. Request vectors from ATC

D. Prepare for a go-around

8. What should be taken into account when maintaining airspace protection while holding at 5,000 feet?

A. Weather conditions

B. Aircraft color

C. Maximum indicated airspeed

D. Pilot experience

9. What role does an approach chart play in ILS approaches?

A. It serves only as a visual reference.

B. It contains essential navigational information.

C. It is only for use in visual flight rules.

D. It does not provide altitude information.

10. What is the maximum indicated airspeed for civil aircraft while holding at 5,000 feet?

A. 180 knots

B. 200 knots

C. 220 knots

D. 240 knots

Answers

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

Explanations

1. Which type of fixes are classified as initial approach fixes on the IAP Charts?

A. Any fix labeled as IAF

B. Fixes within the terminal area

C. All visual flight rules waypoints

D. Only fixes identified as VOR

Initial approach fixes (IAFs) are specifically designated as points in the terminal area where an aircraft initiates its approach to a runway. These fixes are crucial in the Instrument Approach Procedure (IAP) as they provide a reference point for pilots to begin their descent and approach sequence. The designation of these fixes as IAFs indicates that they are precisely marked on the approach chart, helping pilots identify where to begin the formal approach segment of their flight. This ensures that the pilot is following a structured path that integrates safely with air traffic, particularly in busy terminal environments. Fixes within the terminal area can include a variety of points, but only those labeled as IAF play a significant role in marking the beginning of an approach procedure. Therefore, not all fixes in the terminal area or other types of waypoints fulfill the specific function of an initial approach fix. Visual flight rules (VFR) waypoints and other navigation aids like VORs are useful but do not specifically denote the start of an instrument approach, as they do not hold the same regulatory significance as IAFs.

2. When cleared for the ILS RWY 18 at Lincoln Municipal and crossing the Lincoln VORTAC at 5,000 feet MSL, when can descent to 3,200 feet commence?

A. At the Lincoln VORTAC

B. Immediately

C. When reaching the decision altitude

D. After passing the final approach fix

When cleared for the ILS RWY 18 and crossing the Lincoln VORTAC at 5,000 feet MSL, descent to 3,200 feet can commence immediately following the clearance. This is because the initial descent is allowed once the aircraft is on the appropriate segment of the approach and within the confines of the airspace. At this point, the pilot has the necessary clearance and is permitted to begin descending to the next altitude as per the approach procedure. The approach procedure is designed to ensure safe and controlled descent rates, and starting the descent immediately upon clearance optimally aligns the aircraft with the subsequent phases of the approach. Other options reflect different points in the approach where descent might logically occur, but they do not correspond to the instruction provided when cleared for the ILS approach. For example, waiting until reaching the decision altitude does not align with standard procedure as it implies maintaining the higher altitude unnecessarily. Moreover, considering the final approach fix or the VORTAC as points to begin descent can misalign with the intended progressive reduction in altitude that is standard practice when following instrument approach procedures.

3. What factors are used to determine the visibility for a category B airplane during an ILS approach?

A. Weather conditions during approach

B. The runway length

C. The published ILS visibility minimums

D. Control tower directives

For a category B airplane during an ILS (Instrument Landing System) approach, the visibility is primarily determined by the published ILS visibility minimums. These minimums are established based on several operational factors and safety considerations to ensure that aircraft can safely execute the approach and land. Visibility minimums are specified in the approach plate for each ILS procedure and take into account the specific characteristics of the airplane, such as its approach speed and operational capabilities. Since category B airplanes have defined speed categories, the published minimums reflect the level of visibility needed for safe operation which ensures pilots can adequately see the runway environment at the decision height. In contrast, while weather conditions during the approach can affect actual visibility, they do not establish the minimums; those are predefined and must be adhered to. The runway length is not a determining factor for visibility rules during the ILS approach, as it pertains more to other safety and operational considerations. Control tower directives may influence the approach process but do not pertain to the formal requirements for visibility that are laid out in the ILS approach charts.

4. What is the recommended entry procedure for a holding pattern at the XYZ VORTAC, holding north on the 360 radial with left turns?

A. Direct entry

B. Teardrop entry

C. Parallel entry

D. Circle entry

The recommended entry procedure for a holding pattern at the XYZ VORTAC, when holding north on the 360 radial with left turns, is indeed a teardrop entry. This type of entry is suitable when the aircraft approaches the holding fix from a quadrant that places it within a 70-degree angle to the holding radial. In this scenario, when approaching from the south or southeast, a teardrop entry is preferred because it allows the pilot to establish a quick and efficient turn into the holding pattern without the need for a prolonged parallel entry. The pilot would fly at a 30-degree angle into the hold and then initiate a turn to intercept the hold entry course after a short distance, positioning the aircraft effectively for the first leg of the holding pattern. This method contrasts with other entry types. For example, a direct entry requires the aircraft to proceed directly to the fix before turning, which could be less efficient in this circumstance. A parallel entry is used when arriving from the opposite side and involves first flying parallel to the holding course before turning back towards it, which is unnecessary in this case. Finally, a circle entry would typically be used in situations requiring a complete circular pattern, but that doesn't apply to the straightforward left turn holding configuration presented here.

5. What is the minimum rate of climb required for takeoff on RWY 9 with a groundspeed of 140 knots?

A. 870 feet per minute

B. 970 feet per minute

C. 1,050 feet per minute

D. 1,200 feet per minute

To determine the minimum rate of climb required for takeoff at a groundspeed of 140 knots on RWY 9, it's essential to utilize the standard climb gradient calculations that apply during takeoff scenarios. The relationship between groundspeed and the rate of climb can be evaluated using the formula: **Rate of Climb (in feet per minute) = Grounds speed (in knots) × 10% of the groundspeed. First, calculate 10% of the groundspeed. For a groundspeed of 140 knots: 10% of 140 knots = 14 knots. To convert knots to feet per minute, knowing that 1 knot is equivalent to 100 nautical feet per minute: 14 knots * 100 = 1,400 feet per minute. However, to find the required minimum rate of climb for safe operations during takeoff, a typical safety factor is applied, often resulting in using a fraction of the direct conversion rate, commonly around 70% of the calculated climb. This means we take the rate of 1,400 feet per minute and find 70% of that: 0.7 × 1,400 = 980 feet per minute. This value is often rounded to the nearest significant number, which**

6. What entry procedure should be utilized for an ATC clearance to hold with left turns?

A. Teardrop only

B. Parallel only

C. Direct only

D. Circle only

The correct choice for the entry procedure to utilize for an ATC clearance to hold with left turns is the teardrop entry. When a holding pattern is established with left turns, the teardrop entry allows the pilot to enter the hold effectively while adhering to ATC instructions. The teardrop entry is particularly useful when the aircraft approaches the hold from a position that requires a turn to the holding pattern's inbound leg. By initiating a turn to the right, the pilot can design a path that resembles a teardrop shape, allowing for an efficient entry into the hold. After completing the teardrop segment, the aircraft will be positioned correctly to join the inbound course toward the holding waypoint. This approach ensures that the aircraft integrates smoothly into the holding pattern without excessive maneuvering, which could disturb air traffic in the vicinity. Utilizing the teardrop entry method helps maintain safe separation and efficiency in busy airspace. In contrast, the parallel and direct entries are not suitable in all situations when left turns are specified. The parallel entry requires the aircraft to fly a parallel leg to the hold before crossing over, and the direct entry involves flying straight to the holding fix, both of which might not be as effective when left turns are mandated. The circle

7. What is usually the initial action when a pilot reaches the DH without visual references?

A. Continue the approach

B. Initiate a missed approach

C. Request vectors from ATC

D. Prepare for a go-around

When a pilot reaches the Decision Height (DH) without having established visual references, the appropriate action is to initiate a missed approach. The DH represents the minimum altitude at which a pilot must have visual contact with the runway environment to continue the landing safely. If the necessary visual references, such as the runway or approach lights, are not visible at this critical point, proceeding with the landing could pose significant safety risks. Initiating a missed approach allows the pilot to safely climb away from the runway environment and follow predetermined procedures to either attempt the approach again or divert to an alternate landing site. This action is a crucial part of maintaining safety and adhering to established aviation protocols.

8. What should be taken into account when maintaining airspace protection while holding at 5,000 feet?

A. Weather conditions

B. Aircraft color

C. Maximum indicated airspeed

D. Pilot experience

When maintaining airspace protection while holding at 5,000 feet, the maximum indicated airspeed is crucial to consider. This is because there are established airspeed limits that pilots must adhere to while in a holding pattern to ensure safe separation between aircraft and to manage air traffic effectively. The specific holding pattern may have a published maximum airspeed that needs to be respected to prevent conflicts with other aircraft and to keep the maneuver within safe operational limits. Maintaining the correct airspeed during a hold helps ensure that aircraft do not end up too close to each other, which is vital for safety and efficiency in the crowded airspace. Proper management of airspeed allows for predictable aircraft behavior during the holding phase, which is important for air traffic controllers and pilots alike. Other factors such as weather conditions can influence holding patterns and required adjustments, but they do not directly concern the immediate airspace protection as much as the adherence to maximum indicated airspeed does. Aircraft color and pilot experience, while relevant to overall operations and safety, are less critical in the specific context of maintaining airspace protection during a hold.

9. What role does an approach chart play in ILS approaches?

A. It serves only as a visual reference.

B. It contains essential navigational information.

C. It is only for use in visual flight rules.

D. It does not provide altitude information.

An approach chart plays a critical role in Instrument Landing System (ILS) approaches by providing essential navigational information that pilots need to execute the approach safely and accurately. These charts include various vital details such as the approach procedure, which outlines the steps needed to transition from en route to landing. They also display specific altitudes, headings, waypoints, and critical information about the approach trajectory and the minimums required to conduct the approach safely. The accuracy and reliability of the data presented on an approach chart are crucial for pilots operating under Instrument Flight Rules (IFR). They rely on this information to maintain safe separation from terrain and obstacles, calculate descent rates, and ensure alignment with the runway during the final stages of the approach. Additionally, the chart provides information regarding communications frequencies, missed approach procedures, and any relevant notes about the airport and surrounding airspace. In the context of this particular question, the correct answer highlights the necessary and multifaceted role that approach charts play beyond just being a visual reference or focusing solely on visual flight rules.

10. What is the maximum indicated airspeed for civil aircraft while holding at 5,000 feet?

A. 180 knots

B. 200 knots

C. 220 knots

D. 240 knots

The maximum indicated airspeed for civil aircraft while holding at 5,000 feet is 200 knots. This is defined in the Federal Aviation Regulations (FAR) and the respective guidance documents that dictate aircraft operations in holding patterns. Holding patterns are designed to maintain safety and efficiency in air traffic management, especially in congested airspace or during conditions where aircraft must be kept in a holding pattern for a period of time, such as when waiting for landing clearance. The specified airspeed limits help ensure that aircraft can maintain proper separation from one another and have sufficient control authority while maneuvering in these established patterns. At lower altitudes, such as 5,000 feet, a 200-knot limit helps to ensure that aircraft can handle their speeds adequately while also considering their performance characteristics, such as climb rates and descent capabilities. This limit provides a standardized airspeed that is manageable for most commercial aviation operations, aligning with operational safety criteria for engaging in holding procedures.

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://instrumentgl6holdinginstapproaches.examzify.com

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