FAA WEATHER OBSERVATION PRACTICE EXAM (SAMPLE)

STUDY GUIDE



SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

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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.

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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!

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Questions

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1. **What position does the station identifier occupy in a METAR/SPECI coded report?**

   A. first

   B. second

   C. third

   D. sixth

2. **For the reportable contraction "SCT," what is the corresponding sky cover amount?**

   A. 3/8 to 4/8

   B. 5/8 to 7/8

   C. 1/8 to 2/8

   D. 8/8

3. **How would the report look for "the prevailing visibility from your point of observation is three to five miles"?**

   A. 2SM; RMK VIS S 1 1/2

   B. 4SM

   C. 3/8SM; RMK VIS E 1/4 W 1/2

   D. M

4. **What does the code DRDU represent in weather observations?**

   A. Blowing sand

   B. Low drifting dust

   C. Blowing spray

   D. Moderate ice pellet showers

5. **What does the code TSRAPE denote in weather observations?**

   A. Thunderstorm, moderate rain, ice pellets

   B. Light snow and freezing rain

   C. Severe thunderstorms

   D. Patchy fog with low visibility

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6. When multiple types of present weather are reported, which type is mentioned first?

A. Tornadic activity, obscurations, precipitation

B. Tornadic activity, thunderstorms, precipitation, obscurations, other weather

C. Thunderstorms, precipitation, obscurations, other weather

D. Tornadic activity, precipitation, thunderstorms, other weather

7. How many sections does a SPECI observation contain?

A. 1, the body of the report

B. 1, the remarks

C. 3, the time, the data, and the remarks

D. 2, the body of the report and the remarks

8. Wet- and dry-bulb thermometers are read to the nearest what?

A. 0.5 degrees

B. 0.2 degrees

C. 0.1 degrees

D. 1 degree

9. At 1800 UTC, 0.25 inches of precipitation occurred 12 hours ago. What is recorded in column 14 (Remarks)?

A. 70025

B. 60025

C. 71025

D. no report is required

10. When several layers are reported as broken, how is the ceiling determined?

A. The highest broken layer

B. The lowest broken layer

C. The average height of broken layers

D. The obscured layer

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Answers

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

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Explanations

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1. What position does the station identifier occupy in a METAR/SPECI coded report?

A. first

B. second

C. third

D. sixth

In a METAR or SPECI coded weather report, the station identifier occupies the second position. The report begins with a four-letter ICAO (International Civil Aviation Organization) code representing the station that generated the report. Following this identifier, the report includes various pieces of meteorological information. For example, the first position is often reserved for the report type, such as METAR or SPECI, which indicates whether the report is routine or a special weather report. The subsequent parts of the report contain crucial details such as the date and time of the observation, wind conditions, visibility, weather phenomena, and temperature, among other data. Understanding the structure of METAR and SPECI reports is essential for interpreting weather observations accurately, especially for aviation purposes, where timely and precise weather information is crucial for flight safety and planning.

2. For the reportable contraction "SCT," what is the corresponding sky cover amount?

A. 3/8 to 4/8

B. 5/8 to 7/8

C. 1/8 to 2/8

D. 8/8

The contraction "SCT" stands for "scattered," which in aviation weather reporting refers to a specific range of sky cover. For a cloud layer to be classified as scattered, the coverage needs to fall within the range of 3/8 to 4/8 of the sky. This means that there are a few clouds present, but they do not cover the majority of the sky, allowing for significant portions of the sky to remain clear. This classification is important for pilots and meteorologists, as it helps them assess flying conditions, visibility, and potential weather impacts based on the amount of cloud cover present. Understanding and accurately reporting sky conditions is crucial for safe flight operations.

3. How would the report look for "the prevailing visibility from your point of observation is three to five miles"?

A. 2SM; RMK VIS S 1 1/2

B. 4SM

C. 3/8SM; RMK VIS E 1/4 W 1/2

D. M

The report indicating a prevailing visibility of three to five miles would be represented as 4SM. This format follows standard aviation meteorological reporting conventions, where "SM" stands for statute miles. The value given (4) represents the midpoint of the given range of visibility (3 to 5 miles). In aviation weather reporting, prevailing visibility is typically expressed as a single whole number that represents the average visibility over the observation period. Rendering the visibility as 4SM makes it clear and interpretable to pilots and air traffic controllers, providing a straightforward indication of conditions. The other options provide either inadequate or incorrect representations of visibility that do not align with observed meteorological standards for reporting. Thus, the answer accurately reflects the expected weather observation format.

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4. What does the code DRDU represent in weather observations?

A. Blowing sand

B. Low drifting dust

C. Blowing spray

D. Moderate ice pellet showers

The code DRDU is used in weather observations to indicate "low drifting dust." This phenomenon occurs when particles, specifically dust, are lifted from the ground and are blown about by the wind at lower altitudes. It signifies that the visibility may be reduced due to these airborne particles, which can have implications for flight safety and overall weather conditions. Understanding the implications of each type of weather observation code is crucial for interpreting weather reports accurately. While options like blowing sand, blowing spray, and moderate ice pellet showers refer to different weather phenomena, only low drifting dust aligns with the code DRDU. Each of these conditions has its own codes and definitions in the METAR (Meteorological Aerodrome Report) system, which is used to provide up-to-date and standardized weather information in aviation.

5. What does the code TSRAPE denote in weather observations?

A. Thunderstorm, moderate rain, ice pellets

B. Light snow and freezing rain

C. Severe thunderstorms

D. Patchy fog with low visibility

The code TSRAPE represents a specific combination of weather phenomena that can occur during weather observations. In this case, it indicates the presence of a thunderstorm, moderate rain, and ice pellets. Each component of the code helps meteorologists communicate critical information efficiently. The 'TS' stands for thunderstorm, alerting observers that thunderstorms are occurring in the vicinity. The 'R' denotes moderate rain, which indicates that the intensity of the rainfall is above a light level but not extremely heavy. Finally, 'AP' signifies ice pellets, also known as sleet, indicating that the precipitation includes small balls or irregular pieces of ice. This combination of weather conditions can have significant implications for aviation and safety, making it essential for pilots and meteorologists to understand these coded observations. Understanding how to interpret weather codes like TSRAPE is crucial for effective weather reporting and forecasting, particularly in aviation-related scenarios where such conditions can affect flight safety.

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6. When multiple types of present weather are reported, which type is mentioned first?

A. Tornadic activity, obscurations, precipitation

B. Tornadic activity, thunderstorms, precipitation, obscurations, other weather

C. Thunderstorms, precipitation, obscurations, other weather

D. Tornadic activity, precipitation, thunderstorms, other weather

When multiple types of present weather conditions are reported, the convention is to prioritize the types of weather based on their significance and potential impact. The correct choice emphasizes tornadic activity as the first reporting element, which is aligned with aviation safety considerations because tornadic activity poses a severe threat to flight operations. Following tornadic activity, thunderstorms are listed next due to their potential to cause turbulence, lightning, and severe weather events that can affect aircraft. Precipitation comes after thunderstorms because, while it can impact visibility and aircraft operations, it is typically a less immediate threat than severe thunderstorms. Obscurations, which refer to reduced visibility conditions such as fog or smoke, are mentioned next, as they are crucial for pilots to be aware of when landing or navigating in low visibility situations. Lastly, other weather conditions are reported, covering less critical phenomena that may still be relevant but do not have as immediate implications for flight safety. This prioritization helps ensure that pilots receive the most critical safety information first, allowing them to make informed decisions about their flight operations.

7. How many sections does a SPECI observation contain?

A. 1, the body of the report

B. 1, the remarks

C. 3, the time, the data, and the remarks

D. 2, the body of the report and the remarks

A SPECI observation report is a type of aviation weather report that provides updates to the standard METAR report. It consists of specific segments that are crucial for conveying weather changes efficiently. The correct answer highlights that a SPECI observation contains two main components: the body of the report and the remarks. The body of the report includes essential weather data such as temperature, dew point, wind direction, visibility, and significant weather phenomena. This information is vital for pilots and air traffic controllers who rely on accurate and timely weather reports to make informed decisions. The remarks section provides additional information that may not be included in the body but can be important for understanding the current weather conditions, such as maintenance notes about specific observations or historic context that could affect operations. This structure allows the report to be concise while still providing all necessary details, which is especially important in the coordination of safe flight operations. By having two distinct sections, it ensures clarity and prevents misinterpretation of the data presented. The other options that suggest a different number of sections do not adequately reflect how a SPECI report is formatted and what constitutes its essential elements.

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8. Wet- and dry-bulb thermometers are read to the nearest what?

A. 0.5 degrees

B. 0.2 degrees

C. 0.1 degrees

D. 1 degree

Wet- and dry-bulb thermometers are designed to measure temperature with a high degree of accuracy. They are typically read to the nearest tenth of a degree (0.1 degrees). This level of precision is important for applications such as calculating relative humidity, which requires accurate temperature readings to be effective. The wet-bulb thermometer measures the temperature of evaporative cooling, while the dry-bulb thermometer measures the ambient air temperature. The combination of both readings allows for a more precise determination of moisture content in the air, which is critical in meteorology and various aviation operations. The focus on tenths of a degree ensures that these significant measurements can capture small variations that could affect weather predictions and observations.

9. At 1800 UTC, 0.25 inches of precipitation occurred 12 hours ago. What is recorded in column 14 (Remarks)?

A. 70025

B. 60025

C. 71025

D. no report is required

In the context of aviation weather observations, column 14 in the METAR report is typically reserved for remarks, including information on significant weather events or additional relevant details. When determining entries for this column, it's essential to evaluate the timing of the precipitation in relation to the observation time. In this scenario, the precipitation occurred 12 hours prior to the observation time of 1800 UTC. Since the standard reporting period for precipitation in METARs is usually the past hour or current conditions, precipitation that happened 12 hours ago is considered too outdated to be recorded or emphasized in the remarks column. Therefore, for this observation, no specific report regarding 0.25 inches of precipitation is required because it falls outside the standard reporting timeframe. Hence, the appropriate remark in column 14 would indicate the absence of recent significant weather information, which is represented by stating that no report is required. This aligns with meteorological reporting standards, which prioritize current weather conditions over older events that no longer affect the situation at the time of the observation.

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10. When several layers are reported as broken, how is the ceiling determined?

A. The highest broken layer

B. The lowest broken layer

C. The average height of broken layers

D. The obscured layer

In aviation weather reporting, when multiple layers of clouds are categorized as broken, the ceiling is determined by identifying the lowest layer among those classified as broken. The reason for this is that the ceiling in aviation terminology specifically refers to the height of the lowest layer of clouds that covers more than half of the sky. This information is crucial for pilots and air traffic controllers as it affects visibility and flight operations. A higher broken cloud layer does not impact the operational ceiling if there is a lower broken layer present, because the critical factor for flight safety is the lowest point of cloud coverage. Furthermore, understanding this standard helps in interpreting aviation weather reports accurately, ensuring that pilots have the necessary information to make informed decisions regarding take-offs, landings, and altitudinal adjustments during flight operations. The other options do not reflect the accepted standard for determining the ceiling in aviation weather observations.

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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:

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

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