



Certification

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Do I need to get a drone license?



YOU DO NEED A LICENSE IF:

- You plan to fly a drone for any non-recreational purpose, such as:
 - Flying a drone for hire.
 - Flying a drone for internal operations within your organization.
 - Flying a drone for a public safety department or other government entity.*

YOU DON'T NEED A LICENSE IF:

- You plan to fly a drone for a recreational purpose, such as flying in your backyard, local park, or on vacation.

*Public safety departments and other government entities can fly under Part 107 rules or by applying for a Certificate of Authorization (COA).

- This certificate is commonly known as a drone license, Part 107 license, or Part 107 certificate.
- Your Certificate can be used to operate a drone in **all U.S. states and territories**.
- You must renew the Certificate every 2 years.

What's on the FAA drone certification test?



- The FAA test has **60-multiple choice questions**. You have 2 hours to take the test, and you must get a 70% or higher to pass. There are **120+ concepts** in the UAS Airman Certification Standards. Here are some of the key topics you'll be tested on:

- FAA Drone Laws
- National Airspace System (NAS)
- Reading Sectional Charts
- Airport Operations
- Weather & Micrometeorology
- Flying a Drone at Night
- sUAS Loading and Performance
- Emergency Procedures
- Crew Resource Management
- Radio Communications
- Effects of Drugs & Alcohol
- Aeronautical Decision-Making

Cost?



TEST CENTER FEE **\$175**

- Test is scheduled and paid for online or by phone
- A recurrent test is required every 2 years to maintain your certification currency

OTHER COSTS

- \$5 commercial registration fee per drone
- Liability insurance required in certain states
- Other local permits or licensing fees, if applicable

U.S. Regulatory System?



- **Federal Aviation Administration**
 - Governing body which defines what technologies and how they can be used in the National Airspace System.
 - Federal Aviation Act of 1958 was a response to a series of fatal accidents and midair collisions.
 - Department of Transportation
 - Regulates
 - Aircraft, airmen, certain airline employees, operations, airports, and the national airspace

UAS: FAA Regulation development



- **Advisory Circular 107-2 (June 21, 2016)**
 - Outline use of sUAS in a regulated manner
 - Made sUAS use more like motor vehicle use
 - Need to register sUAS
 - Defines procedures for reporting
 - Violations
 - Accidents
 - Events/Incidents
 - Pre-flight Inspections
- **Enforcement Started: August 29, 2016**

FAA Regulation Summary



	Recreational Operations	Non-recreational/Commercial Operations
Pilot Requirements	<ul style="list-style-type: none">No pilot requirements	<ul style="list-style-type: none">Must have Remote Pilot Airman CertificationMust be 16 years or olderMust pass TSA vetting
Aircraft Requirements	<ul style="list-style-type: none">Must be registered if over 0.55 pounds	<ul style="list-style-type: none">Must be less than 55 poundsMust be registered if over 0.55 poundsMust undergo pre-flight checklist
Location Requirements	<ul style="list-style-type: none">Must notify all airports and air traffic control (if applicable) within five miles of proposed area of operations	<ul style="list-style-type: none">Class G airspace without ATC permissionClass B, C, D, and E require ATC permission
Operating Rules	<ul style="list-style-type: none">Must ALWAYS yield right of way to manned aircraftMust keep aircraft in visual line-of-sightMust follow community-based safety guidelines	<ul style="list-style-type: none">Must keep aircraft in visual line-of-sight*Must fly under 400 feet*Must fly only during daylight hours*Must fly at or below 100 mph*Must yield right of way to manned aircraft*Must NOT fly over people*Must NOT fly from a moving vehicle*
Definitions	<ul style="list-style-type: none">Education or recreational flying only	<ul style="list-style-type: none">Flying for commercial useFlying incidental to a businessFlying public aircraft operations

*These requirements are subject to waiver.

Part 107 Inquiries



- UAS Help Line: 844-FLY-MY-UAS
- UAS Email: UASHelp@faa.gov



Small Unmanned Aircraft Systems (UAS) Regulations (Part 107)

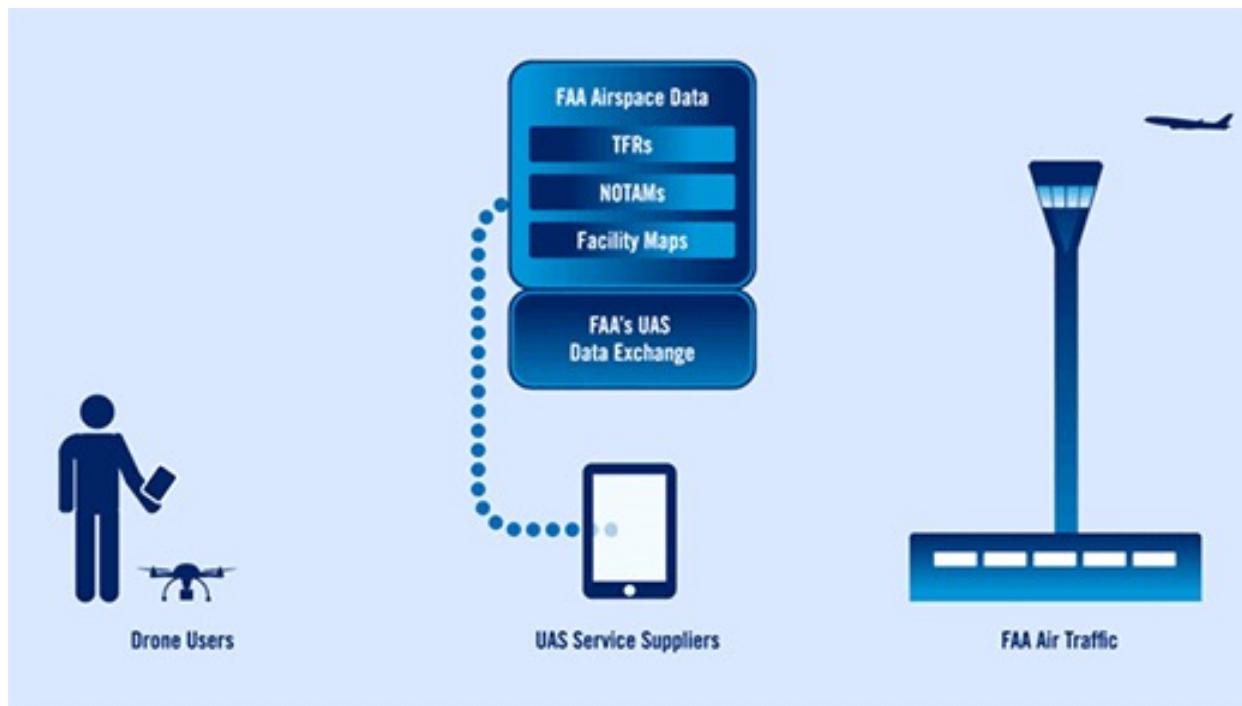


- The FAA's Part 107 provides regulations for the (1) issuance of a remote pilot certificate as well as (2) operating rules for drone operators such as will be line of sight, under 55 pounds, less than 100 MPH, and below 400ft.
- Multiple parts of the Federal Aviation Regulations ("FARs") could apply to your drone flight but the 4 common areas of regulations are Part 47, Part 48, Part 91, and Part 107.
 - Part 47 – Paper Registration
 - Part 48 – Online Registration
 - Part 91 -Operational Rules for Non-Part 107 Drone Operations
 - Part 107 – Remote Pilot Certification, Operating Rules, Aircraft Requirements, etc.

LAANC



- LAANC is the Low Altitude Authorization and Notification Capability, a collaboration between FAA and Industry. It directly supports UAS integration into the airspace.
- LAANC provides:
 - Drone pilots with access to controlled airspace at or below 400 feet.
 - Awareness of where pilots can and cannot fly.
 - Air Traffic Professionals with visibility into where and when drones will operate.



How does LAANC work?



- LAANC automates the application and approval process for airspace authorizations. Through automated applications developed by an FAA Approved UAS Service Suppliers (USS) pilots apply for an airspace authorization.
- Requests are checked against multiple airspace data sources in the FAA UAS Data Exchange such as UAS Facility Maps, Special Use Airspace data, Airports and Airspace Classes, as well as Temporary Flight Restrictions (TFRs) and Notices to Airmen (NOTAMs). If approved, pilots can receive their authorization in near-real time.
- Unless specifically requested in an authorization, drone pilots do not need to notify the tower before they fly.
- LAANC provides airspace authorizations only. Pilots must still check NOTAMs, weather conditions, and abide by all airspace restrictions.

How and when can drone pilots use LAANC?



- Drone pilots planning to fly under 400 feet in controlled airspace around airports must receive an airspace authorization from the FAA before they fly.
- LAANC is available to pilots operating under the [Small UAS Rule Part 107](#) or under the exception for [Recreational Flyers](#). You can get access through one of the [FAA Approved LAANC UAS Service Suppliers](#).
- There are two ways to use LAANC:
 - Submit a near real-time authorization request for **operations under 400 feet in controlled airspace around airports (available to Part 107 Pilots and Recreational Flyers)**.
 - Submit a "further coordination request" if you need to **fly above the designated altitude ceiling in a UAS Facility Map, up to 400 feet**.
 - You can apply up to 90 days in advance of a flight and the approval is coordinated manually through the FAA (**available to Part 107 pilots only**).
- [To qualify under Part 107](#), you must register your drone and hold a Remote Pilot Certificate.
- [To operate as a Recreational Flyer](#), you must register your drone and take the [Recreational UAS Safety Test \(TRUST\)](#) before your first flight.

Companies Providing Public LAANC Services



Companies Providing Public LAANC Services

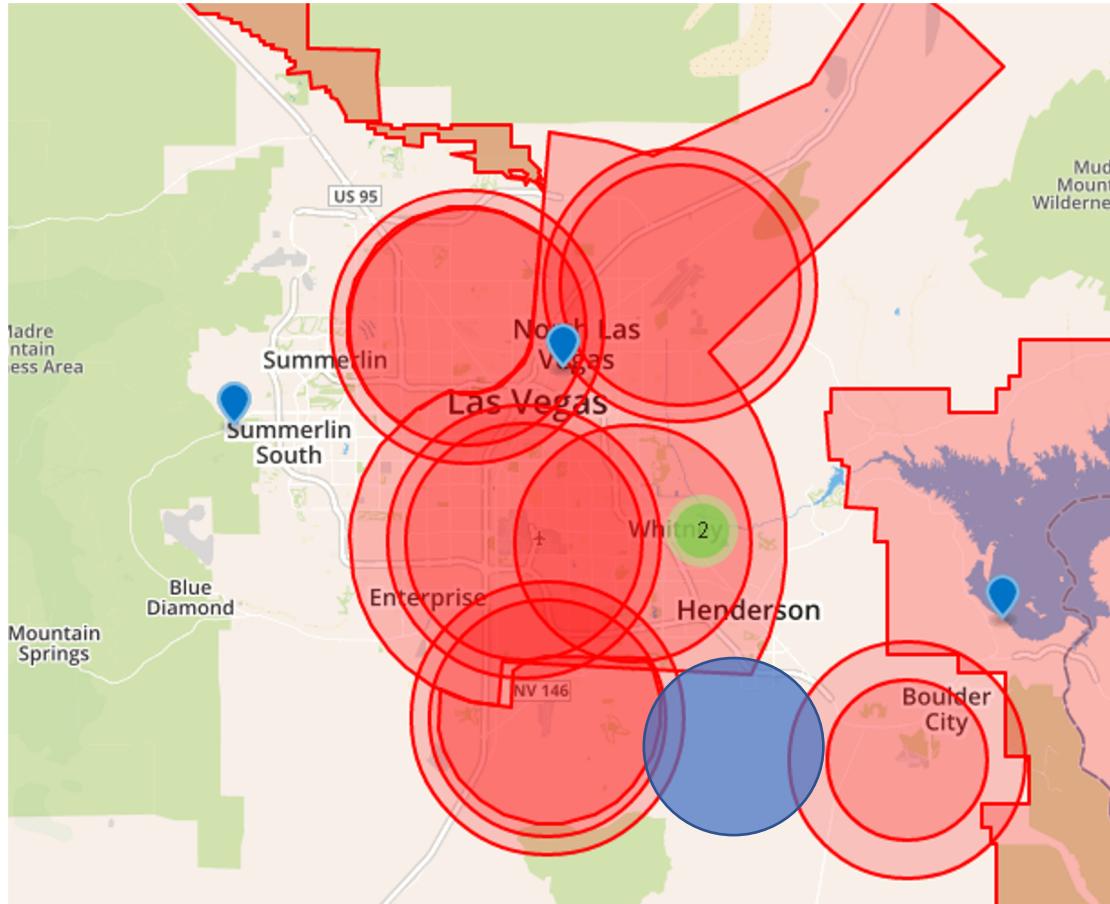
Approved Service Supplier	Part 107 Near – Real Time Authorization Day	Part 107 Near – Real Time Authorization Night	Part 107 Further Coordination	Exception for Recreational Flying/Section 44809
Airbus	✓	✓	✓	✓
Airspacelink	✓	✓	✓	✓
Aloft	✓	✓	✓	✓
Avision	✓	✓	✓	✓
eTT Aviation	✓	✓	✓	✓
FlightReady				
UASidekick	✓	✓	✓	✓
Wing	✓	✓		✓

UAS: FAA Regulation: Fly for Fun

Where to Fly?



<http://knowbeforeyoufly.org/for-recreational-users/>



UAS: FAA Regulation: Fly for Fun: Where to Fly?

<http://knowbeforeyoufly.org/for-recreational-users/>



Las Vegas Radio Control Club

UNNAMED RD LAS VEGAS, NV 89122 undefined
www.lvrcc.com

Guido Terzo
GTERZO@AOL.COM
702-837-7321

[Flying field information](#)

A blue location pin is centered on the map below the club's name.

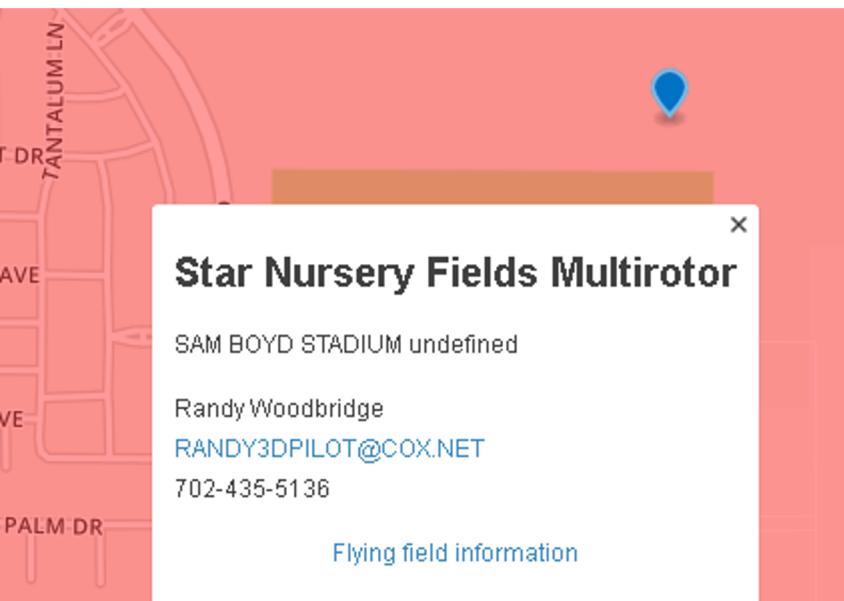


<http://www.lvrcc.org>



UAS: FAA Regulation: Fly for Fun: Where to Fly?

<http://knowbeforeyoufly.org/for-recreational-users/>





UAS: FAA Regulation: Fly for Fun

<https://www.faa.gov/uas/>

When you fly a drone in the United States, it is
**your responsibility to understand and abide by
the rules.**



Drone Laws in South Korea



- Agencies Responsible for regulating drones in the Republic of Korea (South Korea)
 - South Korea Office of Civil Aviation (KOCA)
 - <http://koca.go.kr/>
- Register & Information
 - <https://drone.onestop.go.kr/>



General Rules for Flying a Drone in South Korea

Here are the most important rules to know for flying a drone in South Korea.

- Drones for commercial use require registration with the Ministry of Land, Infrastructure, and Transport. Learn more about registering your drone in South Korea [here](#).
- An operator's license is required for drones weighing 12 kilograms (26 pounds) or more that will be used for commercial purposes. Learn more about obtaining an operator's license [here](#).
- Do not fly at night.
- Do not fly where there is low visibility or yellow dust.
- Do not fly beyond your line of sight.
- Do not fly higher than 150 meters (492 feet).
- Do not fly over people or around crowded areas.
- Do not fly within 5.5 kilometers (3.5 miles) of airfields or in areas where aircraft are operating.
- Drones may not be flown near Seoul Plaza, military installations, power plants, or areas of facilities related to national security such as the Blue House. Most of Seoul is designated as prohibited airspace.