

Remote Pilot Knowledge Test Guide

February 2017



U.S. Department of Transportation
Federal Aviation Administration

INTRODUCTION

FAA-G-8082-20, Remote Pilot Knowledge Test Guide, dated February 2017, provides information for preparing you to take the following airman knowledge test (AKT).

Test Name

Unmanned Aircraft General – Small

Test Code

UAG

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 pilot needs to operate safely in the National Airspace System (NAS).

Comments may be emailed to AFS630Comments@faa.gov.

KNOWLEDGE TEST ELIGIBILITY REQUIREMENTS

For a summary of knowledge test eligibility requirements for the certification area listed above, refer to the FAA Airman Knowledge Testing Authorization Matrix located at http://www.faa.gov/training_testing/testing/media/testing_matrix.pdf

The general qualifications for a Remote Pilot Certificate require that you have the appropriate knowledge to operate safely in the National Airspace System (NAS).

ENGLISH LANGUAGE PROFICIENCY

In accordance with the requirements of AC 107-2, Small Unmanned Aircraft Systems (sUAS), and the aviation English Language proficiency requirements, you must accomplish the entire application process and testing procedures with sufficient fluency in the English language so that crew coordination and communication is never in doubt. Normal restatement of questions, as would be done for an applicant who is a native English speaker, is permitted and should not be deemed grounds for disqualification.

Title 14 of the Code of Federal Regulations (14 CFR) part 107, Small Unmanned Aircraft Systems, requires that pilots must be able to read, write, speak, and understand the English language. If you cannot meet these requirements of English fluency, an airman certificate cannot be issued.

If you are pursuing a Remote Pilot Certificate you should carefully review the appropriate sections of 14 CFR part 107.73 for detailed information pertaining to this subject.

KNOWLEDGE AREAS ON THE TESTS

The Unmanned Aircraft General – Small airman knowledge test covers the following knowledge areas:

- (1) Applicable regulations relating to small unmanned aircraft system rating privileges, limitations, and flight operation;
- (2) Airspace classification, operating requirements, and flight restrictions affecting small unmanned aircraft operation;
- (3) Aviation weather sources and effects of weather on small unmanned aircraft performance;
- (4) Small unmanned aircraft loading;
- (5) Emergency procedures;

- (6) Crew resource management;
- (7) Radio communication procedures;
- (8) Determining the performance of small unmanned aircraft;
- (9) Physiological effects of drugs and alcohol;
- (10) Aeronautical decision-making and judgment;
- (11) Airport operations; and
- (12) Maintenance and preflight inspection procedures.

DESCRIPTION OF THE TEST

All test questions are objective and multiple-choice. 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 UAG test contains 60 questions; you are allowed 2 hours to complete.

APPLYING FOR A REMOTE PILOT CERTIFICATE WITH A SMALL UAS RATING

When applying for a Remote Pilot Certificate with a Small UAS rating, the applicant must meet one of the following:

- An applicant who chooses to take the knowledge test for an sUAS rating must successfully pass the knowledge test, and make an application via the Integrated Airman Certification and Rating Applicant (IACRA) web site. IACRA may be found at this URL: <https://iacra.faa.gov/IACRA/Default.aspx>.
- If the person holds a pilot certificate issued under 14 CFR part 61 and meets the recency requirements specified in § 61.56, the applicant must provide a certificate of completion of an initial training course. The applicant must also show via logbook entry or other method acceptable to the Administrator that they meet the flight review requirements of § 61.56.
- Additionally, the applicant must meet the requirements of §107.61.

An applicant who meets the requirements of holding a 14 CFR part 61 pilot certificate, meets the recency of experience requirements (14 CFR 61.56), and has successfully completed the online training course, must submit their application to a Flight Standards District Office (FSDO), a Designated Pilot Examiner (DPE), an Airman Certification Representative (ACR) for a pilot school, a certified flight instructor, or other person authorized by the Administrator to process the application.

An applicant will find the application requirements in AC 107-2, Small Unmanned Aircraft Systems (sUAS), at https://www.faa.gov/documentLibrary/media/Advisory_Circular/AC_107-2.pdf.

TEST REGISTRATION

The FAA has designated two Airman Knowledge Testing (AKT) Organization Designation Authorization (ODA) Holders, which sponsor hundreds of knowledge testing center locations. These testing centers offer a full range of airman knowledge tests including: Unmanned Aircraft Systems (UAS), Aircraft Dispatcher, Airline Transport Pilot, Aviation Maintenance Technician, Commercial Pilot, Flight Engineer, Flight Instructor, Flight Navigator, Ground Instructor, Inspection Authorization, Instrument Rating, Parachute Rigger, Private Pilot, Recreational Pilot, Sport Pilot and Military Competence. Contact information for the AKT ODA Holders is provided below under Knowledge Test Centers.

The first step in taking a knowledge test is the registration process. You may either call a central registration phone number or appear at a testing center on a walk-in basis. If you choose to use a central registration phone number to schedule your test, you will need to be prepared to select a test date, choose a testing center, and make financial arrangements for test payment. You may register for tests several weeks in advance, and you may cancel your appointment according to the AKT ODA Holder's cancellation policy. If you do not follow the AKT ODA Holder's cancellation policies, you could be subject to a cancellation fee.

APPLICANT IDENTIFICATION AND TEST AUTHORIZATION

The next step in taking a knowledge test is providing proper identification. You should determine what knowledge test prerequisites are necessary before going to the computer-testing center. Your local FAA Flight Standards District Office (FSDO) may advise you regarding the documentation required to be presented at the testing facility. Testing center personnel will not begin the test until your identification and eligibility is verified.

Acceptable forms of authorization and retesting procedures are available in the latest version of the Applicant Identification, Information, Verification, & Authorization Requirements Matrix located at: http://www.faa.gov/training_testing/testing/media/testing_matrix.pdf.

TEST TAKING TIPS

Prior to launching the actual test, the AKT ODA Holder's testing software will provide you with an opportunity to practice navigating through the test. This practice (or tutorial) session may include a "sample" question(s). These sample questions have no relation to the content of the test, but are meant to familiarize you with the look and feel of the system screens, including selecting an answer, marking a question for later review, time remaining for the test, and other features of the testing software.

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 options given, it may appear there is more than one possible answer; however, there is only one answer that is correct and complete. The other options 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 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 closest to your solution. The problem has been checked with various 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.
- For graph type questions, you may request a printed copy of the graph upon which you may actually draw and write to compute the answer. All paper work must be turned in to the test center representative upon completion of the test.

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. All models of aviation-oriented calculators may be used, including small electronic calculators that perform only arithmetic functions (add, subtract, multiply, and divide). Simple programmable memories, which allow addition to, subtraction from, or retrieval of one number from the memory, are permissible. Also, simple functions, such as square root and percent keys are permissible.

The following guidelines apply:

1. You may use any reference materials provided with the test. In addition, you may use scales, straightedges, protractors, plotters, navigation computers, log sheets, and electronic or mechanical calculators that are directly related to the test.
2. Manufacturer's permanently inscribed instructions on the front and back of such aids (e.g., formulas, conversions, regulations, signals, weather data, frequencies, weight-and-balance formulas) are permissible.
3. Testing centers may provide a calculator to you and/or deny use of your personal calculator based on the following limitations:
 - a. Prior to, and upon completion of the test, while in the presence of the Unit Member (formerly referred to as proctor), you must actuate the ON/OFF switch and perform any other function that ensures erasure of any data stored in memory circuits.
 - b. The use of electronic calculators incorporating permanent or continuous type memory circuits without erasure capability is prohibited. The Unit Member may refuse the use of your calculator when unable to determine the calculator's erasure capability.
 - c. Printouts of data must be surrendered at the completion of the test if the calculator incorporates this design feature.
 - d. The use of magnetic cards, magnetic tapes, modules, computer chips, or any other device upon which pre-written programs or information related to the test can be stored and retrieved is prohibited.
 - e. You are not permitted to use any booklet or manual containing instructions related to use of test aids.
4. Dictionaries are not allowed in the testing area.
5. The Unit Member makes the final determination relating to test materials and personal possessions you may take into the testing area.

TESTING PROCEDURES FOR APPLICANTS REQUESTING SPECIAL ACCOMMODATIONS

If you are an applicant with a learning or reading disability, you may request approval from AFS-630, through the local FSDO or IFO, to take an airman knowledge test using one of the three options listed below, in preferential order:

- Option 1. Use current testing facilities and procedures whenever possible.
- Option 2. You may use a self-contained, electronic device which pronounces and displays typed-in words (e.g., the Franklin Speaking Wordmaster®) to facilitate the testing process. (NOTE: The device should consist of an electronic thesaurus that audibly pronounces typed-in words and presents them on a display screen. The device should also have a built-in headphone jack for private listening in order to avoid disturbing others during testing.)
- Option 3. If you do not choose to use the first or second option, you may request Unit Member assistance in reading specific words or terms from the test questions and/or supplement book. In the interest of preventing compromise of the testing process, the Unit Member must be an individual with no aviation background or expertise. The Unit Member 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 assisting Unit Member.

Prior to approval of any option, the FSDO or IFO Aviation Safety 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 Unit Member suspects a cheating incident has occurred. An FAA investigation will then be conducted. If the investigation determines that cheating or unauthorized conduct has occurred, any airman certificate or rating 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 107 or 14 CFR part 61.

LEARNING STATEMENTS

Learning statements, as used in airman knowledge testing, refer to a measurable level of knowledge a student should be able to demonstrate as outlined in the appropriate Airman Certification Standards (ACS). The most current Learning Statement Reference Guide for Airman Knowledge Testing is online at http://www.faa.gov/training_testing/testing/media/LearningStatementReferenceGuide.pdf.

We provide learning statements to help an applicant become more familiar with the areas of knowledge applicable to the airman training, learning, studying, and testing processes.

Beyond serving as a useful reference in preparing for your airman knowledge test, the Learning Statement Reference Guide will assist you in interpreting any learning statement codes that may appear on your Airman Knowledge Test Report. You will receive a test report immediately upon completion of the test. This report will list learning statement codes for any questions you may have answered incorrectly. You should match the codes on the test report to the information in the Learning Statement Reference Guide in order to obtain the corresponding areas of knowledge deficiency.

AIRMAN KNOWLEDGE TEST REPORTS

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

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 \$12.00, payable to the FAA. Send the request to:

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

Airman Knowledge Test Reports are valid until the end of the month 24-calendar months after completing the knowledge test. **If the Airman Knowledge Test Report expires before you complete the application process, you must retake the knowledge test.**

REQUESTING A HAND-SCORE

If you wish to have your test hand-scored, you must submit a request, in the form of a signed letter, to the Airman Testing Standards Branch, AFS-630. The request must be accompanied by a copy of your Airman Knowledge Test Report and a legible photocopy of a government issued identification with your photograph and signature. Mail or fax this information to: (email requests are not accepted due to security issues.)

Federal Aviation Administration
Airman Testing Standards Branch, AFS-630
P.O. Box 25082
Oklahoma City, OK 73125
Or Fax to: 405 954-4748

Note: If you have comments regarding test questions, test procedures, or supplemental material content, please email AFS-630 at: AFS630Comments@faa.gov.

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 Website, www.faa.gov. The training and testing publications and general information can be found on the opening page of that Website under the Training and Testing tab. If a publication is not available in electronic format, there are instructions for obtaining paper copies. Information found on the Website includes the following:

- Advisory Circulars
- Airworthiness Directives
- Code of Federal Regulations
- Computer Testing Supplements
- Knowledge Test Centers
- Sample Knowledge Test questions
- Knowledge Test Statistics

- Learning Statement Reference Guide
- 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 Website. 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. ODA test center personnel will provide these supplements during the airman knowledge test. You can review them prior to testing at: http://www.faa.gov/training_testing/testing/supplements/media/sport_rec_private_akts.pdf. Marking in the supplement book is prohibited; however, you may request a photo copy of any figure either before or during your exam. This marked or unmarked copy must be returned to the proctor at the end of the exam.

Note: *The Unmanned Aircraft - General test currently uses FAA-CT-8080-2G, Airman Knowledge Testing Supplement for Sport Pilot, Recreational Pilot, and Private Pilot. You may review it prior to taking the exam.*

Knowledge Test Centers

The Knowledge Test Centers portion of the Website contains current listings of Airman Knowledge Testing (AKT) Organization Designation Authorization (ODA) Holders and other testing centers, and the registration telephone numbers to call to register for a test.

The following is a list of the ODA holders authorized to give FAA airman knowledge tests. This list should be helpful in case you choose to register for a test or simply want more information.

[Computer Assisted Testing Service \(CATS\)](#)

777 Mariners Island Blvd., Suite 200
San Mateo, CA 94404

Applicant inquiry and test registration: 1-800-947-4228

From outside the U.S. (650) 259-8550

[PSI](#)

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

Knowledge Test Questions

Sample questions are located in the Airman Knowledge Test Questions section of the Website 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 an applicant's understanding of the rules, regulations and knowledge areas required to receive an sUAS rating.

Knowledge Test Statistics

Test statistics for most 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.

Classification Code

Topic, Content and Specific (TCS) codes listed in this guide are NOT a description of the Learning Statement Codes (LSC) found in the 'Learning Statement Reference Guide for Airman Knowledge Testing' document, but are a hierarchical sequence of classification codes placing a question in a unique category. FAA knowledge test question development uses the following hierarchy:

- Topic— Overall subject matter topic code. The highest classification of overall subject matter a knowledge test item was developed to assess (e.g., Aerodynamics).
- Content—Secondary level subject matter code (e.g., Airspeed).
- Specific— the basic hierarchical classification code the subject matter for a knowledge test item (e.g., Thrust).

References Appendix

The Unmanned Aircraft General – Small knowledge test is based on the following 14 CFR parts, FAA guidance documents, manufacturer’s publications, and other documents.

Reference	Title
14 CFR part 47	Aircraft Registration
14 CFR part 48	Registration and Marking Requirements for Small Unmanned Aircraft Systems
14 CFR part 71	Designation of Class A, B, C, D and E Airspace Areas; Air Traffic Service Rotes; and Reporting Points
14 CFR part 107	Operation and Certification of Small Unmanned Aircraft Systems
AC 00-6	Aviation Weather
AC 150/5200-32	Reporting Wildlife Aircraft Strikes
AC 107-2	Small Unmanned Aircraft Systems (sUAS)
AIM	Aeronautical Information Manual
FAA-H-8083-2	Risk Management Handbook
FAA-H-8083-25	Pilot’s Handbook of Aeronautical Knowledge
SAFO 09013	Fighting Fires Caused By Lithium Type Batteries in Portable Electronic Devices
SAFO 10015	Flying in the wire environment
SAFO 10017	Risks in Transporting Lithium Batteries in Cargo by Aircraft
SAFO 15010	Carriage of Spare Lithium Batteries in Carry-on and Checked Baggage

Note: Users should reference the current edition of the reference documents listed above. Safety Alerts for Operators (SAFOs) and the current edition of all FAA publications can be found at www.faa.gov.