FAA Part 107: Small Unmanned Aircraft Operations

May 20, 2019

Certifying Organization	Federal Aviation Administration (FAA) Unmanned Aircraft Systems (UAS)
	The Federal Aviation Administration (**FAA**) of the United States is a national authority with powers to regulate all aspects of civil aviation. https://www.faa.gov/uas/
Description of Credential *IBC#: 470*	Many people don't know the difference between the terms drone, which is an unmanned aerial vehicle (UAV) and unmanned aircraft system (UAS). Drone has been the most popular term in the last couple of years. A UAV is defined as an unmanned aerial vehicle and differs from a UAS in one major way: a UAV is just referring to the aircraft itself, not the ground-based controller and a system of communications between the two. **In order to fly a drone for commercial purposes, under the FAA's Small UAS Rule (Part 107), a Remote Pilot Certificate from the FAA must be obtained.** This certificate demonstrates the understanding of regulations, operating requirements, and procedures for safely flying drones. Since 2016, businesses around the United States have discovered the benefits of using drones. Earning The FAA Part 107 Remote Pilot certification will give students an edge on gaining employment in disciplines such as science, technology, engineering and mathematics (STEM), as well as digital media, and real estate. These job areas include public safety, infrastructure inspection, crime scenes and forensics, search and rescue, emergency management and disaster relief, agricultural monitoring, telecommunications, entertainment, environmental monitoring, oil and gas, construction, and real estate. As part of the engineering and technology branches, students will understand the working components of the machines and better appreciate each function that makes up the machine. Drones allow students to visualize their coding process and use programming to solve real-world challenges. The student pilot will master basic flight proficiency with a strong command of the UAS landscape, the aircraft's hardware and software and the ability to identify obstacles to the flight plan. To fly a drone for commercial purposes, under the FAA's Small UAS Rule (Part 107), a Remote Pilot Certificate from the FAA must be obtained. Earning the FAA 107 fulfills state wide basic credential requirement.

Flying under Part 107
Part 107 is the main set of rules for flying small drones (less than 55 lbs.) in the United States. You can fly under part 107 rules for any reason, including for work or business, for fun in your backyard, to teach, or for public safety missions.
To fly under part 107 rules, there are 3 main steps:
Step 1: Learn the Rules
Make sure you understand what is and is not allowed under Part 107 rules. Review a summary of the Part 107 rules Still unsure if Part 107 rules work for you and your intended operation? Check our user identification tool.
Step 2: Become an FAA-Certified Drone Pilot by Passing the Knowledge Test
To be eligible to get your Remote Pilot Certificate, you must be:
- At least 16 years old
- Able to read, write, speak, and understand English
- Be in a physical and mental condition to safely fly a UAS
- Review the full process to get your Remote Pilot Certificate.

Study for the Knowledge Test by reviewing the test topic areas which include:
- Applicable regulations relating to small unmanned aircraft system rating privileges, limitations, and flight operation
- Airspace classification and operating requirements, and flight restrictions affecting small unmanned aircraft operation
- Aviation weather sources and effects of weather on small unmanned aircraft performance
- Small unmanned aircraft loading and performance
- Emergency procedures
- Crew resource management
- Radio communication procedures
- Determining the performance of small unmanned aircraft
- Physiological effects of drugs and alcohol

	- Aeronautical decision-making and judgment - Airport operations - Maintenance and preflight inspection procedures: Schedule an appointment to take the Knowledge Test at an FAA-approved Knowledge Testing Center (PDF). You must bring a government issued ID with you to the test. Once you've passed your test, Bring your completed Form 8710-13, proof of your current flight review, photo ID, and your online course completion certificate. You'll receive your permanent certificate via U.S. mail within several weeks using the using the electronic FAA Integrated Airman Certificate and/or Rating Application system (IACRA)* **Step 3:** A confirmation email will be sent when an applicant has completed the TSA security background check. This email will provide instructions for printing a copy of the temporary remote pilot certificate from IACRA. **Step 4:** A permanent remote pilot certificate will be sent via mail once all other FAA-internal processing is complete. **Step 5:** Have your Remote Pilot Certificate available whenever you fly your UAS. **Step 6:** Register your drone with the FAA - Registration costs $5 and is valid for 3 years. You'll need a credit or debit card and the make and model of your drone handy in order to register. - Visit dronezone.faa.gov and select "Fly sUAS under Part 107" to create an account and register your drone. - Once you've registered, mark your drone with your registration number in case it gets lost or stolen.
Part of which Graduation Pathways [1]	<u>Integrated:</u> Digital Media, STEM, Agriculture Tech, and Manufacturing, Construction Crafts and Logistics
Associated with Which Careers?	<u>5 Star:</u> Computer User Support Specialists <u>4 Star:</u> Police and Sheriff's Patrol Officers, Electrical and Electronics Repairers,
Entry-Level Annual Salaries	$25,332 - $35,417

Industry-Based Certification Requirements: Students

Standard / Curriculum	Free FAA Course Overview: https://www.faasafety.gov/gslac/ALC/CourseLanding.aspx?cID=515 This free course will prepare students to take and pass the FAA Part 107 Remote Pilot Airman. Advanced Aerial Education (AAE) curriculum is a full curriculum that prepares students to earn the FAA Part 107 license. This curriculum is available for instructors who have completed the AAE instructor training. Completion of this curriculum also ensures pilots have met the rigorous safety and piloting standards set by AAE producing skilled, safe, and socially-aware operators in the National Airspace System. <u>Sample Level I Course:</u> This course will carry the student from the introduction to SUAS (Small Unmanned Aircraft Systems) to the Test Prep for the FAA CR Part 107 Aeronautical Knowledge Test with lots of "hands on" experience flying the Traxxas Alias, DJI Phantom 4, and the DJI Inspire. Topics covered include: Intro to Small Unmanned Aircraft Systems. Airspace Procedures & Regulations Career Opportunities & Applications. Airspace Conceptualization Components, Sections & Systems. Map Utilization Optics & Sensors. Weather Reports Crew Maneuvers & Management. Ground Procedures Aerodynamics. Weather Theory UAS Emergencies, Hazards, & Aeronautical Decision Making. While there are no minimum seat time requirements to take the FAA Part 107 Remote Pilot Airman exam; the AAE curriculum used to prepare students to successfully earn the FAA Part 107 Remote Pilot Airman credential requires 80 seat hours.

Testing Methodology	Paper?	No	Online?	Yes. Schedule an appointment to take the Knowledge Test at an FAA-approved Knowledge Testing Center	Performance Exams / Tests?	Hands-on performance practice with different types of drones required in classroom.

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Re-Testing (if available)	Re-Testing Procedures	Retake available after 14 days.	Max Attempts	n/a
Testing Details (including any age requirements / accommodations)	Please see information in "Description of Credential". Also see: Remote Pilot – Small Unmanned Aircraft Systems (Certification and Recurrent Knowledge Testing) Airman Certification Standards			

Industry-Based Certification Requirements: Teachers
Bulletin 746, Chapter 5: All Louisiana teachers providing instruction in a course that leads to an IBC must hold the certification that they're teaching students to attain.

Instructor Certification Requirements (by certifying agency)	Instructors using the AAE curriculum must complete the AAE Instructor training. The instructor must also hold the FAA Part 107 license.
Proctoring / Test Security (if any)	AAE Test security measures are determined by the school system for testing within the AAE curriculum. Actual FAA Part 107 testing is completed at an approved FAA test site.

Certification Tracking				
Credentialing Documentation and Process	See specific information under "Description of Credential".			
Certification Tracking System	Online Tracking System?	Yes	Details	Certifications are tracked through the FAA Integrated Airman Certificate and/or Rating Application system (IACRA)*
Other Details	Expiration Timeframe?	Valid for 2 years. Certificate holders must pass a recurrent knowledge test every two years. Renewing Your Certificate Electronic Code of Federal Regulations for FAA: Part 107 FAA Part 107 FAQs		

Certification Costs / Funding Sources					
Cost Details	FAA Part 107 Remote Pilot Airman - $150				
Re-test / Refund Policies	Retake available after 14 days. No refunds.				
Funding Sources [2]	CDF?	Yes	Perkins?	Yes	Alternative Source (other than General Funds)

For More Information	
Certifying Agency Contact Info	If you have a general question, comment, or complaint about UAS or drones, please contact us via email at UAShelp@faa.gov or call 844-FLY-MY-UA.
LDOE Contacts	JumpStart@la.gov
Jump Start Regional Team Experts	TBD

1 – This table may not include all the graduation pathways this credential appears in. Please check the graduation pathway you are working with if you have a question as to whether or not this credential is part of that pathway. Always check with certifying agency for latest information.

2 – CDF = Career Development Fund