

Republic Airlines ERJ 170/175 Limitations Practice Test (Sample)

Study Guide



Everything you need from our exam experts!

Copyright © 2026 by Examzify - A Kaluba Technologies Inc. product.

ALL RIGHTS RESERVED.

No part of this book may be reproduced or transferred in any form or by any means, graphic, electronic, or mechanical, including photocopying, recording, web distribution, taping, or by any information storage retrieval system, without the written permission of the author.

Notice: Examzify makes every reasonable effort to obtain accurate, complete, and timely information about this product from reliable sources.

SAMPLE

Table of Contents

Copyright	1
Table of Contents	2
Introduction	3
How to Use This Guide	4
Questions	5
Answers	8
Explanations	10
Next Steps	16

SAMPLE

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

SAMPLE

- 1. What is the maximum crosswind limit for CAT II operations?**
 - A. 10 knots**
 - B. 12 knots**
 - C. 15 knots**
 - D. 20 knots**

- 2. What is the maximum allowable altimeter difference between PFDs on the ground?**
 - A. 25 feet**
 - B. 50 feet**
 - C. 75 feet**
 - D. 100 feet**

- 3. What is the maximum crosswind limit for RCC 4 (Good to Medium) conditions?**
 - A. 20 knots**
 - B. 22 knots**
 - C. 18 knots**
 - D. 15 knots**

- 4. What is the maximum weight that the ERJ 170 can take off at?**
 - A. 75,177 lbs**
 - B. 89,000 lbs**
 - C. 82,011 lbs**
 - D. 85,517 lbs**

- 5. What limitation applies to a single-engine operation during flight?**
 - A. Must remain below FL250**
 - B. Must maintain visual flight rules**
 - C. Must notify air traffic control**
 - D. Must be completed before descent**

- 6. What is the maximum allowable difference between Captain and First Officer altimeters?**
- A. 100 feet**
 - B. 150 feet**
 - C. 200 feet**
 - D. 250 feet**
- 7. What is the maximum ambient pressure allowed for inflight operation?**
- A. 6.5 inHg**
 - B. 7.5 inHg**
 - C. 8.0 inHg**
 - D. 8.5 inHg**
- 8. Which weight limitation considers the max certificated structural weight?**
- A. Max ramp weight**
 - B. Max takeoff weight**
 - C. Max landing weight**
 - D. Max zero fuel weight**
- 9. What is the appropriate action if ice accretion is present during single engine taxi?**
- A. Continue taxiing as normal**
 - B. Perform a full stop and assess conditions**
 - C. Divert to the nearest airport**
 - D. Abandon single engine taxi**
- 10. What is the minimum fuel temperature for takeoff in the ERJ 170/175?**
- A. -37°C**
 - B. -30°C**
 - C. -25°C**
 - D. -40°C**

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. What is the maximum crosswind limit for CAT II operations?

- A. 10 knots
- B. 12 knots**
- C. 15 knots
- D. 20 knots

The maximum crosswind limit for CAT II operations on the ERJ 170/175 is 12 knots. This limitation is crucial for ensuring safe landing conditions under specific visibility and approach scenarios associated with CAT II operations, which involve reduced decision height and lower visibility thresholds. Exceeding this crosswind limit could compromise control of the aircraft during the critical phases of landing, particularly on a precision approach. Operating within this limitation helps to mitigate the risks associated with crosswinds, which can affect the aircraft's stability and handling characteristics. The specific threshold is established based on performance data and regulatory standards that optimize safety during low-visibility conditions. Understanding and adhering to these limitations is essential for flight crew competency and safety in operations involving Category II landings.

2. What is the maximum allowable altimeter difference between PFDs on the ground?

- A. 25 feet
- B. 50 feet
- C. 75 feet**
- D. 100 feet

The maximum allowable altimeter difference between the Primary Flight Displays (PFDs) on the ground is 75 feet. This specification is important for ensuring that both pilots have a consistent reference for altitude during ground operations. A difference within this limit indicates that both altimeters are functioning correctly and are calibrated similarly, which is crucial for maintaining safety and situational awareness, particularly during taxi and takeoff procedures. An altimeter discrepancy exceeding 75 feet could indicate a malfunction or miscalibration, which may lead to incorrect altitude references and potentially hazardous situations during flight. Therefore, the 75-foot limit serves as a critical threshold that pilots must be aware of before proceeding with their flight preparations.

3. What is the maximum crosswind limit for RCC 4 (Good to Medium) conditions?

- A. 20 knots**
- B. 22 knots**
- C. 18 knots**
- D. 15 knots**

The maximum crosswind limit for Runway Condition Code (RCC) 4, which indicates good to medium runway conditions, is 20 knots. This limit is determined to ensure safe operations by accounting for the reduced friction available on the runway when it is in this condition. RCC 4 generally suggests that the runway surface is dry or has minor contamination, allowing for reasonable maneuverability, but still requires pilots to exercise caution due to the possibility of unexpected changes in handling characteristics, especially when crosswinds are present. Exceeding this limit in such conditions can significantly increase the risk of loss of control during takeoff or landing, which is why a defined maximum is critical for safety protocol.

4. What is the maximum weight that the ERJ 170 can take off at?

- A. 75,177 lbs**
- B. 89,000 lbs**
- C. 82,011 lbs**
- D. 85,517 lbs**

The maximum takeoff weight (MTOW) of the ERJ 170 is established by the manufacturer and is crucial for ensuring safe flight operations within the aircraft's structural and performance limitations. The correct answer indicates that the maximum weight the ERJ 170 can safely take off at is 82,011 pounds. This weight limit is designed to ensure that the aircraft can achieve the necessary performance during takeoff, including adequate climb rates, control authority, and fuel efficiency. Exceeding this weight can lead to a variety of issues, including impaired climb performance, longer takeoff distances, and potential stability problems. Therefore, knowing the maximum takeoff weight is essential for flight planning and ensuring compliance with operational regulations and safety guidelines. The other options do not reflect the ERJ 170's specified limitations and would lead to unsafe flight conditions if used as takeoff weights.

5. What limitation applies to a single-engine operation during flight?

- A. Must remain below FL250**
- B. Must maintain visual flight rules**
- C. Must notify air traffic control**
- D. Must be completed before descent**

In the context of single-engine operations during flight, the limitation that requires the aircraft to remain below FL250 is crucial for ensuring safety and operational integrity. This altitude limitation is in place due to several factors, primarily the need for adequate airspace separation and the aircraft's performance characteristics. Above FL250, the performance of the aircraft may not be sufficiently reliable with a single engine, particularly during critical phases such as climb and cruise. Furthermore, there are regulatory and safety considerations that mandate specific operational protocols for single-engine flight, including reduced maximum operating altitudes. By maintaining an altitude below FL250, pilots can ensure that they have a higher safety margin for engine-out scenarios, facilitating better performance and an ability to manage the flight more effectively. Maintaining visual flight rules, notifying air traffic control, and completing certain procedures before descent represent operational best practices but do not specifically address the limitations associated with altitude during single-engine operations. These considerations are important in their own right but do not capture the singular regulatory limitation of altitude that is specifically tied to the challenges faced when operating with just one functional engine.

6. What is the maximum allowable difference between Captain and First Officer altimeters?

- A. 100 feet**
- B. 150 feet**
- C. 200 feet**
- D. 250 feet**

The maximum allowable difference between the Captain and First Officer altimeters is 200 feet. This limitation is in place to ensure the accuracy of altitude readings, which are crucial for safe aircraft operation, especially during critical phases like takeoff and landing. When flying, it is vital that both pilots have consistent and reliable altitude information, as discrepancies could lead to misunderstandings in altitude management and could potentially result in controlled flight into terrain or other hazardous situations. The specified limit of 200 feet allows for a reasonable margin of error while still maintaining safety protocols. If the difference exceeds this limit, it typically requires corrective action, such as recalibrating the altimeters or investigating the source of the discrepancy. Understanding this limit is essential for pilots to adhere to proper operational standards and to ensure effective communication and coordination in the cockpit.

7. What is the maximum ambient pressure allowed for inflight operation?

- A. 6.5 inHg**
- B. 7.5 inHg**
- C. 8.0 inHg**
- D. 8.5 inHg**

The maximum ambient pressure allowed for inflight operation is 8.5 inches of mercury (inHg). This limit is crucial to ensure the safe operation of the aircraft under various atmospheric conditions. At pressures above this threshold, performance parameters such as engine operation, pressurization, and aerodynamic characteristics may not be within their designed operational limits. In the context of aircraft operation, it is essential to understand how ambient pressure affects the performance capabilities of the ERJ 170/175. The aircraft is engineered to function optimally within specific pressure ranges. Exceeding the maximum ambient pressure could lead to issues such as reduced engine efficiency, improper pressurization system functioning, and compromised aerodynamic stability, which can all affect safety and performance during flight. Understanding these limitations helps pilots and operators ensure that the aircraft remains within operational safety margins throughout its flight, particularly when facing variable atmospheric conditions or during cross-country travel where elevations and weather can shift drastically.

8. Which weight limitation considers the max certificated structural weight?

- A. Max ramp weight**
- B. Max takeoff weight**
- C. Max landing weight**
- D. Max zero fuel weight**

The maximum takeoff weight is the limitation that specifically considers the maximum certificated structural weight. This weight includes the aircraft's basic operating weight plus the weight of all passengers, cargo, and usable fuel at the time of takeoff. The maximum takeoff weight is critical because it ensures that the aircraft can safely take off without exceeding structural limits. This limitation is determined based on the aircraft design and engineering, as exceeding this weight can compromise performance and safety during the takeoff phase. The maximum ramp weight includes the aircraft's weight on the ground and can sometimes be higher than the maximum takeoff weight due to the different configurations, but it is not specifically tied to structural certification. Similarly, the maximum landing weight and the maximum zero fuel weight have their own defined purposes, but they do not necessarily relate to the maximum structural weight of the aircraft in the same way that the maximum takeoff weight does.

9. What is the appropriate action if ice accretion is present during single engine taxi?

- A. Continue taxiing as normal**
- B. Perform a full stop and assess conditions**
- C. Divert to the nearest airport**
- D. Abandon single engine taxi**

During a single-engine taxi, if ice accretion is present, the appropriate action is to abandon the single-engine taxi. This decision is important for maintaining control of the aircraft and ensuring safety. Ice can significantly affect the aircraft's performance and handling characteristics, especially when operating at reduced thrust on one engine. The risks associated with maintaining a single-engine taxi while ice is present include loss of control or inadequate acceleration if a need arises to use the operating engine more aggressively. Therefore, it is prudent to not continue taxiing and instead revert to a safer operational mode that allows better control of the aircraft under potentially hazardous conditions. This approach prioritizes safety, as the aircraft may not have predictable handling characteristics when ice is involved, making it wise to avoid any actions that could compromise control during the taxi phase.

10. What is the minimum fuel temperature for takeoff in the ERJ 170/175?

- A. -37°C**
- B. -30°C**
- C. -25°C**
- D. -40°C**

The minimum fuel temperature for takeoff in the ERJ 170/175 is set at -37°C. This temperature is important because it ensures that the fuel remains within operational limits to prevent issues such as fuel freezing or the formation of ice crystals. Keeping fuel temperature within this range is crucial for proper engine performance and to avoid potential mechanical failures during flight. Falling below this temperature can lead to fuel system malfunctions, which can jeopardize the aircraft's safety and operational integrity. Thus, adhering to the specified minimum fuel temperature is vital for ensuring a safe takeoff and overall flight operation.

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://republicairerj170175lim.examzify.com>

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

SAMPLE