

13R FIELD ARTILLERY FIREFINDER RADAR OPERATOR CERTIFICATION PRACTICE TEST (SAMPLE)

STUDY GUIDE



Prepare with structure. Pass with confidence



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	15

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 aspect of Firefinder systems has notably enhanced their operational effectiveness?**
 - A. Dungeon-like designs
 - B. Manual data interpretation
 - C. State-of-the-art signal processing
 - D. Limited electronic support
- 2. During a mission, what is the first priority for a Firefinder radar operator?**
 - A. Confirming target coordinates
 - B. Ensuring system readiness
 - C. Reporting enemy positions
 - D. Updating troop movements
- 3. What are the power requirements for the Q-36 radar system?**
 - A. 115 v/240 v, 2 phase, 400 Hz
 - B. 115 v/208 v, 3 phase, 400 Hz
 - C. 220 v/480 v, 3 phase, 50 Hz
 - D. 110 v/220 v, 2 phase, 60 Hz
- 4. Which aspect is crucial for the training of Firefinder radar operators?**
 - A. Physical fitness
 - B. Team cooperation
 - C. Technical proficiency
 - D. Crisis management
- 5. What is the optimum screening crest for the AN/TPQ-36 radar?**
 - A. 10-20 mils
 - B. 20-40 mils
 - C. 15-30 mils
 - D. 30-50 mils

- 6. What is the maximum number of critical friendly zones that can be entered into the radar?**
- A. 5
 - B. 7
 - C. 9
 - D. 12
- 7. In recent developments, what has made Firefinder systems more effective in combat scenarios?**
- A. Decreased range of operation
 - B. Improved signal processing and digital integration
 - C. Simplified operation without modern technology
 - D. Increased reliance on manual calculations
- 8. When can auto height correction be performed for the AN/TPQ-50?**
- A. After installation
 - B. When DTED is loaded into the system
 - C. During maintenance
 - D. Before power-up
- 9. How is Track Volume determined using the AN/TPQ-36?**
- A. High Mask Angle + Low Mask Angle
 - B. Low Mask Angle - High Mask Angle - Vertical Scan
 - C. Low Mask Angle + Vertical Scan
 - D. High Mask Angle - Low Mask Angle + Vertical Scan
- 10. How does the radar system differentiate between friendly and enemy projectiles?**
- A. By analyzing color codes
 - B. By assessing trajectory and speed data
 - C. By visual identification
 - D. By using sound detection

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. What aspect of Firefinder systems has notably enhanced their operational effectiveness?

- A. Dungeon-like designs
- B. Manual data interpretation
- C. State-of-the-art signal processing**
- D. Limited electronic support

The aspect of Firefinder systems that has notably enhanced their operational effectiveness is state-of-the-art signal processing. Modern Firefinder radar systems utilize advanced algorithms and processing techniques that allow for precise detection and analysis of incoming threats, such as artillery and mortar fire. This sophisticated signal processing capability improves the accuracy of target location, reduces false alarms, and enhances the system's ability to operate in complex electronic environments. The integration of cutting-edge technology in signal processing ensures that Firefinder systems can quickly and effectively respond to real-time battlefield conditions, providing critical information that enables timely counter-battery fire and force protection measures. This advancement is a key factor in the overall utility and reliability of Firefinder systems in military operations.

2. During a mission, what is the first priority for a Firefinder radar operator?

- A. Confirming target coordinates
- B. Ensuring system readiness**
- C. Reporting enemy positions
- D. Updating troop movements

Ensuring system readiness is considered the first priority for a Firefinder radar operator during a mission because the effectiveness of any subsequent actions relies heavily on the radar system being fully operational and ready to detect incoming threats. If the system is not ready, the operator will not be able to accurately confirm target coordinates, report enemy positions, or update troop movements effectively. The reliability of radar data and the ability to react to threats in a timely manner depends on the readiness of the equipment. The operator must first conduct essential checks and ensure that the radar is functional before proceeding with any mission-critical tasks. This foundational step guarantees that the operator can provide the necessary intelligence and support to the combat team during operations.

3. What are the power requirements for the Q-36 radar system?

- A. 115 v/240 v, 2 phase, 400 Hz
- B. 115 v/208 v, 3 phase, 400 Hz**
- C. 220 v/480 v, 3 phase, 50 Hz
- D. 110 v/220 v, 2 phase, 60 Hz

The power requirements for the Q-36 radar system specify that it operates on a three-phase electrical supply at 115 v/208 v, with a frequency of 400 Hz. This configuration is essential for providing the necessary power quality and stability that high-tech radar systems like the Q-36 require for optimal performance. Three-phase power is advantageous because it enables more efficient power distribution and supports the operation of heavy electrical loads without generating excessive heat. The specific voltage and frequency are tailored to meet the operational demands of the radar equipment. In military applications, this setup ensures that the radar can function effectively in a variety of deployment scenarios, where reliability and adaptability are crucial. Understanding the power requirements is vital for operational readiness and maintenance, ensuring that the radar system can be readily deployed with the right infrastructure in place.

4. Which aspect is crucial for the training of Firefinder radar operators?

- A. Physical fitness
- B. Team cooperation
- C. Technical proficiency**
- D. Crisis management

The training of Firefinder radar operators emphasizes technical proficiency as a crucial aspect because these operators must have a thorough understanding of the complex systems and technologies involved in radar operations. This knowledge is essential for accurately detecting and identifying threats, processing data, and effectively communicating information to artillery units. Proficiency in technical skills ensures that operators can operationalize the equipment under various conditions and maintain situational awareness, which is vital for mission success in combat scenarios. While other aspects like physical fitness, team cooperation, and crisis management are important in military training, they serve as supportive elements rather than the primary focus when it comes to the specialized role of a Firefinder radar operator. The ability to use advanced technology efficiently directly impacts the effectiveness of artillery fire support and the safety of allied forces. Therefore, achieving technical proficiency is crucial for optimizing performance and sustaining the operational capacity of the artillery unit.

5. What is the optimum screening crest for the AN/TPQ-36 radar?

- A. 10-20 mils
- B. 20-40 mils
- C. 15-30 mils**
- D. 30-50 mils

The optimum screening crest for the AN/TPQ-36 radar is 15-30 mils. This range is ideal because it allows the radar to maintain effective detection capabilities while minimizing the chances of clutter and false returns caused by terrain. When the screening crest is set within this mil range, it ensures that the radar can effectively differentiate between actual threats, like incoming artillery fire, and obstructions or disturbances in the environment, such as hills or buildings. Selecting a crest that is too high could result in lost detection opportunities, as the radar may miss targets that are being obscured by the screening. Conversely, setting the crest too low would cause the radar to pick up unwanted ground reflections, leading to reduced operational efficiency. Therefore, 15-30 mils strikes an effective balance, maximizing the radar's ability to fulfill its purpose of detecting and tracking incoming projectiles accurately.

6. What is the maximum number of critical friendly zones that can be entered into the radar?

- A. 5
- B. 7
- C. 9**
- D. 12

The maximum number of critical friendly zones that can be entered into the radar system is nine. This limitation is established to effectively manage and delineate areas where friendly forces are located, ensuring that the radar can accurately identify and track incoming projectiles without mistaking them for friendly fire. The critical friendly zones aid in preventing the engagement of friendly positions and are essential for the safety of troops on the ground. Having nine zones allows for sufficient coverage and flexibility when determining the safe areas for allied forces while maintaining the system's operational efficiency. The choice of nine is a balance between maximizing coverage and maintaining system performance, making it a well-considered design feature of the radar system.

7. In recent developments, what has made Firefinder systems more effective in combat scenarios?

- A. Decreased range of operation
- B. Improved signal processing and digital integration**
- C. Simplified operation without modern technology
- D. Increased reliance on manual calculations

The effectiveness of Firefinder systems in combat scenarios has been significantly enhanced by improved signal processing and digital integration. These advancements allow the radar systems to quickly and accurately detect, classify, and report incoming artillery threats. Improved signal processing helps in filtering out noise and focuses on the relevant signals, allowing for better detection capabilities. Digital integration enables seamless communication with other systems and enhances data processing speeds, leading to quicker responses and improved operational efficiency on the battlefield. This integration also allows for more sophisticated algorithms and automated features that contribute to increased precision in targeting and situational awareness, making the systems more reliable and effective in modern combat operations.

8. When can auto height correction be performed for the AN/TPQ-50?

- A. After installation
- B. When DTED is loaded into the system**
- C. During maintenance
- D. Before power-up

The correct answer regarding when auto height correction can be performed for the AN/TPQ-50 is when Digital Terrain Elevation Data (DTED) is loaded into the system. This is significant because the DTED provides precise elevation information that allows the radar system to accurately calibrate its height settings based on the terrain where it is deployed. By utilizing the loaded DTED, the radar can make adjustments that optimize its performance in detecting incoming indirect fire threats, thereby enhancing the overall effectiveness of the system. Performing auto height correction after installation, during maintenance, or before power-up would not utilize the terrain-specific elevation data that DTED provides, which is crucial for achieving the accuracy required for effective operation in real-world environments. Therefore, the timing of the DTED loading directly correlates to the radar's ability to perform height correction effectively.

9. How is Track Volume determined using the AN/TPQ-36?

- A. High Mask Angle + Low Mask Angle
- B. Low Mask Angle - High Mask Angle - Vertical Scan**
- C. Low Mask Angle + Vertical Scan
- D. High Mask Angle - Low Mask Angle + Vertical Scan

Track Volume is a crucial measure in radar operations that denotes the three-dimensional space in which targets can be detected. The AN/TPQ-36 radar system includes specific parameters that contribute to the calculation of Track Volume. The calculation takes into account the Low Mask Angle and the High Mask Angle, which define the vertical limits of the radar's scanning capabilities. By subtracting the High Mask Angle from the Low Mask Angle, you determine the net vertical coverage that the radar has for tracking objects. This establishes the vertical component of the Track Volume. Additionally, incorporating the Vertical Scan into the equation enhances the understanding of the radar's operational range in terms of both elevation and distance. Thus, the full combination provides the necessary parameters to determine the complete Track Volume effectively. This formulation is essential for operators to ensure optimal radar performance and target acquisition, as it identifies the exact area where radar tracking is feasible. Understanding this calculation allows operators to maximize the effectiveness of their radar systems during operations.

10. How does the radar system differentiate between friendly and enemy projectiles?

- A. By analyzing color codes
- B. By assessing trajectory and speed data**
- C. By visual identification
- D. By using sound detection

The radar system differentiates between friendly and enemy projectiles primarily by assessing trajectory and speed data. This involves calculating the incoming projectile's angle of approach and its velocity, allowing the system to classify the projectile based on its characteristics. Each type of projectile has a unique flight path and speed profile, which the radar can identify and analyze to determine its origin. Assessing these factors is crucial for situational awareness on the battlefield, as it enables operators to make quick and informed decisions regarding asset protection and response actions. Other methods, such as visual identification or sound detection, are not practical or reliable in all combat situations, especially at long ranges or in low-visibility conditions, thus reinforcing the reliance on trajectory and speed data for accurate classification.

SAMPLE

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://13rfieldartilleryfirefinderradarop.examzify.com>

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

SAMPLE