

# PARACHUTE RIGGER KNOWLEDGE TEST GUIDE



**February 2012**



U.S. Department of Transportation  
Federal Aviation Administration



## INTRODUCTION

FAA-G-8082-15F, Parachute Rigger Knowledge Test Guide, provides information for preparing to take the following knowledge tests. This document supersedes FAA-G-8082-15E, dated 2011.

<u>TEST NAME</u>	<u>TEST CODE</u>
Parachute Rigger	RIG
Parachute Rigger—Military Competence	RMC

As parachuting has grown over the last 40 years, so has the need for skilled riggers. The introduction of the ram-air canopy gave the sport a parachute that is highly maneuverable and capable of gentle landings. This advancement of parachute technology opened the sport to many persons who would not have considered it a few years ago. As a result of the rapid expansion of parachute technology, today's riggers are faced with an ever expanding variety of equipment, materials, and rigging requirements. The ram-air canopy, being more complex than the simple round canopy of a few years ago, requires different packing and repair methods, making it essential that today's rigger possess a high degree of knowledge and skill.

Federal Aviation Administration (FAA) airman knowledge tests are effective instruments for aviation safety and regulation compliance measurement. However, these tests can only sample the vast amount of knowledge every airman needs to operate safely in the National Airspace System (NAS).

Comments may be e-mailed to [AFS630Comments@faa.gov](mailto:AFS630Comments@faa.gov).

## KNOWLEDGE TEST ELIGIBILITY REQUIREMENTS

The general qualifications for a Senior or Master Parachute Rigger's Certificate require that you have a combination of experience, knowledge, and skill.

If you are pursuing a Senior, Master, or Military Competence Certificate, you should carefully review the appropriate sections of Title 14 of the Code of Federal Regulations (14 CFR) part 65, subpart A and subpart F for detailed information pertaining to this subject.

## KNOWLEDGE AREAS ON THE TESTS

Parachute Rigger Knowledge Tests are comprehensive because they must test your knowledge in many subject areas. The knowledge test for Military Competence for Senior Parachute Rigger consists of questions relating to Title 14 of the Code of Federal Regulations (14 CFR) that pertain to parachuting: Part 39, Airworthiness Directives; Part 65, Certification: Airmen Other Than Flight Crewmembers, Subpart A, General, and Subpart F, Parachute Riggers; and Part 105, Parachute Operations.

If you are pursuing a Senior Parachute Rigger Certificate, you should review 14 CFR part 65, section 65.115.

If you are pursuing a Military Competence Senior Parachute Rigger Certificate, you should review 14 CFR part 65, section 65.117.

If you are pursuing a Master Parachute Rigger Certificate, you should review 14 CFR part 65, section 65.119.

## DESCRIPTIONS OF THE TESTS

All test questions are the objective, multiple-choice type. Each question can be answered by the selection of a single response. Each test question is independent of other questions; therefore, a correct response to one does not depend upon, or influence, the correct response to another.

**The minimum passing score is 70 percent.**

The Parachute Rigger (RIG) test contains 50 questions, and you are allowed 2 hours to complete it.

The Parachute Rigger Military Competence (RMC) test contains 25 questions, and you are allowed 1 hour to complete it.

## OBTAINING PERMISSION TO TEST

If you will be taking the Parachute Rigger Knowledge Test for the first time, you will need to obtain permission to test. This may be accomplished at your local FAA Flight Standards District Office (FSDO) or International Field Office (IFO) and should be done before contacting the testing center. When you visit the FSDO or IFO, you will be asked to fill out an FAA Form 8610-2, Airman Certificate and/or Rating Application, and to show documentation of your experience. You must also provide a permanent mailing address and positive proof of identification.

### Acceptable Forms of Identification:

- For a U.S. citizen, acceptable forms of photo identification include, but are not limited to: U.S. territory or state issued driver license, U.S. government identification card, U.S. military identification card, passport, and/or citizenship documentation.
- For a non-U.S. citizen, a passport and/or proof of permanent resident status (Form I-551) is required, along with one or more of the following forms of photo identification: driver license, government identification card, and/or military identification card.

Once your eligibility has been established, you will be given FAA Form 8610-2 properly completed and signed by the interviewing Airworthiness Safety Inspector (ASI). This is the form you must present at the testing center to take the test. Ensure that you retain this form; it is also required for the practical exam.

## TEST REGISTRATION

The next step is the actual registration process, which is accomplished in one of two ways. You may contact the computer testing designees (CTDs) through their national 1-800 number (refer to telephone numbers following this paragraph), or call directly to a local site. A complete listing of test centers may be found on the Internet at the FAA website, [www.faa.gov](http://www.faa.gov), under the heading "Training and Testing." You will then need to schedule a test date and make financial arrangements for test payment.

You may register for the tests several weeks in advance, and you may cancel your appointment according to the cancellation policy of the computer testing designee (CTD). If you do not follow the CTD's cancellation policies, you could be subject to a cancellation fee.

### Computer Assisted Testing Service (CATS)

1801 Murchison Drive, Suite 288  
Burlingame, CA 94010

Applicant inquiry and test registration: 1-800-947-4228  
From outside the U.S. (650) 259-8550

 **LaserGrade Computer Testing**  
16821 SE McGillivray Blvd., Suite 201  
Vancouver, WA 98683

Applicant inquiry and test registration: 1-800-211-2753 or 1-800-211-2754  
From outside the U.S. (360) 896-9111

## **TAKING A KNOWLEDGE TEST**

At the test site, you will again be asked to provide proper identification and the completed FAA Form 8610-2. Testing center personnel will not begin the test until the required items are verified. Before you take the actual test, you will have the option to review a tutorial that demonstrates test navigation. The actual test is time limited; however, you should have sufficient time to complete and review your test.

When taking a test, keep the following points in mind:

- Carefully read the instructions given with the test.
- Answer each question in accordance with the latest regulations and guidance publications.
- Read each question carefully before looking at the answer options. You should clearly understand the problem before attempting to solve it.
- After formulating an answer, determine which answer option corresponds with your answer. The answer you choose should completely resolve the problem.
- From the answer options given, it may appear that there is more than one possible answer; however, there is only one answer that is correct and complete. The other answers are either incomplete, erroneous, or derived from popular misconceptions.
- If a certain question is difficult for you, it is best to mark it for review and proceed to the next question. After you answer the less difficult questions, return to those you marked for review and answer them. The review marking procedure will be explained to you prior to starting the test. Although the computer should alert you to unanswered questions, make sure every question has an answer recorded. This procedure will enable you to use the available time to maximum advantage.
- When solving a calculation problem, select the answer that most nearly matches your solution. The problem has been checked by various individuals and with different types of calculators; therefore, if you have solved it correctly, your answer will be closer to the correct answer than any of the other choices.

## **USE OF TEST AIDS AND MATERIALS**

You may use aids, reference materials, and test materials within the guidelines listed below, if actual test questions or answers are not revealed. The following guidelines apply:

- You may use any reference materials provided with the test.
- Dictionaries are not allowed in the testing area.
- The proctor makes the final determination relating to test materials and personal possessions you may take into the testing area.

## **DYSLEXIC TESTING PROCEDURES**

If you are a dyslexic applicant, you may request approval from the local FSDO or IFO to take airman knowledge test using one of the three options listed in preferential order:

Option 1. Use current testing facilities and procedures whenever possible.

Option 2. You may use a Franklin Speaking Wordmaster® to facilitate the testing process. The Wordmaster® is a self-contained electronic thesaurus that audibly pronounces typed in words and presents them on a display screen. It has a built-in headphone jack for private listening. The headphone feature must be used during testing to avoid disturbing others.

Option 3. If you do not choose to use the first or second option, you may request a proctor to assist in reading specific words or terms from the test questions and supplement material. In the interest of preventing compromise of the testing process, the proctor must be someone who is non-aviation oriented.

The proctor must provide reading assistance only, with no explanation of words or terms. When this option is requested, the FSDO or IFO inspector must contact the Airman Testing Standards Branch (AFS-630) for assistance in selecting the test site and proctor.

Prior to approval of any option, the FSDO or IFO inspector must advise you of the regulatory certification requirement of being able to read, write, speak, and understand the English language.

## **CHEATING OR OTHER UNAUTHORIZED CONDUCT**

Computer testing centers must follow strict security procedures to avoid test compromise. These procedures are established by the FAA and are covered in FAA Order 8080.6, (as amended), Conduct of Airman Knowledge Tests. The FAA has directed testing centers to terminate a test at any time a test proctor suspects a cheating incident has occurred. An FAA investigation will then be conducted. If the investigation determines that cheating or unauthorized conduct has occurred, then any airman certificate or rating that you hold may be revoked, and you will be prohibited for 1 year from applying for or taking any test for a certificate or rating under 14 CFR part 65.

## **KNOWLEDGE TEST REPORTS**

Upon completion of the knowledge test, you will receive your Airman Knowledge Test Report, with the testing center's embossed seal, which reflects your score.

The Airman Knowledge Test Report lists the learning statement codes for questions answered incorrectly. The total number of learning statement codes shown on the Airman Knowledge Test Report is not necessarily an indication of the total number of questions answered incorrectly.

The Learning Statement Reference Guide for Airman Knowledge Testing, found at [www.faa.gov](http://www.faa.gov), contains the listings of reference materials, learning statement codes, and learning statements. The learning statement codes, as used in airman testing, refer to a measurable statement of knowledge that a student should be able to demonstrate following a defined element of training. You should match the codes on your Airman Knowledge Test Report to the codes in the Learning Statement Reference Guide to review your areas of deficiency.

Your instructor is required to provide instruction on each of the knowledge areas listed on your Airman Knowledge Test Report and to complete an endorsement of this instruction. The Airman Knowledge Test

Report must be presented to the examiner prior to taking the practical test. During the oral portion of the practical test, the examiner is required to evaluate the noted areas of deficiency.

Should you require a duplicate Airman Knowledge Test Report due to loss or destruction of the original, send a signed request accompanied by a check or money order for \$1.00, payable to the FAA. Send the request to:

Federal Aviation Administration  
Airmen Certification Branch, AFS-760  
P.O. Box 25082  
Oklahoma City, OK 73125

For an Airman Knowledge Test Report to be valid, it must be dated within the 24-calendar-month period preceding the month you complete the practical test. **If the Airman Knowledge Test Report expires before completion of the practical test, you must retake the knowledge test.**

## **RETESTING PROCEDURES**

If you receive a grade lower than 70 percent and wish to retest, you must present the following to testing center personnel.

- You may retake the test after 30 days from the date your last test was taken by presenting your failed Airman Knowledge Test Report.
- You may retest sooner than 30 days if you present the following: your failed Airman Knowledge Test Report and a signed statement from an airman holding the certificate and rating you seek certifying that you have been given additional instruction in each subject failed and that you are now ready for retesting.

If you decide to retake the test in anticipation of a better score, you may retake the test after 30 days from the date your last test was taken. The FAA will not allow you to retake a passed test before the 30-day period has lapsed. Prior to retesting, you must give your current Airman Knowledge Test Report to the test proctor. The last test taken will reflect the official score.

## **TRAINING AND TESTING PUBLICATIONS AND GENERAL INFORMATION**

Most of the current Flight Standards Service airman training and testing publications can be obtained in electronic format from the FAA Web site, [www.faa.gov](http://www.faa.gov). The training and testing publications and general information can be found on the opening page of that web site. If a publication is not available in electronic format, there are instructions for obtaining paper copies. Information found on the web site includes, but is not limited to, the following:

- Advisory Circulars
- Airworthiness Directives
- Code of Federal Regulations
- Computer Testing Supplements
- Knowledge Test Centers
- Knowledge Test questions (samples)
- Knowledge Test statistics
- Learning Statement Reference Guide
- Practical Test Standards
- Training handbooks
- Type Certificate Data Sheets

### **Advisory Circulars**

Advisory circulars (ACs) provide guidance and information on various subjects related to airman certification.

### **Airworthiness Directives**

Airworthiness Directives (ADs) are notifications to aircraft owners of a known safety deficiency with a specific model of aircraft, engine, avionics, or other system.

### **Code of Federal Regulations**

The portion of 14 CFR containing what was formerly known as the Federal Aviation Regulations can be found on the Web site. 14 CFR contains regulations designed to promote aviation safety, and govern all aviation activities in the United States.

### **Computer Testing Supplements**

The knowledge testing supplements contain the graphics, legends, and maps that are needed to successfully respond to certain knowledge test items. These supplements will be provided by CTD test center personnel during the airman knowledge test.

### **Knowledge Test Centers**

The Knowledge Test Centers portion of the Web site contains current listings of CTDs and other testing centers, and the registration telephone numbers to call to register for a test.

### **Knowledge Test Questions**

Sample questions are located in the Airman Knowledge Test Questions section of Web site and represent the types of questions included in the actual test banks. Practicing these questions will help you become familiar with similar questions on the airman knowledge tests. The knowledge test is not designed to intimidate any prospective airman; it is designed to measure understanding of the rules and regulations required to receive an FAA certificate.

### **Knowledge Test Statistics**

Test statistics for all airman knowledge tests are contained in a series of tables organized by year and subject area. Individual tables are provided for the following subject areas: test volume, pass rates, average test scores, countries, regions, and district offices.

### **Learning Statement Reference Guide**

Learning statement codes replace the old subject matter codes. They are also noted on the test report. They refer to measurable statements of knowledge that a student should be able to demonstrate following a defined element of training. The learning statement

### **Practical Test Standards**

The practical test standards outline the knowledge and skill requirements for each airman certificate and rating. The references listed in each task of the practical test standards indicate the specific publications used to develop the skill standards. The ability to issue immediate changes prior to publishing revised printed copies ensures the practical test standards are always accurate and usable.

### **Training Handbooks**

The training handbooks are the basic information sources an airman applicant should refer to when preparing for the knowledge and practical tests for a specific certificate or rating. FAA handbook FAA-H-8083-17 (as revised), Parachute Rigger Handbook, is a large document and will take a few minutes to download.

### **Type Certificate Data Sheets (TCDS)**

A Type Certificate Data Sheet contains a formal description of an aircraft, engine, or propeller, including detailed specification of the type design and the information required for type certification.



**Parachute Rigger (RIG)  
Sample Questions**

## PARACHUTE RIGGER (RIG)

### 1. Where are cross-ports located in a ram-air canopy?

- A—At 10% of the cord.
- B—In the outboard end ribs.
- C—Midway between suspension line attachment points.

*Answer: C.*

*Learning Statement: Recall ram-air canopy—design/container/harness.*

### 2. Suspension line breakage in ram-air canopies most often occurs at what line position?

- A—The leading edge outboard.
- B—The trailing edge mid-canopy.
- C—The leading edge center line.

*Answer: C.*

*Learning Statement: Recall suspension/steering line-inspection/repair/packing/malfunction/design.*

### 3. What is the correct procedure for measuring replacement Spectra line? Before marking, tension under

- A—10 lbs.
- B—5 lbs. for 30 minutes.
- C—30 lbs. for 30 seconds.

*Answer: B.*

*Learning Statement: Recall line replacement/repair-procedures/techniques.*

### 4. Which of the following is used to determine the size of the sewing machine needle to be used for a particular job?

- A—Size of the hole in the feed dog.
- B—Length of the seam to be sewn.
- C—Thread size and type of cloth.

*Answer: C.*

*Learning Statement: Recall sewing machine –attachments/needles/thread.*

### 5. What Federal Aviation Regulation prescribes rules for intentional parachute jumping?

- A—FAR Part 65.
- B—FAR Part 91.
- C—FAR Part 105.

*Answer: C.*

*Learning Statement: Recall regulatory specifics – rules & regulations.*

## LIST OF REFERENCE MATERIALS SPECIFIC TO THE PARACHUTE RIGGER (RIG)

<i>Topic</i>	<i>Content</i>	<i>Specific</i>
<b>RIG003</b> <a href="#">Parachute Rigger Handbook, FAA-H-8083-17</a> Packing Parachutes	Inspection	Basic Packing Procedure(s).
<b>RIG004</b> <a href="#">The Parachute Manual</a> Packing Parachutes	Folding/Stowing	Basic Packing Procedure(s).
<b>RIG005</b> <a href="#">The Parachute Manual Vol II</a> Parachute Construction Details	Deployment Device	System Operational Fundamentals.
<b>RIG006</b> <a href="#">14 CFR 65</a> Certification	Test Requirements	Certification Requirement(s)
<b>RIG017</b> <a href="#">14 CFR 65</a> Packing Parachutes	Inspection	Regulatory Packing Requirements.
<b>RIG020</b> <a href="#">PIA Technical Standard 100</a> Parachute Operation/Care	Forces Acting on Parachute	Design and/or Aerodynamic Fundamental(s).
<b>RIG022</b> <a href="#">The Parachute Manual Vol II</a> Parachute Operation/Care	Function-Parts/Assemblies	Operational Malfunction.
<b>RIG023</b> <a href="#">The Parachute Manual Vol II</a> Parachute Construction Details	Reserve Deployment Device	Design and/or Aerodynamic Fundamentals.
<b>RIG024</b> <a href="#">PIA Technical Standard 100</a> Parachute Construction Details	Main Canopy	Design and/or Aerodynamic Fundamentals.
<b>RIG037</b> <a href="#">The Parachute Manual</a> Parachute Repair	Sewing Machines	Machine Operating Fundamentals.
<b>RIG040</b> <a href="#">Parachute Rigger Handbook, FAA-H-8083-17</a> Parachute Construction Details	Container	Basic Construction Procedure(s).
<a href="#">The Parachute Manual Vol II</a> Parachute Construction Details	Parachute Specifications	Sewing Fundamentals.
<b>RIG041</b> <a href="#">Parachute Rigger Handbook, FAA-H-8083-17</a> Parachute Construction Details	Reserve Deployment Device	System Operational Fundamentals.

**Parachute Rigger Military Competence (RMC)  
Sample Questions**

## PARACHUTE RIGGER MILITARY COMPETENCE (RMC)

### 1. Where are cross-ports located in a ram-air canopy?

- A—At 10% of the cord.
- B—In the outboard end ribs.
- C—Midway between suspension line attachment points.

*Answer: C.*

*Learning Statement: Recall ram-air canopy—design/container/harness.*

### 2. Suspension line breakage in ram-air canopies most often occurs at what line position?

- A—The leading edge outboard.
- B—The trailing edge mid-canopy.
- C—The leading edge center line.

*Answer: C.*

*Learning Statement: Recall suspension/steering line-inspection/repair/packing/malfunction/design.*

### 3. What is the correct procedure for measuring replacement Spectra line? Before marking, tension under

- A—10 lbs.
- B—5 lbs. for 30 minutes.
- C—30 lbs. for 30 seconds.

*Answer: B.*

*Learning Statement: Recall line replacement/repair-procedures/techniques.*

### 4. Which of the following is used to determine the size of the sewing machine needle to be used for a particular job?

- A—Size of the hole in the feed dog.
- B—Length of the seam to be sewn.
- C—Thread size and type of cloth.

*Answer: C.*

*Learning Statement: Recall sewing machine –attachments/needles/thread.*

### 5. What Federal Aviation Regulation prescribes rules for intentional parachute jumping?

- A—FAR Part 65.
- B—FAR Part 91.
- C—FAR Part 105.

*Answer: C.*

*Learning Statement: Recall regulatory specifics – rules & regulations.*

## LIST OF REFERENCE MATERIALS SPECIFIC TO THE PARACHUTE RIGGER MILITARY COMPETENCE (RMC)

<i>Topic</i>	<i>Content</i>	<i>Specific</i>
<b>RIG006</b>		
<a href="#">14 CFR 65</a>		
Certification	Experience Requirements	Certification Requirement(s)
Certification	Skill Requirements	Regulatory Requirements
Certification	Test Requirements	Certification Requirement(s)