

# Pilot Certification and Aircraft Registration for Non-Hobby Users of Small Unmanned Aircraft Systems (sUAS)

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In just a few years, small unmanned aircraft systems (sUAS), or drones, have gone from being an expensive novelty, usually associated with military applications, to relatively affordable systems used by hobbyists. Importantly, sUAS also found diverse applications in photography, mining, archaeology, law enforcement, rescue operations, real estate and agriculture, to name just a few. Until recently, commercial use of sUAS in the U.S. has been limited due to restrictive and vague rules and regulations. This fact sheet will outline some of the considerations that a potential non-hobby (commercial) operator must consider before flying. If you would like to fly for fun or work, the Federal Aviation Administration (FAA) offers a good portal ([https://www.faa.gov/uas/getting\\_started/](https://www.faa.gov/uas/getting_started/)) for getting started.

## Aircraft Registration

Whether you fly your aircraft for hobby or commercial applications, you must register your aircraft. If the aircraft takeoff weight is more than 0.55 pounds or less than 55 pounds, it is classified as a small unmanned aircraft system (sUAS), and registration uses a simple online portal (<https://faadronezone.faa.gov/#/>).



**Example of sUAS registration number prominently displayed on the aircraft.**

Once you create an account and enter your information, you will immediately receive your aircraft registration number. Effective Feb. 23, 2019, the registration number must be clearly marked on the outside of the aircraft, and you may no longer place the marking in an enclosed compartment such as a battery case. The aircraft registration cost is currently \$5. Aircraft registration for commercial operators is valid for three years. To register, a user must be 13 years of age or older. If your aircraft weighs at least 55 pounds at takeoff, you will use the paper (N-number) registration process ([https://www.faa.gov/licenses\\_certificates/aircraft\\_certification/aircraft\\_registry/UA/](https://www.faa.gov/licenses_certificates/aircraft_certification/aircraft_registry/UA/)).

## Remote Pilot Certification

In the U.S., flight regulations related to sUAS are overseen by the

FAA. In addition to information outlined in this fact sheet, the FAA has an online portal ([https://www.faa.gov/uas/commercial\\_operators/become\\_a\\_drone\\_pilot/](https://www.faa.gov/uas/commercial_operators/become_a_drone_pilot/)) that outlines the process to become a drone pilot.

## Educational Users

The Oct. 5, 2018, reauthorization legislation (H.R. 302) for the FAA included two options ([https://www.faa.gov/uas/educational\\_users/](https://www.faa.gov/uas/educational_users/)) for educational users: Option #1 is to fly under Part 107 and Option #2 is to fly under the Special Rule for Model Aircraft.

## Commercial Users

A major advancement for commercial and public users in the U.S. was the issuance of the permanent flight regulations for commercial use of sUAS on Aug. 29, 2016. Referred to as Part 107 (14 CFR part 107), these permanent regulations apply to a broad spectrum of commercial uses, including academic researchers using sUAS. For academic researchers, Part 107 provides a simpler and more rational pathway compared to the alternative, a Certificate of Authorization (COA). It is important to stress that if producers, consultants, real estate agents, etc., are piloting a sUAS in any way for their business, then they must have Remote Pilot Certification. Otherwise, they are out of compliance with FAA regulations. **Remember that the FAA considers a farmer's use of a sUAS as a commercial use even when the aircraft is being used on their own farm.** Unlike the interim flight regulations, Part 107 does NOT require a Class 2 medical exam.

**If you already hold a pilot certificate** issued under 14 CFR, part 61, and you have completed a flight review within the previous 24 months, you can receive Remote Pilot Certification if you complete a few simple steps. First, you need to complete a free online course, Part 107 Small Unmanned Aircraft Systems (small UAS) ALC451, which is available at the FAA Safety Team website (Initial: <https://www.faasafety.gov/gslac/ALC/CourseLanding.aspx?cID=451>; Recurrent: <https://www.faasafety.gov/gslac/ALC/CourseLanding.aspx?cID=515>). Next, you need to complete FAA Form 8710-13 (FAA Airman Certificate and/or Rating Application for a Remote Pilot Certificate: [https://www.faa.gov/documentlibrary/media/form/faa\\_form\\_8710-13\\_\\_\(10-16\).pdf](https://www.faa.gov/documentlibrary/media/form/faa_form_8710-13__(10-16).pdf)) and get the form signed by a recognized authority (e.g., FAA certified flight instructor). Similar to commercial users, Part 61 pilot certificate holders with a current flight review (in accordance with 14 CFR, part 61.56) must

successfully complete an online course to satisfy the Part 107 remote pilot recurrent training requirement.

## FAA Part 107 Exam

### Test Preparation:

Starting Aug. 30, 2018, we have two groups of test takers: those taking the Remote Pilot exam for the first time (initial) and those renewing their certification (recurrent).

For those who have no prior exposure to the Private Pilot FAA Knowledge Test, preparing for the Remote Pilot Exam may seem like studying a foreign language. For those with no prior knowledge of this subject area, it will likely require at least 30 hours to prepare for the test. Study time for those renewing their license should be one-third of the initial time. The FAA offers an overview of the certification standards for both the initial and recurrent testing ([https://www.faa.gov/uas/commercial\\_operators/become\\_a\\_drone\\_pilot/](https://www.faa.gov/uas/commercial_operators/become_a_drone_pilot/)). A number of vendors provide test preparation materials including sample test questions. Test preparation materials can vary from \$0 to \$800. Examples of test preparation materials include:

- FAA Remote Pilot – Small Unmanned Aircraft Systems Study Guide: [https://www.faa.gov/regulations\\_policies/handbooks\\_manuals/aviation/media/remote\\_pilot\\_study\\_guide.pdf](https://www.faa.gov/regulations_policies/handbooks_manuals/aviation/media/remote_pilot_study_guide.pdf). (Based on our experience, simply using this study guide is insufficient to pass the exam.)
- RemotePilot101.com: <https://remotepilot101.com/>.
- King Schools: <https://www.kingschools.com/courses/supplemental/drone/uas-drone-certificate-course.asp>.
- Aviation Supplies & Academics, Inc.: <https://www.asa2fly.com/Virtual-Test-Prep-Remote-Pilot-P4043.aspx>.
- Drone Pilot Ground School: <https://www.dronepilotgroundschool.com/>.
- DroneU: <https://www.thedroneu.com/>.
- Gleim Aviation: <https://www.gleimaviation.com/drones/>.
- Center for Innovations in Education: <http://www.centerforinnovationineducation.org/part107.html>.
- The Drone Professor: (initial): <https://www.thedroneprofessor.com/course/107-study-guide/>; (recurrent): <https://www.thedroneprofessor.com/course/rpc-recurrent-exam-preparation/>.
- Rupperecht Law: <https://jrupprechtlaw.com/part-107-test-study-guide>.

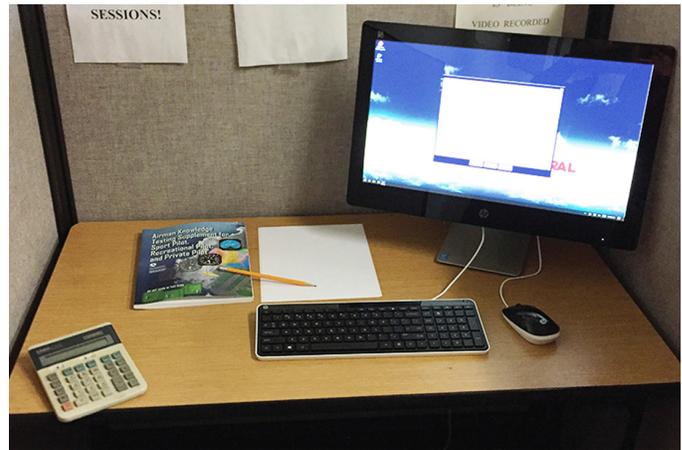
## Taking the Test:

The cost of either (initial or recurrent) exam is currently \$150, and testing locations can be found at [https://www.faa.gov/training\\_testing/testing/media/test\\_centers.pdf](https://www.faa.gov/training_testing/testing/media/test_centers.pdf) (July 25, 2018). Most testing centers require making an appointment to take the test. For those who use the Computer Assisted Testing Service (CATS) registration, the proctor will simply pull all the information related to their registration and confirm it with the individual. The testing center will register you with the FAA, and this will require a photo ID. Once you register, the proctor will set you up in a testing cubicle. The test is taken using a computer terminal. Your testing cubicle will likely consist of a monitor, keyboard, mouse, blank paper tablet, pencil and the Airman Knowledge Testing Supplement for Sport Pilot, Recreational Pilot, Remote Pilot, and Private Pilot ([https://www.faa.gov/training\\_testing/testing/supplements/media/sport\\_rec\\_private\\_akts.pdf](https://www.faa.gov/training_testing/testing/supplements/media/sport_rec_private_akts.pdf)). A significant number of the test questions utilize illustrations in the supplement book, but the same information can be viewed on the computer monitor using dropdown illustrations. You can bring your own simple calculator, but the online testing system provides a dropdown menu with a calculator. You may also bring a magnifying glass to help you read the FAA Airman Knowledge Testing Supplement. The testing center will also go over other testing parameters with you.

The initial test consists of 60 questions, and you are allotted 2 hours. Once the proctor logs you in, you will run through approximately eight sample questions that will help familiarize you with the testing format and help tabs/tools at the bottom of the screen. The recurrent test consists of 40 questions, and you are allotted 90 minutes. One of the tabs in either exam allows you to mark questions that you wish to review later before completing your exam. Once you have submitted your test, you will have the opportunity to see which questions you answered incorrectly (unless you scored 100 percent). You cannot change your answers at this time, but you can specifically see which questions you answered incorrectly. Once you complete the test review (optional), the proctor will complete the process that will immediately indicate your score. To pass either type of test, you must receive a grade of 70 percent or higher.

## Post Exam:

For both initial and recurrent students, the testing center will print out a Computer Test Report including your Exam ID and score. For those taking the test for the first time, the form indicates to “please allow 24 to



**Example of a pilot certification testing station.  
The calculator was not provided by the testing center.**

48 hours for your examination results to upload,” but you can begin the next step which is to login or start a new registration at IACRA. To be clear, you can initiate (register) an account in IACRA before taking the test. However, for a new registration, it is probably more logical to register after passing the Remote Pilot exam. After you complete the Start Application process (Application Type: pilot; Certifications: remote pilot), you will need to complete four sections (Personal Information; Supplementary Data; Basis of Issuance; Review and Submit). Once each section is complete, you save them. BEFORE you can Sign & Complete Application in the fourth section, you MUST read and sign the Pilot’s Bill of Rights. The IACRA application process should take about 15 minutes, and there is currently no fee. UAVCoach has a good video (scroll down until you see Using IACRA & Applying for Remote Pilot Certification: <https://uavcoach.com/drone-certification/#guide-11>) walking you through the IACRA registration process. If you do not already have a pilot (private, commercial) license, your application will need to be vetted by the Transportation Security Administration (TSA) as a part of the application process. If you complete the online application process, you should receive a temporary certificate within a few days. The FAA will mail you a permanent certificate within six to eight weeks.

For recurrent students you are done and are NOT required to enter any information on the Integrated Airman Certification and Rating Application (IACRA) website (<https://iacra.faa.gov/IACRA/Default.aspx>). The test center will emboss your test report providing proof that your sUAS certification is current. You will NOT receive a new plastic license card. The test report should be kept with you at all times during flight operations, and you must show a copy of this report if asked.

**DISCLAIMER:** No endorsement is implied or discrimination intended for firms or references included or excluded from this document. This fact sheet is for educational purposes only and not meant to provide legal or regulatory advice for the safe and legal operation of any small unmanned aircraft system. It is the responsibility of the sUAS user to read, understand and follow all FAA regulations. Users are also subject to state laws in which they operate.

Printed by University of Arkansas Cooperative Extension Service Printing Services.

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FSA6150-PD-2-2019R