Space Training Advancement and Readiness Squadron (STARS) TAP Practice Exam (Sample)

Study Guide

BY EXAMZIFY

Everything you need from our exam experts!

Table of Contents

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 is the purpose of a Satellite Tasking Order (STO) or equivalent directive?

A. To assign tasks, priorities, timelines, and constraints for satellite operations.

B. To replace failed components.

C. To schedule ground vehicle procurement.

D. To log spacecraft telemetry.

2. On what date was the first satellite Sputnik launched by the Soviet Union?

A. October 4, 1950

B. October 4, 1957

C. December 4, 1957

D. July 20, 1969

3. Who is the Vice Chief of Space Operations?

A. Gen Shawn N. Bratton

B. General John W. 'Jay' Raymond

C. General B. Chance Saltzman

D. CMSSF John F. Bentivegna

4. What is the purpose of a risk mitigation plan?

A. To document the mission objectives and success criteria.

B. To specify risk owners and deadlines for remediation of all risks.

C. To specify actions, owners, and timelines to reduce identified risks to acceptable levels.

D. To define contingency budgets for all mission phases.

5. Name two primary propulsion types used for orbital maneuvers.

A. Nuclear propulsion and chemical propulsion

B. Chemical propulsion and electric propulsion

C. Gravity assist and ion propulsion

D. Solar sail and chemical propulsion

6. Which statement about availability is correct?

A. Availability equals reliability only.

B. Availability excludes maintainability.

C. Availability considers reliability plus maintainability and uptime.

D. Availability is unrelated to uptime.

7. Explorer 1, the United States' first satellite, was launched on which date?

A. February 2, 1958

B. January 31, 1958

C. February 1, 1958

D. February 1, 1957

8. In the DECIDE model, what does the 'Execute' step mean?

A. Carry out the chosen plan.

B. Define the problem.

C. Evaluate the outcome after actions.

D. Establish criteria.

9. In system engineering, what are typical spacecraft lifecycle stages?

A. Concept, Preliminary Design, Detailed Design, Assembly/Integration/Test, Deployment/Operations, and Disposal

B. Concept, Manufacturing, Launch, Operation

C. Requirements, Verification, Launch, Decommission

D. Design, Build, Test only

10. What is the National Reconnaissance Office mission?

A. Manage civil space programs in coordination with multiple agencies.

B. Lead designs for international space treaties.

C. Develop, acquire, launch, and operate the Nation's space-based intelligence, surveillance, and reconnaissance capabilities to secure and expand the U.S. Intelligence advantage.

D. Oversee commercial satellite constellations for civilian communications.

Answers

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

Explanations

1. What is the purpose of a Satellite Tasking Order (STO) or equivalent directive?

A. To assign tasks, priorities, timelines, and constraints for satellite operations.

B. To replace failed components.

C. To schedule ground vehicle procurement.

D. To log spacecraft telemetry.

The main idea here is that a Satellite Tasking Order is the formal plan that tells the spacecraft what to do, when to do it, and under what limits. It translates mission objectives into concrete commands by assigning specific tasks, ordering them by priority, and specifying the time windows and constraints for each operation. This ensures the spacecraft executes the most important activities first, stays within resource limits like power and thermal conditions, and cooperates with ground station passes and other on-orbit activities to avoid conflicts. An STO (or its equivalent) provides a single, authoritative plan that guides operators and the spacecraft, ensuring safe, efficient, and coordinated satellite operations. It's not about hardware maintenance, procurement, or simply logging telemetry, but about coordinating and sequencing the commanded actions during the mission.

2. On what date was the first satellite Sputnik launched by the Soviet Union?

A. October 4, 1950

B. October 4, 1957

C. December 4, 1957

D. July 20, 1969

Launching a satellite into Earth orbit for the first time shows a pivotal moment when human-made objects could circle the planet. Sputnik's successful launch occurred on October 4, 1957. It was sent into orbit by the Soviet Union using a modified R-7 rocket from the Baikonur launch site and carried a radio transmitter, so people back on Earth could track it by its beeps. This date is significant because it marks the dawn of the space age and sparked the Space Race, prompting the United States to accelerate its own program and eventually establish NASA. The other dates don't fit because they correspond to either events long before practical orbital flight or to different milestones altogether—like the Moon landing in 1969.

3. Who is the Vice Chief of Space Operations?

A. Gen Shawn N. Bratton

B. General John W. 'Jay' Raymond

C. General B. Chance Saltzman

D. CMSSF John F. Bentivegna

The position of Vice Chief of Space Operations is the second-in-command in the U.S. Space Force, serving directly under the Chief of Space Operations. This role focuses on keeping the force ready and operating smoothly by overseeing day-to-day missions, resource management, budget execution, and program implementation across the enterprise. In this question, the name listed is the officer who has held that deputy leadership role, which is why it's identified as the correct choice. The other individuals listed are not the ones who have served in the Vice Chief position, so the option naming the former deputy commander aligns with the role's responsibilities and authority.

4. What is the purpose of a risk mitigation plan?

A. To document the mission objectives and success criteria.

B. To specify risk owners and deadlines for remediation of all risks.

C. To specify actions, owners, and timelines to reduce identified risks to acceptable levels.

D. To define contingency budgets for all mission phases.

A risk mitigation plan translates identified risks into concrete, actionable steps designed to lower their probability or impact to an acceptable level. It lays out who is responsible for each action, exactly what actions will be taken, and when they should be completed. This creates accountability and a clear path forward, allowing the team to execute systematically, monitor progress, and adjust as needed to keep the mission within risk tolerance. This focuses on turning risk into actionable work, not merely documenting objectives or listing owners and deadlines without implementation details. It also differs from simply outlining contingency budgets, which is more about funding responses than specifying the specific mitigations themselves. By detailing actions, owners, and timelines to reduce risk to acceptable levels, the plan provides the practical steps needed to manage uncertainty throughout the mission.

5. Name two primary propulsion types used for orbital maneuvers.

A. Nuclear propulsion and chemical propulsion

B. Chemical propulsion and electric propulsion

C. Gravity assist and ion propulsion

D. Solar sail and chemical propulsion

Two main ways spacecraft achieve changes in velocity for orbital maneuvers are chemical propulsion and electric propulsion. Chemical propulsion uses the energy released from chemical reactions in propellants to produce a large thrust in short bursts. That high-thrust capability is ideal for impulsive maneuvers like rapid burns to insert into an orbit, perform a plane change, or deorbit, where you need a strong push in a brief moment. Electric propulsion instead uses electricity to accelerate propellant to much higher exhaust speeds, giving a very high specific impulse but relatively low thrust. This makes it efficient for long-duration, gradual delta-v changes, such as orbit raising, long-term station-keeping, or deep-space cruise, where conserving propellant mass is valuable even though the maneuver takes longer. Other options like gravity assists involve changing velocity through gravitational interactions rather than producing thrust, and solar sails rely on photon pressure rather than conventional propulsion. Nuclear propulsion exists conceptually but is not a standard method used for typical orbital maneuvers.

6. Which statement about availability is correct?

A. Availability equals reliability only.

B. Availability excludes maintainability.

C. Availability considers reliability plus maintainability and uptime.

D. Availability is unrelated to uptime.

Availability measures how ready a system is to perform its mission by accounting for both how often it works without failing and how quickly it can be restored when it does fail, along with the actual time it is up and running. In practice, that means availability combines reliability (the chance of operating without a failure) with maintainability (how fast you can fix it) and uptime (the amount of time the system is available to operate). That makes the statement that availability considers reliability plus maintainability and uptime the most accurate. Think of it this way: a system might be highly reliable but if it takes a long time to repair, or if it's rarely up and running due to long downtimes, its overall availability will be low. Conversely, quick repairs and lots of up time boost availability. The other options misstate one or more of those relationships and don't reflect how uptime, reliability, and maintainability together determine readiness.

7. Explorer 1, the United States' first satellite, was launched on which date?

A. February 2, 1958

B. January 31, 1958

C. February 1, 1958

D. February 1, 1957

Dates for space launches can vary because which moment you call the “launch” and which time standard you use can shift the calendar date. Explorer 1 lifted off from Cape Canaveral on January 31, 1958, at 22:48 UTC, and it soon went into orbit. Some sources record the date based on a different moment in the timeline or use a different time convention, which can lead to February 1, 1958 appearing in their records. That’s why, in certain references, the date shown is February 1, 1958. The timeline moment most researchers cite as the actual liftoff is January 31, 1958, but understanding the date can depend on the source’s chosen convention.

8. In the DECIDE model, what does the 'Execute' step mean?

A. Carry out the chosen plan.

B. Define the problem.

C. Evaluate the outcome after actions.

D. Establish criteria.

In this DECIDE interpretation, Execute is about taking the first, defining action that starts the decision process: clearly defining the problem you’re trying to solve. By articulating the problem with its boundaries, constraints, and desired outcomes, you set the direction for everything that follows—what criteria matter, which alternatives to consider, and what a successful result looks like. Why this fits best: before you can carry out a plan, judge its effectiveness, or set the standards you’ll use to compare options, you must know exactly what issue you’re addressing. Defining the problem establishes that foundation. The other actions—carrying out a chosen plan, evaluating results, and establishing criteria—occur after this initial framing, during and after the decision process.

9. In system engineering, what are typical spacecraft lifecycle stages?

A. Concept, Preliminary Design, Detailed Design, Assembly/Integration/Test, Deployment/Operations, and Disposal

B. Concept, Manufacturing, Launch, Operation

C. Requirements, Verification, Launch, Decommission

D. Design, Build, Test only

This question is about the full sequence of activities that turn a spacecraft idea into a mission and then into a safe end-of-life. The best choice lays out a complete progression: Concept, Preliminary Design, Detailed Design, Assembly/Integration/Test, Deployment/Operations, and Disposal. Each step represents a real, connected phase in system engineering. Concept starts with exploring the mission idea, assessing feasibility, and defining high-level requirements and constraints. Preliminary Design develops the overall system architecture and interfaces, performing trade studies to show how the concept can meet the requirements within constraints. Detailed Design then finishes the concrete implementation: solving how every subsystem and component will be built, specified, and made to work together. Assembly/Integration/Test brings the actual hardware together, validates that subsystems interface correctly, and confirms performance through testing before flight. Deployment/Operations covers the launch, deployment in space, and the ongoing mission operations, where engineers manage performance, anomaly resolution, and routine maintenance it allows. Disposal completes the lifecycle by decommissioning the spacecraft in a safe and compliant way at end-of-life. The other options omit or misplace essential phases. They either skip key design and integration steps, skip verification and end-of-life activities, or compress the lifecycle into only an initial design-build-test sequence without the subsequent deployment, operations, or disposal phases. The full sequence captures how a spacecraft is conceived, engineered, built, tested, launched, operated, and retired.

10. What is the National Reconnaissance Office mission?

A. Manage civil space programs in coordination with multiple agencies.

B. Lead designs for international space treaties.

C. Develop, acquire, launch, and operate the Nation's space-based intelligence, surveillance, and reconnaissance capabilities to secure and expand the U.S. Intelligence advantage.

D. Oversee commercial satellite constellations for civilian communications.

The NRO's mission centers on building and operating the space-based eyes and ears that provide intelligence for national security. Specifically, it develops, acquires, launches, and operates the Nation's space-based intelligence, surveillance, and reconnaissance capabilities to secure and expand the U.S. intelligence advantage. This means creating the satellites and systems that collect imagery and signals intelligence from space and delivering that data to decision-makers who protect the country. It isn't about managing civil space programs (that's NASA's domain), crafting international space treaties, or overseeing commercial civilian communications satellites—those areas fall outside the NRO's focus.

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://starstap.examzify.com

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