# DARTDRONES

# GUIDE TO GETTING YOUR PART 107 DRONE LICENSE

#### The Part 107 Remote Pilot Certificate with an sUAS Rating

To legally fly a drone for commercial use, the pilot of the aircraft must have a remote pilot certificate with a small UAS rating. To obtain a remote pilot certificate, a drone pilot must pass the FAA's Airman Knowledge Exam. The Federal Aviation Administration needs to make sure that all commercial drone pilots have the ability to act responsibly, coordinate with Air Traffic Control in case of an emergency, read aeronautical maps, and abide by all regulations pertaining to UAV regulations and also general aviation regulations.

DARTdrones has trained thousands of pilots to pass their Part 107 Exam with both our in-person and online Part 107 Test Prep Course.

The **remote pilot certificate** is sometimes referred to as:

- Drone License
- Remote Pilot Exam
- Aeronautical Knowledge Exam
- Part 107
- Remote Pilot Certification



#### Operational Requirements Under Part 107

- Flights must be conducted within 400 feet of the ground or 400 feet from the top of a structure, provided the sUA remains within 400 feet of the structure itself.
- Flights within Classes of **Controlled Airspace** require a specific Airspace Authorization or Waiver issued via the FAA using an online submittal system.
- The unmanned aircraft must remain within the unaided visual line of site of the pilot and/or a visual observer with a
  direct line of communication to the pilot.
- The unmanned aircraft cannot be flown directly above any non-participants or members of the public.
- All aircraft utilized must weigh less than 55 lbs on takeoff, including everything onboard (cameras, lights, etc.) in order to qualify as a sUAS under Part 107.
- All sUAS pilots for Part 107 operations must possess an FAA issued Remote Pilot Certificate with an sUAS Rating.
- All sUAS pilots must pass a biannual flight review every 2 years.

#### →→ Definition of "Commercial Use"

The FAA considers any drone flight that promotes a business in any way to be a "commercial" UAV flight (also known as non-recreational use). Non-recreational use, as defined by the FAA, can include everything from a fire department conducting search and rescue missions, a business filming event footage to train employees, and architects or engineers surveying property.

#### >>> Who Does Not Need to Take the Part 107 Exam?

- ▶ **Recreational Users:** Recreational users are not required to take the Part 107 exam.
- ▶ Part 61 Pilots: Instead of taking the Part 107 Remote Pilot Exam, Part 61 certificate holders who have completed a flight review within the past 24 months and have an active medical certificate can elect instead to complete an online training on www.faasafety.gov called "Part 107 small Unmanned Aircraft Systems (sUAS) ALC-451" and subsequently apply for a rating by filling out an FAA form called "8710-13." Once both requirements have been completed, Part 61 pilots can legally operate a UAV for commercial purposes.
- Under 16: Sixteen is the minimum age to obtain a Part 107 Remote Pilot Certificate.

## **Expectations for Taking the Exam**

Test-takers have **two hours** to answer **60 multiple choice questions**. A **70% or higher** is considered a passing grade. To pass the FAA Airman Knowledge Exam, a remote pilot must fully understand twelve different aeronautical knowledge topics including:

- Regulations Under Part 107
- Airspace Classifications
- Flight Restrictions
- Aeronautical Charts
- Airport Operations for Drone Pilots
- Radio Communications for sUAS Pilots
- Aviation Weather for Drone Pilots
- Maintenance and Preflight Procedures
- Crew Resource Management and Aeronautical Decision Making
- sUAS Loading and Performance
- Hazards to Flight and Emergency Procedures
- Physiology for Drone Pilots Under Part 107

#### **Study Time**

Most of our students take a total of 15 – 20 hours to study for the exam. When studying with our In-Person Part 107 Test Prep Course, students typically complete the 8 hours of in-person training and then continue to study with our Online Part 107 Test Prep Course. Most students take and pass the exam between two and three weeks after completing the course.

#### **Exam Cost**

The exam costs \$150 for every attempt. If a test-taker fails the exam, they must wait 14 days before taking the exam again. DARTdrones students have achieved a 99% pass rate. Students who complete our course should not expect to pay for the exam multiple times.

#### Registering for the Exam

The Airman Knowledge Exam must be taken at an FAA approved **Airman Knowledge Testing Center**. There are over 670 testing centers across the country. Students are typically able to find a testing center with availability near their home. Each testing center has a proctor and a few computer stations for the electronic exam.

Test-takers can pre-register and pay for the exam on www.catstest.com, but will not be able to choose a test date. Within a few days, a representative from a CATS Testing Center will call to reserve a time slot. Test-takers can also call the CATS facility directly to book an exam time at 800-947-4228.

#### **Timeline After the Exam**

Test-takers will receive their score from the exam immediately upon completing the test. After passing the exam, remote pilots need to submit their test score on IACRA. Within one week, a temporary certificate is typically made available on the IACRA site. Remote pilots can then fly legally with the temporary certificate. Within 1 to 3 months, a permanent Remote Pilot Certificate arrives in the mail.

#### **In-Person Training Was Key**

Although the online course gave me all the information, many times during the test I found the correct answer by remembering conversations that happened in the in-person classroom. Having an instructor answer my questions, tell me when my thinking was wrong, and share personal stories made me fully understand the material.

## >--- Studying for the Exam



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#### In-Person OFFERED IN 40+ CITIES

\$ 603 Regularly \$670 Save 10% with coupon code 107TEN

SEE SCHEDULE

|  | Part 107 Online | Part 107 In-Person |
|--|-----------------|--------------------|
| 50 Page Study Guide                              | ≅               | ≅                  |
| 300+ Practice Test Questions                     | ⊠               | ⊠                  |
| Access to Chief Pilot for Questions              | ⊠               | ⊠                  |
| Access to Interactive Online E-Learning Course   | Ø               | ☑                  |
| Real Time Updates to Curriculum                  | ≅               | ⊠                  |
| Curriculum Developed by Navy Helicopter pilot    | ⊠               | ⊠                  |
| Money Back Guarantee*                            | ⊠               | ⊠                  |
| Access to Monthly Q&A Webinar with Chief Pilot** | ⊠               |                    |
| 8 Hours with an Expert Pilot                     |                 | ⊠                  |
| Practice Real Test Questions with a Manned Pilot |                 | ☑                  |
| Hands on Chart Study with Real Aeronautical Maps |                 | ⊠                  |
| Group Discussions with Other Students            |                 | ≅                  |
| Class Size Limited to 10                         |                 | ⊠                  |

Learning from Real Pilots!

"After hearing personal stories from DARTdrones Flight Instructors, I was able to figure out the answer to a lot of the regulations questions."

## Exam Topics

## Lesson 1 Regulations Under Part 107

- Part 107 Definitions
- Registration Requirements
- Conditions for Safe Operations
- PIC Responsibilities
- Visual Observers
- Visual Line of Sight
- Hazardous Operations
- Daylight Operations
- See and Avoid of Other Aircraft
- Operating Restrictions
- Eligibility Requirements
- Accident Reporting
- Waiver Policy

## Lesson 2 Airspace Classifications

- National Airspace System
- Air Traffic Control
- Clearances and Permissions
- Operations in Uncontrolled Airspace
- Operations in Controlled Airspace

## Sample Question

Question 10 of our 300+ Practice Test Questions

What are the cloud clearances required to operate a sUAS in the NAS?

A. 400' below / 1000' horizontal B. 500' below / 2000' horizontal C. 500' below / 1000' horizontal



## Lesson 3 Flight Restrictions

- Prohibited and Restricted Areas
- Temporary Flight Restrictions
- Filing NOTAMS
- Special Use Airspace
- Military Training Routes
- VFR versus IFR Flight Rules

## **Sample Question**

Question 18 of our 300+ Practice Test Questions



Refer to Area 2 on this sectional excerpt. The chart shows a gray line with "VR1667, VR1617, VR1638, and VR1668." Could this area present a hazard to the operations of a small unmanned aircraft?

A. No, all operations will be above 400 feet

B. Yes, this is a Military Training Route from 1,500 feet AGL and below

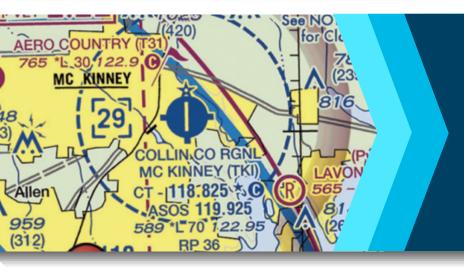
C. Yes, the defined route provides traffic separation to manned aircraft.

## Sample Question

Question 24 of our 300+ Practice Test Questions

## Lesson 4 Aeronautical Charts

- Reading Sectional Charts
- Chart Legend
- Navigation Basics
- Chart Interpretation
- Difficult Chart Test Questions



The airspace overlying McKinney (TKI) is controlled from the surface to:

A. 700' AGL

B. 2,900' MSL

C. 2.500' MSL

Whether you complete our course in-person or online, our students have achieved a 99% pass rate!

## Lesson 5 Airport Operations

- Reading Operating Near Towered and Non-Towered Airports
- Traffic Patterns
- Runway Markings and Signage
- Heliports

## Lesson 6 Radio Communications

- Controlled Tower Communication Procedures
- ATIS (Airport Terminal Information Service)
- Standard Communications
- Self-Announce Procedures
- Common Traffic Advisory Frequency
- UNICOM/ MULTICOM
- Traffic Pattern Communications
- Phonetic Alphabet

## **Sample Question**

Question 45 of our 300+ Practice Test Questions

The numbers 9 and 27 on a runway indicate that the runway is oriented approximately:

A. 090° and 270° magnetic B. 090° and 270° true C. 009° and 027° true

## **Sample Question**

Question 68 of our 300+ Practice Test Questions

While monitoring the Cooperstown Common Traffic Advisory Frequency (CTAF) you hear an aircraft announce that they are midfield left downwind to RWY 13. Where would the aircraft be relative to the runway?

- A. The aircraft is East
- B. The aircraft is South
- C. The aircraft is West





## **Sample Question**

Question 125 of our 300+ Practice Test Questions

If Dallas Executive Airport Tower is not in operation, which frequency should be used as a Common Traffic Advisory Frequency (CTAF) to monitor airport traffic?

A. 127.25 MHz

B. 122.95 MHz

C. 126.35 MHz

## Sample Question

Question 189 of our 300+ Practice Test Questions

## How will high humidity affect your drone?

A. High density altitude will increase performance B. High density altitude will reduce performance

C. Low density altitude will reduce performance

## The DARTdrones Difference: Get Access to a Monthly Q&A Webinar with our Chief Pilot!

## Lesson 7 Aviation Weather

- Atmospheric Basics
- Types of Weather
- Stages of a Thunderstorm
- Types Cloud Formations
- Micrometeorology
- Weather Planning
- Weather Briefings
- Reading METARS
- Aviation Forecasts (TAFs)
- Weather Factors and Their Effect on sUAS

## Lesson 8 Maintenance and Preflight Procedures

- Scheduled Maintenance
- Unscheduled Maintenance
- Preflight Inspection
- Record Keeping
- FAA Inspection and Testing

## Sample Question

Question 245 of our 300+ Practice Test Questions

You have been hired as a Remote Pilot in Command by a local TV news station to film breaking news with a small unmanned aircraft. You expressed a safety concern and the station manager has instructed you to "fly first, ask questions later." What type of hazardous attitude does this attitude represent?

A. Impulsivity
B. Machoism
C. Invulnerability

## **Sample Question**

Question 221 of our 300+ Practice Test Questions

Under what condition should the Remote Pilot in Command of a small unmanned aircraft establish a scheduled maintenance protocol?

A. When the FAA requires you to, following an accident
B. Small unmanned aircraft systems do not
require maintenance
C. When the manufacturer does not
provide a maintenance schedule

#### Lesson 9 Crew Resource Management and Aeronautical Decision Making

- Hazards and Risks
- Decision Making
- Risk Management for Drone Pilots
- Crew Resource Management
- Crew Coordination
- Hazardous Attitudes
- Situational Awareness
- Effective Communication

Curriculum
Developed
by Navy
Helicopter
Pilot Amelia
Owre



Amelia is a former **Navy helicopter pilot** and flew the SH-60F, HH-60H and MH-60S prior to transitioning to unmanned systems. She spent 5 years developing curriculum and implementing training for the **Navy's MQ-8 Fire Scout UAS**, and continues to instruct UAS operators as a current Naval reservist. She is a graduate of the U.S. Naval Academy and holds an M.S. in Environmental Science, a **Commercial Pilot Certificate with fixed wing, helicopter and instrument ratings**, and a Remote Pilot Certificate. Amelia focuses on developing new curriculum for DARTdrones and coordinating our subject matter experts.

## Lesson 10 sUAS Loading and Performance

- Basic Aerodynamics
- Aircraft Loading
- Weight and Balance
- Stability and Control
- Center of Gravity
- Longitudinal Stability
- Performance Data

## **Sample Question**

Question 285 of our 300+ Practice Test Questions

How will performance be affected when a camera on an unmanned aerial system causes the center of gravity to shift to the rear?

A. Performance will decrease at a higher altitudeB. Performance will increase at a higher altitudeC. Performance will stay the same

## Sample Question

Question 290 of our 300+ Practice Test Questions

While operating a small unmanned aircraft system (sUAS), you experience a flyaway and several people suffer injuries. Which of the following injuries requires reporting to the FAA?

A. Minor bruises

B. Scrapes and cuts bandaged on site

C. An injury requiring an overnight hospital stay

## Lesson 11Hazards to Flight and Emergency Procedures

- Common Flight Hazards
- Accident Factors
- Reporting In-Flight Emergencies
- Emergency Communications
- Lost Link / Fly Away Procedures
- Low Battery Procedures
- Lithium Battery Hazards
- System Malfunction
- Fail Safe Procedures
- Airborne Inspections
- Wildlife Hazards



#### Lesson 12 Physiology for Drone Pilots Under Part 107

- Stress
- Fatigue
- Dehydration
- Heat Stroke
- Hyperventilation
- Vision Impairment
- Impacts of Drugs and Alcohol
- Determining Fitness for Flight
- Physiological Considerations
- Part 107 Regulations Requirements

## **Sample Question**

Question 295 of our 300+ Practice Test Questions

You are a remote pilot for a co-op energy service provider. You are to use your UA to inspect power lines in a remote area 15 hours away from your home office. After the drive, fatigue impacts your abilities to complete your assignment on time.

Fatigue can be recognized:

A. Easily by an experienced pilotB. As being in an impaired stateC. By an ability to overcome sleep deprivation

## Part 107 Guarantee

If you take our practice test 3 times and score a 85% or higher, we will refund your test fees if you fail your FAA Part 107 Test.



## **™→ What Our Students Say About our Class**

"Comprehensive and informative! Well worth the time. The instructor ensured that students understood the concepts as they were presented."

"Team thought Mark was great. Super informative. Worked really well with the limited time we had. Mark did a great job of identifying the important information not only needed for the test, but for practical flying. **Prep material and study guide are amazing.** Highly recommended using you and DARTdrones."

"Once again Colin knocked it out of the park. His knowledge and professionalism exemplifies his **passion to teach new pilots** key and important issues concerns and updates about the drone industry."

"The class was **jam packed and interactive** which helped to understand Part 107 for those of us that are new to the aviation world. The flight class was invaluable for me! I have never even touched a drone prior to the class and left with some confidence that I can fly either the Phantom or Inspire without destroying my investment in equipment on the first flight."

"Excellent courses. The instructor made things interesting and informative for both the novice and experienced pilot. No matter your level of experience flying drones, you will take away valuable knowledge and skills."

"I absolutely loved my two day course with DARTdrones! I was excited before I got there but got even more excited about flying drones commercially after attending class! **Karl was an exceptional instructor and made the class fun as well as informative!**"

"The instructor was great! He used his **real world experiences in the field** to tie in the industry material. I would highly suggest this training to anyone looking to gain knowledge in the sUAS field."

We're all over the map.. literally! DARTdrones offers classes in 40+ cities across the country! Can't make it out to one of our Part 107 classes? We offer an online option as well. Visit dartdrones. com for more information!



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