



**GENERAL**

# 2022 TEST GUIDE

**STUDY & PREPARE**

Pass your test and know what is essential to become a safe, competent aviation mechanic—from the most trusted source in aviation training

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### READER TIP

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The FAA Knowledge Exam Questions can change throughout the year. Stay current with test changes; sign up for ASA's free email update service at [asa2fly.com/testupdate](https://asa2fly.com/testupdate)



AVIATION SUPPLIES & ACADEMICS, INC.  
NEWCASTLE, WASHINGTON

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*General Test Guide*  
2022 Edition

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# Updates and Practice Tests

## Free Test Updates for the One-Year Life Cycle of Test Guide Books

The FAA modifies tests as needed throughout the year. ASA keeps abreast of changes to the tests and posts free Test Updates on the ASA website. Before taking your test, be certain you have the most current information by visiting the ASA Test Updates webpage: [asa2fly.com/testupdate](http://asa2fly.com/testupdate). Additionally, sign up for free email notifications, which are sent when new Test Updates are available.

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# Introduction

Welcome to the Aviation Supplies & Academics, Inc., (ASA) Test Guide Series, based on the original Fast-Track series written by Dale Crane. This series has been helping aviation mechanics prepare for FAA Knowledge Exams with great success for more than 60 years. We are confident that with the proper use of this book you will score very well on your FAA Knowledge Exam. Additionally, the ASA Test Guides include typical oral test questions and practical projects to help you prepare for the final step in the Aviation Mechanic certification process.

Begin your studies with an instructor-led or home-study ground school course, which will involve reading a comprehensive AMT textbook. Once complete, visit the dedicated Reader Resource webpage for this Test Guide ([asa2fly.com/reader/AMG](http://asa2fly.com/reader/AMG)) and become familiar with the FAA guidance material available for this certification exam. Then use this Test Guide to prepare for your exam: Read the question, select your choice for the correct answer, and then read the explanation. Use the references that accompany the correct answer at the bottom of each page to identify additional resources for further study. Upon completion of your studies, take practice tests at [prepware.com](http://prepware.com) (see inside the front cover for your five free practice tests).

Prior to taking an FAA Airman Knowledge Test, all applicants must establish an FAA Tracking Number (FTN) by creating a profile in the Integrated Airman Certification and Rating Application (IACRA) system at [iacra.faa.gov](http://iacra.faa.gov). Then visit [faa.psiexams.com](http://faa.psiexams.com) to register for your exam and take FAA-created practice tests to become familiar with the computer testing platform.

The FAA exams are “closed tests” which means the exact database of questions is not available to the public. The question and answer choices in this book are based on our extensive history and experience with the FAA testing process as well as the FAA’s publicly available information. You might see similarly worded questions on your official FAA exam and answer stems may be rearranged from the A, B, C order you see in this book. Therefore, be sure to fully understand the intent of each question and corresponding answer while studying, rather than memorizing the letter associated with the correct response. Studying and understanding the information in this book and the associated references will give you the tools to answer question variations with confidence.

If your study leads you to question an answer choice, we recommend you seek the assistance of a local instructor. We welcome your questions, recommendations or concerns—send them to:

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Fax: 425-235-0128  
Website: [asa2fly.com](http://asa2fly.com)

The FAA appreciates testing experience feedback. Contact them at:

**Federal Aviation Administration**

AFS-630, Airman Testing Standards Branch  
PO Box 25082  
Oklahoma City, OK 73125  
Email: [afs630comments@faa.gov](mailto:afs630comments@faa.gov)

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# General Test Questions, Explanations, Answers, and References

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Answers are printed at the bottom of the page, with other coded items as explained below:

This is the question number.

The brackets enclose the letter answer selected by ASA's researchers. (For those questions for which none of the answer choices provide an accurate response, we have noted [X] as the Answer.)

8001 [C] (031) AMT-G Ch 4

The parentheses enclose the appropriate Learning Statement Code (LSC)—refer to Pages ix–xi. FAA Learning Statement Codes have letter-identifying prefixes, but for reference purposes in this book the letter prefix (“AMG”) is omitted and only the number-identifying portion of the code is shown in parentheses.

The reference following the Learning Statement Code is the source from which the answer was derived. The meanings of these abbreviations are found on Page xii. The number following the abbreviations is the specific chapter within that source to study for more information about the derived answer.

## Aircraft Drawings

**8103.** What type of line is normally used in a drawing or blueprint that indicates invisible edges or contours?

- A—Medium-weight short dashes evenly spaced.
- B—Medium-weight very short dashes evenly spaced.
- C—Thin-weight, one long and two short dashes evenly spaced.

*A medium-weight dashed line is called a hidden line and is used to show an edge or object not visible to the viewer.*

*A medium solid line is used as a visible outline or object line.*

*Alternate short and long light dashes are used to show a center line.*

**8104.** (Refer to Figure 27.) In the isometric view of a typical aileron balance weight, identify the view indicated by the arrow.

- A—1.
- B—3.
- C—2.

*View 3 shows the aileron balance weight as seen from the direction shown by the arrow. This view shows the*

*outline of the weight and the outline of the hole. Both of these are drawn as solid lines.*

*The two bolt holes are shown as light dashed lines (hidden lines), and there are also two hidden lines that show the break lines where the radius begins for the tip of the weight.*

**8105.** (1) A detail drawing is a description of a single part.

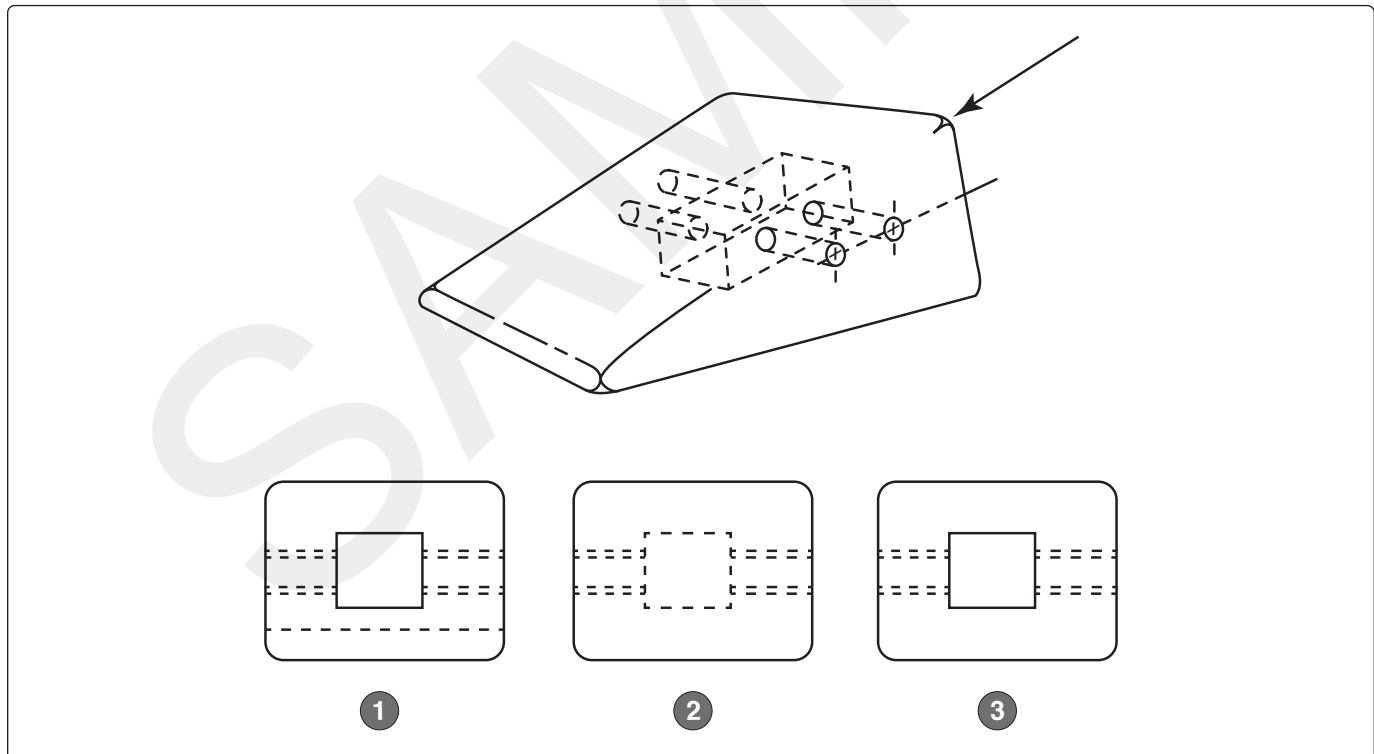
(2) An assembly drawing is a description of an object made up of two or more parts.

Regarding the above statements,

- A—only 1 is true.
- B—neither 1 nor 2 is true.
- C—both 1 and 2 are true.

*Statement 1 is true. A detail drawing is a description of a single part that includes enough information to allow the part to be manufactured (fabricated).*

*Statement 2 is also true. An assembly drawing is a drawing that shows the way various detail parts are put together to form an assembly or a subassembly. Assembly drawings refer to the various parts to be assembled by the drawing number of their detail drawings.*



**Figure 27.** Object views

### Answers

8103 [A] (014) AMT-G Ch 5

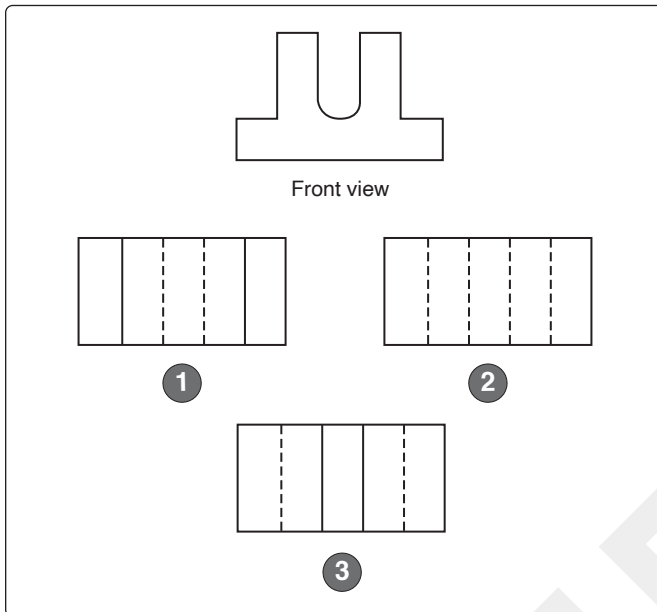
8104 [B] (013) AMT-G Ch 5

8105 [C] (013) AMT-G Ch 5



**8106.** (Refer to Figure 28.) Identify the bottom view of the object shown.

- A—2.
- B—3.
- C—1.



**Figure 28.** Object views

*View 2 shows the part as it would be seen looking up at it from the bottom. The vertical lines are hidden.*

*View 1 is not a correct orthographic view of this part.*

*View 3 is not a correct orthographic view of this part.*

**8107.** A specific measured distance from the datum or some other point identified by the manufacturer, to a point in or on the aircraft is called a

- A—zone number.
- B—reference number.
- C—station number.

*A station number is a number used to identify the number of inches from the datum or other point identified by the manufacturer to a point in or on the aircraft.*

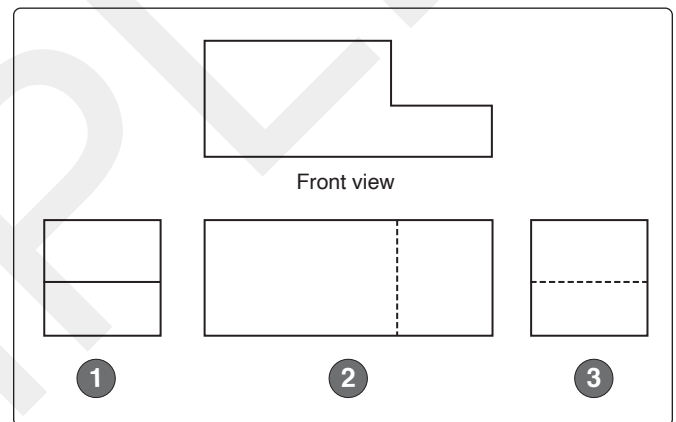
**8108.** Which statement is true regarding an orthographic projection?

- A—There are always at least two views.
- B—It could have as many as eight views.
- C—One-view, two-view, and three-view drawings are the most common.

*An orthographic projection can show as many as six views of an object. One-view, two-view, and three-view drawings are the most commonly used types of orthographic projections.*

**8109.** (Refer to Figure 29.) Identify the left side view of the object shown.

- A—1.
- B—2.
- C—3.



**Figure 29.** Object views

*View 3 is the left side. The horizontal surface is shown as a hidden line.*

*View 1 is the right side. We see the horizontal surface as a visible line.*

*View 2 is the bottom view. The vertical surface is shown as a hidden line.*

**Answers**

8106 [A] (013) AMT-G Ch 5

8107 [C] (013) AMT-G Ch 5

8108 [C] (014) AMT-G Ch 5

8109 [C] (013) AMT-G Ch 5

**8110.** A line used to show an edge which is not visible is a  
 A—phantom line.  
 B—hidden line.  
 C—break line.

*A phantom line is a light line made up of an alternate long dash and two short dashes. A phantom line shows the location of a part that is used as a reference.*

*A hidden line is a medium-weight dashed line that shows a surface or a part that is not visible from the view in which it appears.*

*A break line is a wavy or a zigzag line used to show that a part has been broken off and only part of it is shown.*

**8110-1.** What type of drawing line consists of alternating long and short lines?

- A—Dimension.
- B—Center.
- C—Hidden.

*Centerlines are made up of alternate long and short dashes. They indicate the center of an object or part of an object. Where centerlines cross, the short dashes intersect symmetrically. In the case of very small circles, the centerlines may be shown unbroken.*

**8111.** (Refer to Figure 30.) Identify the bottom view of the object.

- A—1.
- B—2.
- C—3.

*View 1 is the bottom. The two vertical surfaces are shown as hidden lines.*

*View 2 is the left side. The two horizontal surfaces are shown as hidden lines.*

*View 3 is the top view. The two vertical surfaces are shown as visible lines.*

**8112.** (1) Schematic diagrams indicate the location of individual components in the aircraft.

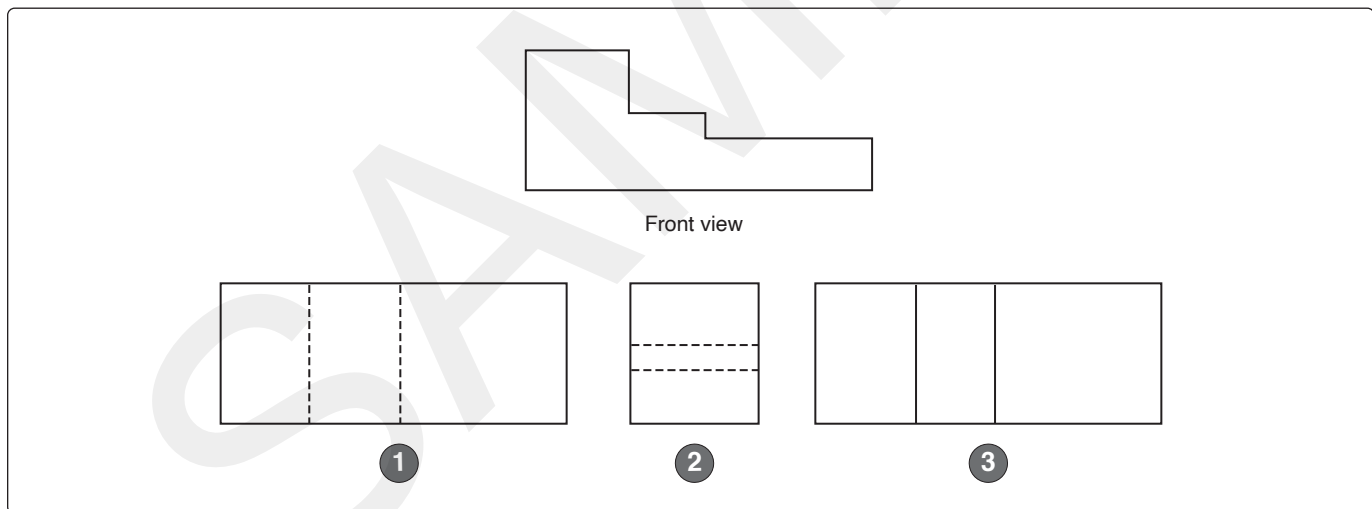
(2) Schematic diagrams indicate the location of components with respect to each other within the system.

Regarding the above statements,

- A—only 1 is true.
- B—both 1 and 2 are true.
- C—only 2 is true.

*Statement 1 is not true. Schematic diagrams do not indicate the location of individual components in the aircraft.*

*Statement 2 is true. Schematic diagrams do show the location of the components with respect to each other within the system.*



**Figure 30.** Object views

**Answers**

8110 [B] (013) AMT-G Ch 5

8110-1 [B] (014) AMT-G Ch 5

8111 [A] (013) AMT-G Ch 5

8112 [C] (014) AMT-G Ch 5

**8113.** (Refer to Figure 31.) What are the proper procedural steps for sketching repairs and alterations?

- A—3, 1, 4, and 2.
- B—4, 2, 3, and 1.
- C—1, 3, 4, and 2.

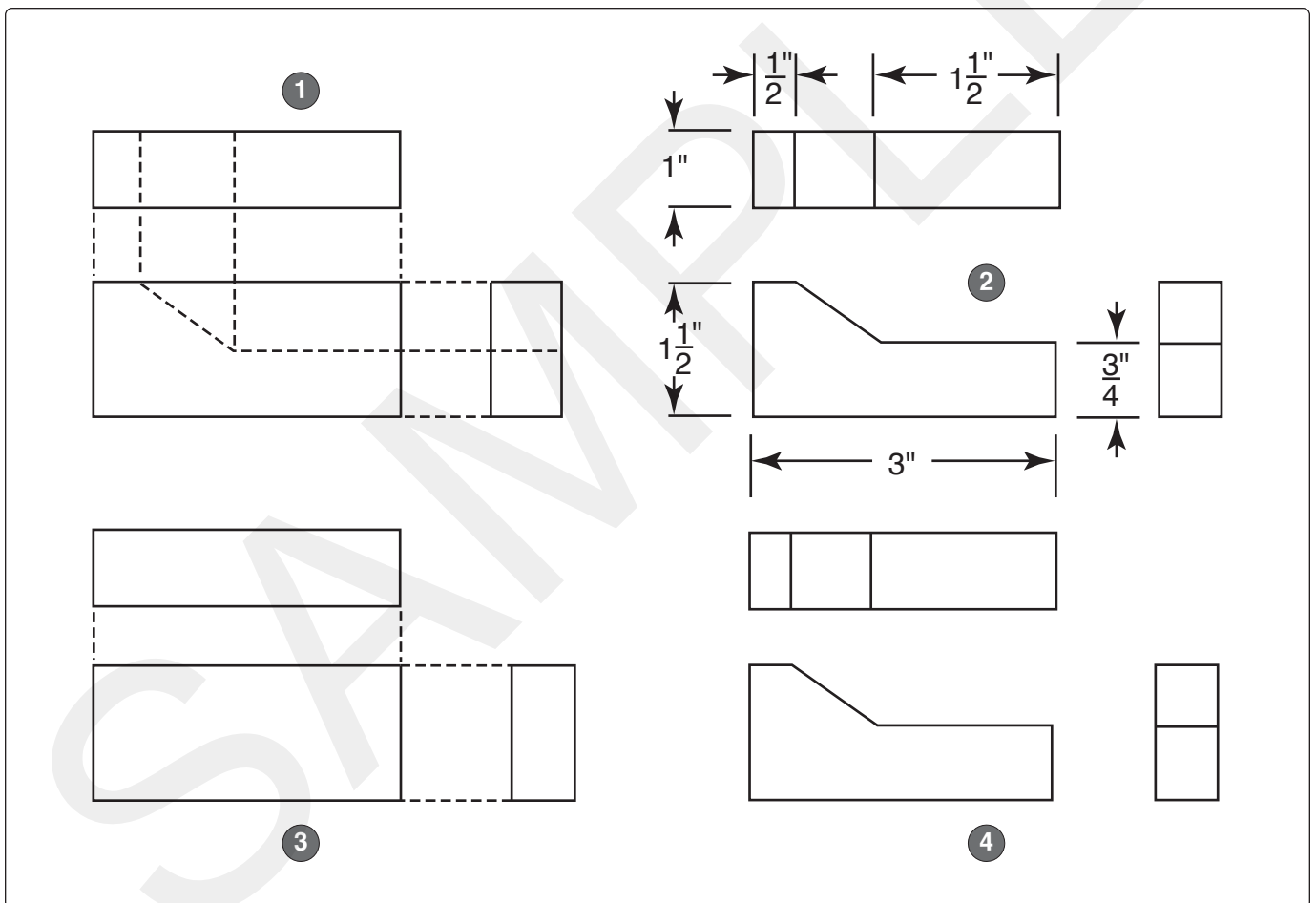
*An easy way to make a sketch of a repair or alteration is to:*

- 3 *Block in the space and basic shape to be used for the sketch;*
- 1 *Add details to the basic block;*
- 4 *Darken the lines that are to show up as visible lines in the finished sketch; and*
- 2 *Add dimensions and any other information that will make the sketch more usable.*

**8114.** Which statement is applicable when using a sketch for making a part?

- A—The sketch may be used only if supplemented with three-view orthographic projection drawings.
- B—The sketch must show all information to manufacture the part.
- C—The sketch need not show all necessary construction details.

*A sketch is a simple, rough drawing made rapidly and without much detail. A sketch is frequently drawn for use in manufacturing a replacement part. Such a sketch must provide all necessary information to those persons who must manufacture the part.*



**Figure 31.** Sketches

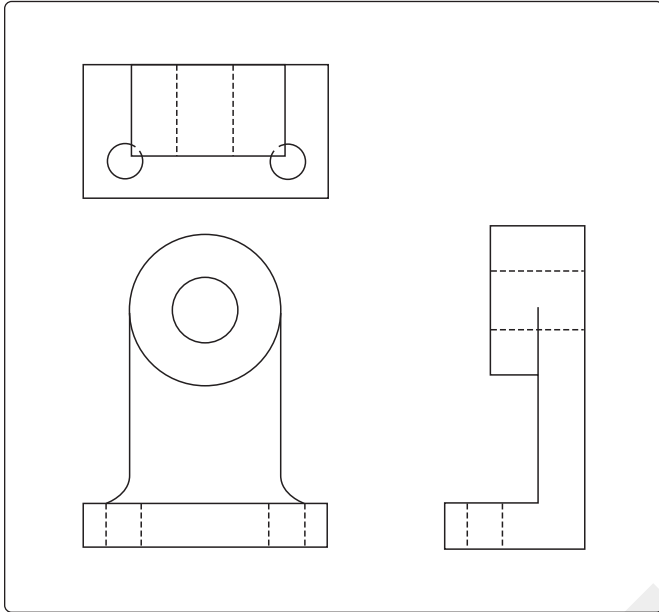
**Answers**

8113 [A] (001) AMT-G Ch 5

8114 [B] (001) AMT-G Ch 5

**8115.** (Refer to Figure 32.) What is the next step required for a working sketch of the illustration?

- A—Darken the object outlines.
- B—Sketch extension and dimension lines.
- C—Add notes, dimensions, title, and date.



**Figure 32.** Sketches

*In the sketch shown here, the part has already been blocked in, details have been added, the visible lines darkened, and the hidden lines added. The next step is to sketch in the extension lines and the dimension lines.*

**8116.** For sketching purposes, almost all objects are composed of one or some combination of six basic shapes; these include the

- A—angle, arc, line, plane, square, and circle.
- B—triangle, circle, cube, cylinder, cone, and sphere.
- C—triangle, plane, circle, line, square, and sphere.

*Almost all objects are composed of one or some combination of the triangle, circle, cube, cylinder, cone, and sphere.*

**8116-1.** In a sectional view drawing, what sections illustrate particular parts of an object?

- A—Removed.
- B—Revolved.
- C—Half.

*A removed section illustrates particular parts of an object. It is similar to revolved sections, except it is placed at one side and, to bring out pertinent details, often drawn to a larger scale than the main view on which it is indicated.*

**8117.** What should be the first step of the procedure in sketching an aircraft wing skin repair?

- A—Draw heavy guidelines.
- B—Lay out the repair.
- C—Block in the views.

*In making a sketch of a repair, the first thing to do is to block in the views.*

*As you block in the views, you are able to organize the sketch so it will clearly show the most information.*

**8117-1.** A simple way to find the center of a circle on a sketch or drawing, or a circular piece of material is to

- A—draw two non-parallel chord lines across the circle and then a corresponding perpendicular bisector line across each chord line.
- B—draw two parallel chord lines across the circle and then a corresponding perpendicular bisector line across each chord line.
- C—draw a single chord line across the circle and then a corresponding perpendicular bisector line across each chord line.

*An easy way to find the center of a circle on a sketch is to draw two non-parallel chord lines across the circle. Then, draw a perpendicular bisector of each of these chord lines. The bisector lines will cross at the center of the circle.*

**8118.** (1) According to 14 CFR Part 91, repairs to an aircraft skin should have a detailed dimensional sketch included in the permanent records.

(2) On occasion, a mechanic may need to make a simple sketch of a proposed repair to an aircraft, a new design, or a modification.

Regarding the above statements,

- A—only 1 is true.
- B—only 2 is true.
- C—both 1 and 2 are true.

*Statement 1 is not true. Part 91 requires that maintenance records contain "a description (or reference to data acceptable to the Administrator) of the work performed..." There is no requirement in Part 91 that a detailed dimensional sketch of a repair become a part of the aircraft's permanent records.*

*Statement 2 is true. A simple sketch is often needed to help a mechanic make a repair, a new design, or a modification.*

**Answers**

8115 [B] (001) AMT-G Ch 5  
8117-1 [A] (001) AMT-G Ch 5

8116 [B] (001) AMT-G Ch 5  
8118 [B] (001) AMT-G Ch 5

8116-1 [A] (013) AMT-G Ch 5

8117 [C] (001) AMT-G Ch 5

**8119.** Working drawings may be divided into three classes. They are:

- A—title drawings, installation drawings, and assembly drawings.
- B—detail drawings, assembly drawings, and installation drawings.
- C—detail drawings, orthographic projection drawings, and pictorial drawings.

*The three classes of working drawings are: detail drawings, assembly drawings, and installation drawings.*

**8119-1.** What is the class of working drawing that is the description/depiction of a single part?

- A—Installation drawing.
- B—Assembly drawing.
- C—Detail drawing.

*A detail drawing is a description of a single part, given in such a manner as to describe by lines, notes, and symbols the specifications as to size, shape, material, and method of manufacture that are to be used in making the part.*

**8120.** Sketches are usually made easier by the use of

- A—graph paper.
- B—plain white paper.
- C—artist's paper.

*Sketches are easily made by using graph paper, which is available, ruled with light lines, in either four or five squares to the inch.*

**8120-1.** (1) Sketches are usually made with the aid of drafting instruments.

(2) Sketches are usually more complicated to make when using graph paper.

Regarding the above statements,

- A—Only 1 is true.
- B—Only 2 is true.
- C—Neither 1 nor 2 is true.

*Sketches are simple drawings made without the use of tools. It is easier to do a sketch on graph paper where dimensions are easier to visualize without using tools such as a ruler.*

**8121.** What material symbol is frequently used in drawings to represent all metals?

- A—Steel.
- B—Cast iron.
- C—Aluminum.

*If the exact specifications of a material are shown on the drawing, the easily drawn symbol for cast iron is used for the sectioning, and the material specification is listed in the bill of materials or indicated in a note.*

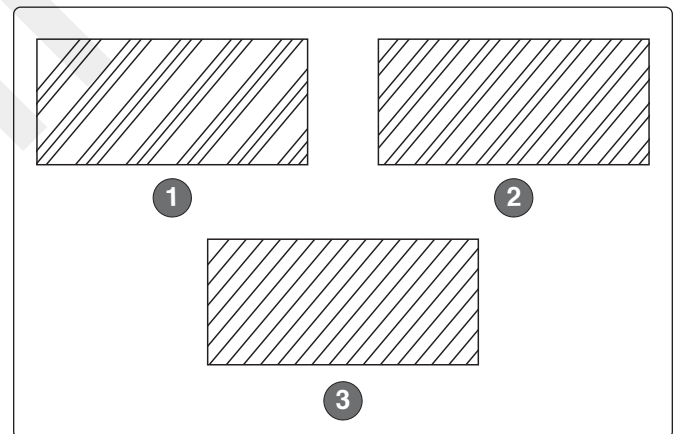
**8121-1.** What is used to indicate that a surface must be machine finished?

- A—Text.
- B—Leader lines.
- C—Finished marks.

*By using finished marks a drawing identifies those surfaces that must be machine finished.*

**8122.** (Refer to Figure 33.) Which material section-line symbol indicates cast iron?

- A—1.
- B—2.
- C—3.



**Figure 33.** Material symbols

*Section lines shown in 3 are for cast iron.*

*Section lines shown in 1 are for rubber, plastic, or electrical insulation.*

*Section lines shown in 2 are for steel.*

#### Answers

8119 [B] (001) AMT-G Ch 5  
8121 [B] (001) AMT-G Ch 5

8119-1 [C] (001) AMT-G Ch 5  
8121-1 [C] (014) FAA-H-8083-30

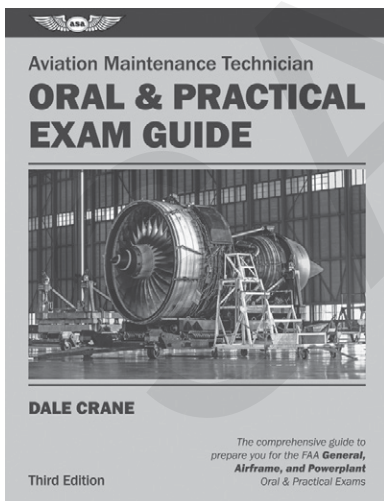
8120 [A] (001) AMT-G Ch 5  
8122 [C] (001) AMT-G Ch 5

8120-1 [C] (001) AMT-G Ch 5

# General Oral & Practical Study Guide

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For more oral and practical projects and sample questions covering General, Airframe, and Powerplant:



## **AMT Oral & Practical Exam Guide**

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Available at [asa2fly.com](http://asa2fly.com) and at your local aviation retailer (order number ASA-OEG-AMT).

# The Oral and Practical Tests

## Prerequisites

All applicants must have met the prescribed experience requirements as stated in 14 CFR §65.77. In addition, all applicants must provide:

1. Proof of having unexpired passing credit for the Aviation Mechanic General (AMG) Knowledge Test by presenting an Airman Knowledge Test Report (except when properly authorized under the provisions of 14 CFR §65.80 to take the practical tests before the airman knowledge tests).
2. Identification with a photograph and signature.

## Test Standards

The examiner will download an oral and practical examination that is generated at random for each applicant that reflects all the knowledge and skill “Areas of Operation.”

Areas of Operation are subject areas in which aviation mechanic applicants must have knowledge or demonstrate skill.

“Tasks” are the items that should be performed according to standards acceptable to the examiner.

“Reference” identifies the publication(s) that describe the task. Information contained in manufacturer and/or FAA approved data always takes precedence over textbook referenced data.

The objective of each Task lists the elements that must be satisfactorily performed to demonstrate competency in the Task.

The objective includes:

1. Specifically what the applicant will be able to do.
2. Conditions under which the Task is to be performed.
3. Acceptable standards of performance.

These terms apply to each Task:

- “Inspect” means to examine by sight and touch.
- “Check” means to verify proper operation.
- “Troubleshoot” means to analyze and identify malfunctions.
- “Service” means to perform functions that ensure continued operation.
- “Repair” means to correct a defective condition.
- “Overhaul” means to disassemble, inspect, repair as necessary, and check.

The applicant should be well prepared in all knowledge and skill areas included in the standards.

Satisfactory performance to meet the requirements for certification is based on the applicant’s ability to:

1. Show basic knowledge.
2. Demonstrate basic mechanic skills.
3. Perform the Tasks within the standards of the reference materials.

The practical test is passed if, in the judgment of the examiner, the applicant demonstrates the prescribed level of proficiency on the assigned Tasks in each Area of Operation. Each practical examination item must be performed, at a minimum, to the performance level in the practical test standards. For mechanic testing, there are three practical performance levels:

- Level 1: You must know basic facts and principles and be able to locate information and reference materials. You do not have to interpret information or demonstrate a physical skill.
- Level 2: Know and understand principles, theories, operations, and concepts. You must be able to find, interpret, and apply maintenance data and information. You must be able to select and utilize the appropriate tools and equipment. While you need to demonstrate adequate performance skills, you do not need to demonstrate skill at a high or return-to-service quality level.
- Level 3: Know and understand principles, theories, operations, and concepts. You must be able to find, interpret, and apply maintenance data and information, select and utilize the appropriate tools and equipment to the overall operation and maintenance of an aircraft. You must be able to demonstrate the ability to work independently and make accurate judgments of airworthiness. You must demonstrate skills at a high level which includes the ability to perform return-to-service levels of work.

If, in the judgment of the examiner, the applicant does not meet the standards of any Task performed, the associated Area of Operation is failed and therefore, the practical test is failed.

Typical areas of unsatisfactory performance and grounds for disqualification are:

1. Any action or lack of action by the applicant that requires corrective intervention by the examiner for reasons of safety.
2. Failure to follow recommended maintenance practices and/or reference material while performing projects.
3. Exceeding tolerances stated in the reference material.
4. Failure to recognize improper procedures.
5. The inability to perform to a return-to-service standard, where applicable.
6. Inadequate knowledge in any of the subject areas.

When an applicant fails a test the examiner will record the applicant's unsatisfactory performance and Tasks not completed in terms of Areas of Operation appropriate to the practical test conducted.

SAMPLE



# Basic Electricity

## Study Materials

Aviation Maintenance Technician Series General textbook ..... ASA ..... Chapter 4

Aviation Maintenance Technician General Handbook FAA-H-8083-30A ..... FAA ..... Chapter 12

## Typical Oral Questions

1. What is the basic unit of voltage?  
*The volt.*
2. What is the basic unit of current?  
*The amp.*
3. What is the basic unit of resistance?  
*The ohm.*
4. Which law of electricity is the most important for an aircraft mechanic to know?  
*Ohm's law.*
5. What are the three elements in Ohm's law?  
*Voltage, current, and resistance (volts, amps, and ohms).*
6. What are five sources of electrical energy?  
*Magnetism, chemical energy, light, heat and pressure.*
7. What four things affect the resistance of an electrical conductor?  
*The material, the cross-sectional area, the length and the temperature.*
8. How can you tell the resistance of a composition resistor?  
*By a series of colored bands around one end of the resistor.*
9. What three things must all electrical circuits contain?  
*A source of electrical energy, a load to use the energy, and conductors to join the source and the load.*
10. What is the purpose of a capacitor?  
*To store electrical energy in electrostatic fields.*
11. What is the basic unit of capacitance?  
*The farad.*
12. Why should electrolytic capacitors not be used in an AC circuit?  
*They are polarized. An electrolytic capacitor will pass current of one polarity, but will block current of the opposite polarity.*
13. What is meant by inductance?  
*The ability to store electrical energy in electromagnetic fields.*
14. What is the basic unit of inductance?  
*The henry.*
15. What is meant by impedance?  
*The total opposition to the flow of alternating current. It is the vector sum of resistance, capacitive reactance and inductive reactance.*
16. How can you find the polarity of an electromagnet?  
*Hold the electromagnet in your left hand with your fingers encircling the coil in the direction the electrons flow. Your thumb will point to the north end of the electromagnet.*
17. In what units is impedance measured?  
*In ohms.*
18. What is the basic unit of electrical power in a DC circuit?  
*The watt.*
19. What is meant by a kilowatt?  
*1,000 watts.*
20. What happens to the current in a DC circuit if the voltage is increased but the resistance remains the same?  
*The current increases.*
21. What are three types of DC circuits, with regard to the placement of the various circuit components?  
*Series, parallel and series-parallel.*
22. How many cells are there in a 24-volt lead-acid battery?  
*12.*

23. What is the specific gravity of the electrolyte in a fully charged lead-acid battery?  
*Between 1.275 and 1.300.*
24. What is the range of temperatures of the electrolyte in a lead-acid battery that does not require that you apply a correction when measuring its specific gravity?  
*Between 70 degrees and 90 degrees Fahrenheit.*
25. What instrument is used to measure the specific gravity of the electrolyte in a lead-acid battery?  
*A hydrometer.*
26. How is a lead-acid battery compartment treated to protect it from corrosion?  
*Paint it with an asphaltic (tar base) paint or with polyurethane enamel.*
27. What is used to neutralize spilled electrolyte from a lead-acid battery?  
*A solution of bicarbonate of soda and water.*
28. How high should the electrolyte level be in a properly serviced lead-acid battery?  
*Only up to the level of the indicator in the cell.*
29. What precautions should be taken in a maintenance shop where both lead-acid and nickel-cadmium batteries are serviced?  
*The two types of batteries should be kept separate, and the tools used on one type should not be used on the other.*
30. Why is a hydrometer not used to measure the state of charge of a nickel-cadmium battery?  
*The electrolyte of a nickel-cadmium battery does not enter into the chemical changes that occur when the battery is charged or discharged. Its specific gravity does not change appreciably.*
31. What is used to neutralize spilled electrolyte from a nickel-cadmium battery?  
*A solution of boric acid and water.*
32. What is meant by electromagnetic induction?  
*The transfer of electrical energy from one conductor to another that is not electrically connected*
33. How many ohms are in a megohm?  
*One million (1,000,000).*
34. What part of an amp is a milliamp?  
*One thousandth (0.001).*

## Typical Practical Projects

1. Compute the voltage and current in an electrical circuit specified by the examiner.
2. Find the total resistance of a combination of resistors that are connected in series.
3. Find the total resistance of a combination of resistors that are connected in parallel.
4. Find the power used by an electric motor when the voltage and the current are known.
5. Identify for the examiner electrical symbols used in an aircraft service manual.
6. Measure the voltage drop across each of the components in a series circuit specified by the examiner.
7. Check an electrical circuit for opens or shorts, using an ohmmeter.
8. Measure the current in an electrical circuit, using a multimeter.
9. Measure the resistance of several components, using an ohmmeter.
10. Use an electrical schematic diagram to locate the source of a malfunction described by the examiner.
11. Measure the state of charge of a lead-acid battery.
12. Correctly connect a lead-acid battery to a constant-current battery charger.
13. Correctly remove electrolyte that has been spilled from a lead-acid battery, and protect the surface around the battery from corrosion.
14. Select the proper size terminal and correctly swage it to an electrical wire.
15. Given a group of composition resistors, identify the resistance and tolerance of each one by the color code.
16. Demonstrate to the examiner the correct way to remove and install an aircraft lead-acid battery.
17. Demonstrate to the examiner the correct way to check a solid-state diode to determine whether or not it is good, or if it is open or shorted.

# Aircraft Drawings

## Study Materials

Aviation Maintenance Technician Series General textbook ..... ASA ..... Chapter 5

Aviation Maintenance Technician General Handbook FAA-H-8083-30A ..... FAA ..... Chapter 4

## Typical Oral Questions

1. What is meant by tolerance on an aircraft drawing?

*The allowable plus or minus variation from the dimension given on the drawing.*

2. What is meant by clearance on an aircraft drawing?

*The amount of space, or separation, that is allowed between two components or parts.*

3. What information is given in the title block of an aircraft drawing?

*The name and address of the company who made the part, the name of the part, the scale of the drawing, the name of the draftsman, the name of the engineer approving the part and the number of the part (the drawing number).*

4. How are dimensions shown on an aircraft drawing?

*By numbers shown in the break of a dimension line.*

5. How can you know that the aircraft drawing you are using is the most current version of the drawing?

*By the number in the revision block and by the log of the most recent drawings.*

6. How many views can there be in an orthographic projection?

*Six.*

7. How many views are used to show most objects in an aircraft drawing?

*Three.*

8. What is the purpose of a center line on an aircraft drawing?

*This is the line that shows the center of the object in the drawing.*

9. What is a fuselage station number?

*The distance in inches from the datum, measured along the longitudinal axis of the fuselage.*

10. Where is the title block normally located on an aircraft drawing?

*In the lower right-hand corner of the drawing.*

11. What is the purpose of a cutting plane on an aircraft drawing?

*It shows where an object has been cut to allow an auxiliary drawing to be made. The arrows on a cutting plane show the direction the auxiliary drawing is viewed.*

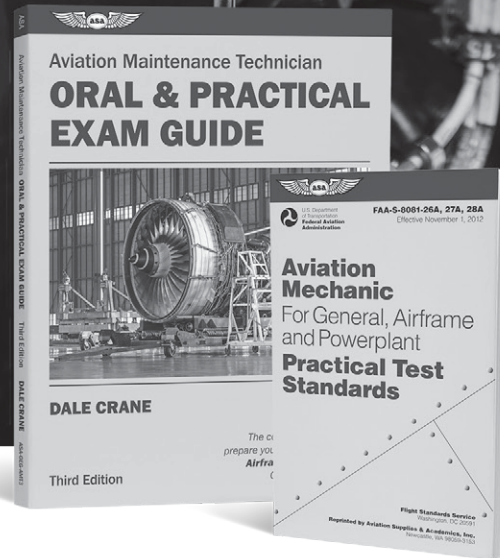
12. How is the alternate position of a part shown on an aircraft drawing?

*By a thin line made up of a series of long dashes separated by two short dashes.*

## Typical Practical Projects

1. Identify the following lines on an aircraft drawing specified by the examiner:
  - a. Center line
  - b. Hidden line
  - c. Alternate-position line
  - d. Cutting plane
2. Using a performance chart for a specific aircraft engine, find the brake horsepower developed when the RPM and BMEP are known.
3. Using the electrical wire chart from AC 43.13-1B, find the correct size wire to use when the current, allowable voltage drop, and length of wire are known.
4. Using a brake specific fuel consumption curve for a specific aircraft engine, find the fuel flow in gallons per hour for a given RPM.
5. Find the dimensions that are specified by the examiner of an object on an aircraft drawing.
6. Make a sketch of an aircraft repair specified by the examiner, giving all of the information that is needed to make the repair.
7. Locate a part on an aircraft drawing specified by the examiner by using the zone numbers.
8. Identify the change number of an aircraft drawing specified by the examiner.
9. Make a sketch of an aircraft part, using the scale the examiner designates.
10. Using an electrical schematic diagram specified by the examiner, identify the components shown by the schematic symbols.

SAMPLE



Also available as 

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