# Controller Knowledge Test 2 (CKT2) Practice Exam (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. In a holding pattern, how does the protected airspace area change as altitude and speed increase?**

**A. Increases in size**

**B. Decreases in size**

**C. Remains the same**

**D. Becomes unprotected**

**2. After obtaining the pilot's concurrence at uncontrolled airports, what action may be necessary?**

**A. Specify the initial heading**

**B. Issue the landing clearance**

**C. Assign a new altitude**

**D. Request a handoff**

**3. MARSA stands for which of the following?**

**A. Military Authority for Radar Surveillance of Airspace**

**B. Military Authority Assumes Responsibility for Separation of Aircraft**

**C. Military Authority Assumes Responsibility for Separation and Flight**

**D. Military Actions Regarding Separation of Aircraft**

**4. Which altitude setting is used to determine the lowest usable flight level?**

**A. 30.30**

**B. 30.28**

**C. 29.92**

**D. 31.00**

**5. Which statement best describes a prohibited area?**

**A. An area where operations require authorization from the using agency**

**B. An area where operations are restricted during certain hours**

**C. An area where operations require pilot-initiated clearance**

**D. No person may operate an aircraft without the permission of the using agency**

**6. What is the correct phraseology to have an aircraft squawk an emergency code when not radar identified?**

**A. squawk 7700 mayday emergency**

**B. squawk 7700 mayday**

**C. squawk mayday on 7700**

**D. squawk 7700 mayday**

**7. At FL350, how many miles should separate the outermost aircraft from a nonstandard formation flight?**

**A. 3 miles**

**B. 5 miles**

**C. 7 miles**

**D. 10 miles**

**8. The rule that separation exists between radials diverging by 15 degrees applies under which condition?**

**A. Both aircraft inside protected airspace**

**B. Either aircraft is clear of the airspace to be protected**

**C. Only IFR flight**

**D. Only VFR flight**

**9. Which discreet beacon code corresponds to an emergency?**

**A. 1200**

**B. 7600**

**C. 7700**

**D. 5000**

**10. Which statement best describes when an altitude should be assigned after an aircraft leaves its previously assigned altitude?**

**A. The controller shall assign an altitude after the aircraft leaves the altitude or reports leaving the altitude**

**B. The altitude is unchanged and the aircraft will maintain current altitude**

**C. The pilot should request the next altitude**

**D. The altitude will be assigned only upon arrival at the destination**

# Answers

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

# Explanations

## 1. In a holding pattern, how does the protected airspace area change as altitude and speed increase?

**A. Increases in size**

**B. Decreases in size**

**C. Remains the same**

**D. Becomes unprotected**

**In a holding pattern, the space that must be kept free around the aircraft is sized to let you turn safely and stay on the protected path. The key point is that the turn radius grows with speed. For a standard-rate turn, the radius is roughly proportional to true airspeed, since the aircraft needs more lateral space to complete the same number of degrees per second as you go faster. So when speed increases, the area you sweep out during the turns becomes larger, and the protected airspace expands accordingly. Altitude comes into play because, for the same indicated speed, true airspeed tends to be higher at higher altitudes. That also leads to a larger turn radius, further increasing the protected area. So, as altitude and speed increase, the protected airspace around the holding pattern increases in size.**

## 2. After obtaining the pilot's concurrence at uncontrolled airports, what action may be necessary?

**A. Specify the initial heading**

**B. Issue the landing clearance**

**C. Assign a new altitude**

**D. Request a handoff**

**When operating at an uncontrolled airport, coordinating the arrival relies on clear navigational guidance from the controller to establish the first leg of the approach. After the pilot agrees with the intended plan, giving an initial heading helps the pilot turn toward the proper entry point or runway and begin the approach in a predictable, orderly way. This vectoring is especially important to maintain separation and to fit the aircraft into the traffic pattern with other airplanes in the area. Issuing a landing clearance isn't applicable at uncontrolled fields because there isn't a control tower issuing landings. Assigning a new altitude isn't typically required unless there are specific sequencing or spacing needs, and a handoff isn't relevant because there's no controlling facility to hand you off to at an uncontrolled field.**

## 3. MARSA stands for which of the following?

**A. Military Authority for Radar Surveillance of Airspace**

**B. Military Authority Assumes Responsibility for Separation of Aircraft**

**C. Military Authority Assumes Responsibility for Separation and Flight**

**D. Military Actions Regarding Separation of Aircraft**

**MARSA conveys who is responsible for keeping aircraft separated in a mixed civil-military environment. When this arrangement is in effect, the military authority assumes responsibility for separation of aircraft, meaning the military facility provides the separation service for those flights rather than civil ATC. This allows military control to manage the traffic under their procedures, and pilots must follow the military controller's separation instructions. The other formulations don't match the standard meaning, since MARSA is not about radar surveillance, does not add "and flight" to the title, and isn't described as military actions regarding separation.**

## 4. Which altitude setting is used to determine the lowest usable flight level?

**A. 30.30**

**B. 30.28**

**C. 29.92**

**D. 31.00**

**The key idea here is that determining the lowest usable flight level relies on the local pressure setting, not just the fixed standard setting. Flight levels are defined using the standard pressure (29.92 inHg), but when you're assessing what level you can safely use near the surface, you have to apply the local altimeter setting (the QNH) to translate pressure into actual altitude above terrain. Using the local altimeter setting gives you a true picture of how high you are above the ground with that day's pressure. In this scenario, the local setting is 30.28 inHg, so that value is the one used to determine the lowest usable flight level. Using the standard 29.92 would misrepresent your height relative to the terrain, and other values like 30.30 or 31.00 do not reflect the actual local pressure at the surface.**

## 5. Which statement best describes a prohibited area?

**A. An area where operations require authorization from the using agency**

**B. An area where operations are restricted during certain hours**

**C. An area where operations require pilot-initiated clearance**

**D. No person may operate an aircraft without the permission of the using agency**

**Prohibited airspace is active, off-limits airspace defined by the government where flight is not allowed unless explicit permission is granted. The defining rule is that no person may operate an aircraft there without government authorization. This makes it more restrictive than other special-use areas, which may permit entry under certain conditions or with clearance. Why this fits best: it captures the essential idea that entry is not permitted by default and requires a formal clearance from the appropriate authority. The other statements describe areas where access is conditional—through authorization from a particular agency, during certain hours, or via pilot-initiated clearance—which are characteristic of restricted or other special-use airspaces, not a prohibited area.**

## 6. What is the correct phraseology to have an aircraft squawk an emergency code when not radar identified?

**A. squawk 7700 mayday emergency**

**B. squawk 7700 mayday**

**C. squawk mayday on 7700**

**D. squawk 7700 mayday**

**When an aircraft is not radar identified, the priority is to clearly signal distress and to set the emergency transponder code so ATC can quickly identify and prioritize the aircraft. The best phrasing does both in one concise transmission: it states the mayday (distress) and ties it to the emergency squawk by saying the squawk is on 7700. This makes it immediately clear to ATC that the aircraft is in urgent trouble and that the transponder is broadcasting the emergency code, enabling proper tracking and priority handling. The other approaches fall short because they either omit the distress call, fail to clearly indicate the specific emergency code, or place the elements in a less direct way. By pairing mayday with the emergency code using the linking phrase, the communication leaves no ambiguity about both the status and the squawk setting.**

## 7. At FL350, how many miles should separate the outermost aircraft from a nonstandard formation flight?

**A. 3 miles**

**B. 5 miles**

**C. 7 miles**

**D. 10 miles**

**The key idea is standard enroute separation: aircraft on radar are kept five miles apart horizontally. When aircraft fly in a nonstandard formation, ATC still uses at least that five-mile buffer for the outermost member to ensure safe clearance from other traffic and to allow for any unexpected maneuvers. So at FL350, the outermost aircraft should be separated by five miles from any other aircraft. A smaller distance wouldn't meet the standard safety buffer, while larger distances aren't required unless ATC specifically assigns them.**

## 8. The rule that separation exists between radials diverging by 15 degrees applies under which condition?

**A. Both aircraft inside protected airspace**

**B. Either aircraft is clear of the airspace to be protected**

**C. Only IFR flight**

**D. Only VFR flight**

**The important idea here is how lateral separation using VOR radials interacts with the protected airspace around the facility. The 15-degree divergence rule is tied to that protected area, and separation is recognized when the airspace constraint no longer applies to the aircraft pair. If either aircraft is clear of the airspace to be protected, you can rely on that 15-degree divergence to establish separation because the protection boundary isn't governing both aircraft anymore. That's why the best description is that separation exists when either aircraft is clear of the airspace to be protected. The other options don't fit because the rule isn't about flight rules (IFR vs VFR) and it isn't restricted to both aircraft remaining inside the protected airspace.**

## 9. Which discreet beacon code corresponds to an emergency?

**A. 1200**

**B. 7600**

**C. 7700**

**D. 5000**

**In aviation, the transponder uses a four-digit code to signal your status to air traffic control, with each code having a specific meaning. The universal emergency code is 7700. When a pilot squawks 7700, ATC immediately recognizes an urgent situation and grants priority handling, coordinating with rescue services as needed. The other codes indicate different scenarios: 7600 means a loss of radio communications, 1200 is the standard VFR routine code, and 5000 is not used to indicate an emergency. Since 7700 is the code designated for emergencies, it is the best answer.**

**10. Which statement best describes when an altitude should be assigned after an aircraft leaves its previously assigned altitude?**

**A. The controller shall assign an altitude after the aircraft leaves the altitude or reports leaving the altitude**

**B. The altitude is unchanged and the aircraft will maintain current altitude**

**C. The pilot should request the next altitude**

**D. The altitude will be assigned only upon arrival at the destination**

**When an aircraft leaves its previously assigned altitude, ATC must issue the next altitude right away to maintain continuous vertical separation and clearance. This ensures there is a clear, updated target for the aircraft as it transitions to the next segment of its flight, preventing any ambiguity about how high the aircraft should be climbing or descending next. The controller has the responsibility to provide the next altitude clearance, not the pilot, and not to wait until arrival or rely on the pilot to request it. If no new altitude is issued, the aircraft could drift into conflict with other traffic or lose the intended flight profile.**

# 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://ckt2.examzify.com**

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