

Naval Aircrewman - Mechanical (AWF) Test 1 Practice (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

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. What does “yaw” describe in terms of aircraft movement?**
 - A. The rotation of an aircraft around its longitudinal axis**
 - B. The rotation of an aircraft around its vertical axis**
 - C. The upward movement of an aircraft**
 - D. The downward movement of an aircraft**
- 2. Which term describes the fore-to-aft alignment of an airfoil?**
 - A. Pitch**
 - B. Chord Line**
 - C. Span**
 - D. Roll**
- 3. The sum of the weight of an aircraft and its configured items is known as which weight type?**
 - A. Operating Weight**
 - B. Gross Weight**
 - C. Zero Fuel Weight**
 - D. Basic Weight**
- 4. What does DD Form 365-4 detail?**
 - A. The weight of unused fuel**
 - B. Weight and balance clearance for a flight**
 - C. An analysis of aircraft performance**
 - D. Log of emergency equipment**
- 5. When should safe combinations be changed according to military guidelines?**
 - A. Only once a year**
 - B. When anyone who knows it leaves the command**
 - C. Only after a security breach**
 - D. Daily**

- 6. What does compression refer to in the context of stress on materials?**
- A. Stress that stretches an object**
 - B. Stress that causes separation between materials**
 - C. Stress that pushes on or squeezes a material**
 - D. Stress that twists the material**
- 7. What law states that an object in motion stays in motion while an object at rest stays at rest?**
- A. First Law of Motion**
 - B. Second Law of Motion**
 - C. Third Law of Motion**
 - D. Law of Conservation of Momentum**
- 8. What is the force produced by an aircraft's engine known as?**
- A. Thrust**
 - B. Lift**
 - C. Drag**
 - D. Weight**
- 9. DAPA and legal documents have what level of access limitation?**
- A. Eyes only**
 - B. NOFORN**
 - C. FOUO**
 - D. Sensitive**
- 10. What is meant by the term “aerodynamic drag”?**
- A. The lift generated by the aircraft wings**
 - B. The resistance experienced by an aircraft as it moves through the air**
 - C. The force that pulls the aircraft downward**
 - D. The thrust produced by the aircraft engines**

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. What does “yaw” describe in terms of aircraft movement?

- A. The rotation of an aircraft around its longitudinal axis**
- B. The rotation of an aircraft around its vertical axis**
- C. The upward movement of an aircraft**
- D. The downward movement of an aircraft**

Yaw refers to the rotation of an aircraft around its vertical axis. This movement results in the aircraft turning left or right relative to its direction of flight. The vertical axis runs from the top to the bottom of the aircraft, allowing it to pivot around this point. Yaw is primarily controlled by the aircraft's rudder, which is located at the tail of the aircraft. Understanding yaw is crucial for pilots and aircrew as it affects the aircraft's navigation and stability during flight. By controlling yaw, a pilot can maintain the desired flight path and respond effectively to various flight conditions. This makes it an essential component of aircraft maneuverability.

2. Which term describes the fore-to-aft alignment of an airfoil?

- A. Pitch**
- B. Chord Line**
- C. Span**
- D. Roll**

The term that describes the fore-to-aft alignment of an airfoil is "Chord Line." The chord line is an imaginary straight line that connects the leading edge to the trailing edge of an airfoil. This line is crucial in aerodynamics because it helps define the shape and performance characteristics of the airfoil. When discussing lift and drag, understanding the chord line is essential, as it provides a reference for the angle of attack and other aerodynamic measurements. The other options refer to different concepts in aviation. For example, "Pitch" describes the angle of rotation around the lateral axis of the aircraft and affects how the aircraft climbs or descends. "Span" refers to the distance from one wingtip to the other, which is important when discussing the overall size and efficiency of an airfoil in creating lift. "Roll" describes the rotational movement of the aircraft around its longitudinal axis, affecting how the aircraft turns. Each of these terms plays a role in understanding aircraft performance, but the chord line specifically relates to the fore-to-aft alignment of the airfoil.

3. The sum of the weight of an aircraft and its configured items is known as which weight type?

- A. Operating Weight**
- B. Gross Weight**
- C. Zero Fuel Weight**
- D. Basic Weight**

The sum of the weight of an aircraft and its configured items is referred to as Gross Weight. This weight encompasses the total weight of the aircraft, including its structure, systems, fuel, cargo, and any other items it may be carrying at the time of measurement. Understanding Gross Weight is crucial in aviation since it affects performance, safety, and compliance with regulatory limits. In operational contexts, Gross Weight is significant as it determines the performance capabilities of the aircraft, including takeoff and landing distances, fuel consumption, and overall handling characteristics. Pilots and engineers must monitor this weight closely to ensure safety and efficiency during flight operations. The other weight classifications serve different purposes. Operating Weight typically refers to the aircraft weight with necessary items onboard for operation, but without usable fuel. Zero Fuel Weight is the weight of the aircraft plus all its contents, excluding fuel, to ensure stability and control without the variable of fuel weight. Basic Weight generally signifies the aircraft's weight minus usable fuel and payload, focusing on its standard configuration. Each of these terms holds specific meanings and applications, highlighting the importance of accurate weight measurement in aviation.

4. What does DD Form 365-4 detail?

- A. The weight of unused fuel**
- B. Weight and balance clearance for a flight**
- C. An analysis of aircraft performance**
- D. Log of emergency equipment**

DD Form 365-4 is a crucial document that details the weight and balance clearance for a flight. This form is used by pilots and aircrew to ensure that the aircraft is within weight limits for safe operation. Proper weight and balance is vital for maintaining control and stability during flight, as it affects the aircraft's center of gravity and handling characteristics. The form contains pertinent information about the aircraft's load, including the total weight, the distribution of weight across the aircraft, and any additional considerations that may impact the flight. By having this documented, aircrew can confirm that the aircraft is configured correctly before takeoff, which is essential for safety and performance. Understanding and using DD Form 365-4 appropriately helps prevent mishaps related to improper loading, enhancing operational safety in aviation.

5. When should safe combinations be changed according to military guidelines?

A. Only once a year

B. When anyone who knows it leaves the command

C. Only after a security breach

D. Daily

Changing safe combinations when anyone who knows it leaves the command is a critical security measure. This practice ensures that sensitive information and classified materials remain protected, as the departure of an individual who has access to the combination could potentially compromise security. It prevents unauthorized access and maintains the integrity of secure areas. The rationale is not only to safeguard against potential insider threats but also to ensure that the security protocols are updated regularly in alignment with personnel changes. This aligns with military guidelines emphasizing the protection of classified and sensitive information, illustrating a proactive approach to security management within military operations.

6. What does compression refer to in the context of stress on materials?

A. Stress that stretches an object

B. Stress that causes separation between materials

C. Stress that pushes on or squeezes a material

D. Stress that twists the material

In the context of stress on materials, compression specifically refers to stress that pushes on or squeezes a material. This type of stress occurs when forces act to reduce the volume of an object, effectively pushing its particles closer together. When a material is subjected to compressive stress, it experiences an increase in density and is often evaluated for its structural integrity under loads that attempt to compress its shape. Understanding compression is crucial in fields related to engineering and material science, as it impacts how materials behave under various forces. For example, in construction, materials like concrete and steel are designed to handle substantial compressive forces to ensure safety and stability in structures. The other types of stress mentioned, such as tensile stress (which stretches an object), shear stress (which can cause separation between materials), and torsional stress (which twists the material), describe different interactions and behaviors under various loading conditions. However, they do not define compression's specific action of squeezing or pushing, thereby highlighting why the correct answer is related explicitly to compression's nature and effects.

7. What law states that an object in motion stays in motion while an object at rest stays at rest?

- A. First Law of Motion**
- B. Second Law of Motion**
- C. Third Law of Motion**
- D. Law of Conservation of Momentum**

The First Law of Motion, also known as Newton's First Law, articulates the principle of inertia. This law states that an object will maintain its state of motion—whether that is at rest or in motion—unless acted upon by a net external force. This concept highlights the tendency of objects to resist changes in their state of motion. In essence, if an object is stationary, it will remain at rest until something causes it to move. Conversely, if an object is already moving, it will continue moving in a straight line at a constant speed unless a force acts to change that motion. This foundational principle serves as a cornerstone in understanding the behavior of objects in physics and is central to classical mechanics. The other laws mentioned differentiate in their focus; the Second Law addresses the relationship between force, mass, and acceleration, while the Third Law pertains to action and reaction forces. The Law of Conservation of Momentum deals with the constancy of momentum in closed systems, which is a separate concept altogether.

8. What is the force produced by an aircraft's engine known as?

- A. Thrust**
- B. Lift**
- C. Drag**
- D. Weight**

Thrust is the force generated by an aircraft's engines to propel it forward. It is essential for overcoming various forces acting on the aircraft, particularly drag, which opposes the forward motion. The thrust produced by engines is crucial for achieving and maintaining flight, as it must be sufficient to not only move the aircraft forward but also to allow it to climb, maneuver, and ultimately land safely. Understanding thrust is fundamental in aerodynamics and aircraft performance. It plays a pivotal role in how an aircraft accelerates during takeoff, maintains cruise speed during flight, and how it adjusts its speed for approach and landing. The measurement of thrust is often expressed in pounds or newtons, and it can be generated by various types of engines, including jet engines and propellers.

9. DAPA and legal documents have what level of access limitation?

- A. Eyes only**
- B. NOFORN**
- C. FOUO**
- D. Sensitive**

The correct answer indicates that DAPA (Drug and Alcohol Program Advisor) and legal documents are intended to be viewed only by individuals with the appropriate clearance or need-to-know status. The designation "eyes only" signifies a high level of confidentiality and restricts access to specific authorized personnel, ensuring sensitive information is not disclosed to unauthorized individuals. This level of access limitation is crucial for protecting sensitive data, particularly in military and legal contexts where breaches can have serious implications. Documents marked as "eyes only" can contain personal information, legal ramifications, and details that could affect the safety and security of personnel or operations. In contrast, the other options represent different access levels. "NOFORN" indicates information that cannot be shared with foreign nationals, "FOUO" means For Official Use Only, which is slightly less restrictive, and "Sensitive" typically refers to information that must be protected but might not require the same stringent access as "eyes only." Understanding the distinctions between these classifications is essential for someone involved in managing or accessing sensitive information within the military or any secure environment.

10. What is meant by the term "aerodynamic drag"?

- A. The lift generated by the aircraft wings**
- B. The resistance experienced by an aircraft as it moves through the air**
- C. The force that pulls the aircraft downward**
- D. The thrust produced by the aircraft engines**

Aerodynamic drag refers to the resistance experienced by an aircraft as it moves through the air. This resistance acts opposite to the direction of the aircraft's motion and is a crucial factor affecting an aircraft's performance and efficiency. As the aircraft travels, it encounters air molecules that create friction and pressure differing effects, contributing to drag. Understanding aerodynamic drag is essential for optimizing aircraft design, enhancing fuel efficiency, and improving flight performance. In contrast to lift generated by an aircraft's wings, which is essential for overcoming gravity and achieving flight, aerodynamic drag specifically relates to the opposing forces encountered in the air. The downward force that pulls the aircraft is related to gravity rather than drag, and thrust produced by the aircraft engines is the force that propels the plane forward, not a resistance. Thus, the concept of aerodynamic drag is fundamentally tied to the resistance mechanism that impacts how smoothly and efficiently an aircraft can navigate through the atmosphere.

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://awftest1.examzify.com>

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