

# UAS / UAV FAQ

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Whether you call it a drone a UAS or a UAV, unmanned aerial photography is fascinating, fun, and subject to newly written laws. Here is information to help you navigate your hovering camera platform through the jungle of FAA regulation. As drone technology and usage rapidly evolves, the regulations will be updated, and so will this document.

## 1. Abbreviations

AGL	above ground level
COA	Certificate of Authorization
FAA	Federal Aviation Agency
FAR's	Federal Aviation Regulations
NM	nautical mile (international: 1.852 km    about 6,076 feet    1.151 mi)
UAS	Unmanned Aircraft System ( refers to all elements of the system )
UAV	Unmanned Aircraft Vehicle ( refers to the aircraft only )
VFR	visual flight rules
VLOS	visual line of sight

## 2. What is the FAA definition of commercial operation?

[Jump to more info on Commercial use & Section 333 Exemptions](#)

Commercial Operation means that the pilot of an aircraft or drone is flying for compensation (including barter) or hire or simply in furtherance of a business. "In furtherance of business" can include flying for personal use but posting to a commercial business website or using personal flight videos or stills for marketing of a commercial business.

## 3. When I register my drone online with the FAA can I fly commercially?

No. The latest FAA online registration process is for recreational use only. It does not allow you to fly commercially. Commercial operation still requires a Section 333 Exemption, a pilot's license and a different registration form.

## 4. SUMMARY for RECREATIONAL DRONE USE:

Your drone must be registered prior to recreational flight.

If you bought your drone prior to Dec 14, 2015 you must register by Feb 19 2015.

Register at <https://www.faa.gov/uas/registration/>

Any drone over 0.55 lb (8.8 ounces) is considered an aircraft by the FAA.

The FAA will be sending enforcement guidelines to local police. You can read those guidelines here: <http://1.usa.gov/1moeDwi>

Learn and follow the safety regulations or you may potentially be fined.

Some rules are based on info you might not know unless you are a licensed pilot. Be aware that manned aircraft often do fly below 400' AGL (above ground level). Be aware that there are many ways for a drone to fail and cause a hazard.

## **5. What are the rules for flying drones for hobby or recreational use?**

- Register your aircraft. One registration will cover all your models
- Fly below 400 feet and remain clear of surrounding obstacles
- Keep the aircraft within visual line of sight at all times
- Remain well clear of and do not interfere with manned aircraft operations
- Don't fly within 5 miles of an airport unless you contact the airport and control tower before flying. Get the tower phone number, call and tell them where and when you will be flying. They appreciate knowing this information.
- Don't fly within 2 miles of a heliport
- Don't fly near people or stadiums
- Don't fly a drone that weighs 55 lb or more.
- Don't be careless or reckless with your unmanned aircraft — you could be fined for endangering people or other aircraft
- Don't fly under the influence of alcohol or drugs
- There may be specific local laws you need to follow
- Respect the privacy of individual
- Greet authorities with a smile and present your registration etc.

## **6. If I am only flying for fun, do I have to register my drone?**

Yes. All recreational drone flyers are now required to register their drones and display their registration numbers on the aircraft as well as carry proof of their registration when flying (drones weighing less than .55 lbs. or 8.8 oz. need not register).

## **7. Where can I register my drone?**

For hobby flight only register at <https://www.faa.gov/uas/registration/>

## **8. What other paper work is required for recreational registration?**

That's it for now. However, drones used for commercial purposes require more forms, including a certificate of origin or an affidavit of ownership.

## **9. What is the fee to register my drone?**

The fee is \$5 dollars (registration before January 20, 2016 is free).

## **10. Do I have to register each drone I buy?**

If you are flying recreationally, you only have to register once, after which you can use the same registration number on all the drones you own. If you are flying commercially under a Section 333, you have to re-apply for the Section 333 for each additional drone you want to fly.

## **11. What happens if I sell my drone?**

Get a signed bill of sale stating you transfer your rights, title and interest etc.  
You should remove your registration markings.  
Update your info on the FAA registration website.

## **12. If I am a professional photographer or videographer, can I post videos of my personal drone work online?**

The FAA actively reviews online videos for obvious FAR violations. If you can demonstrate you were acting legally and responsibly then yes, post your stuff. However, if your video is posted to a commercial photography site it can be considered "in furtherance of business", in which case you would need to produce a Section 333 exemption and pilot's license and a log book if questioned.

## **13. Where can I find more info?**

FAQ for recreational registration: <https://www.faa.gov/uas/registration/faqs/>

Recreation registration link: <https://www.faa.gov/uas/registration/>

Updated news on drones: <http://www.suasnews.com/>

FAA UAS general questions: <https://www.faa.gov/uas/>

Map of No Fly Zones: <https://www.mapbox.com/drone/no-fly/>

Resource for flying responsibly: <http://knowbeforeyoufly.org/>

Section 333 exemption info:

[https://www.faa.gov/uas/legislative\\_programs/section\\_333/](https://www.faa.gov/uas/legislative_programs/section_333/)

Learn to read a VFR Sectional Chart: <http://1.usa.gov/1NzDWme>

VFR Sectional Chart: <https://skyvector.com/>

## **14. SUMMARY for COMMERCIAL DRONE USE:**

[Or go to summary for recreational use](#)

Commercial Operation means that the pilot of an aircraft or drone is flying for compensation (including barter) or hire or simply in furtherance of a business. In furtherance of business can include flying for personal use but posting to a commercial business website or using personal flight videos or stills for marketing of a commercial business.

Commercial use of a drone requires a more extensive registration process. Commercial flight is any flight that is "in furtherance of a business".

Yes, posting drone captured media to any website linked to a professional business is considered commercial use.

You need a Section 333 exemption and an FAA issued pilots license to fly commercially at this time (December 2015).

You can be granted an exemption without a pilot's license, but cannot use the exemption until you also have the license.

You can apply for a Section 333 exemption online at <http://www.faa.gov/uas>.

Section 333 application requires that you know the Federal Aviation Regulations.

If you don't know the FAR's you can hire a third party to apply for you.

Perform your due diligence when hiring a firm to apply for your exemption.

An FAA Sport License is the most affordable recognized type of pilot's license. Contact your local flight school for more information.

### **15. What are the rules for flying drones for commercial use?**

The FAA considers any commercially operated drone to be an aircraft. It is subject to the extensive FAR's just as any manned aircraft.

The limitations of commercial drone flight we are interested in are as follows:

- At or below 200 feet. (You will need an additional COA to fly to 400 feet)
- Less than 55 lb.
- Daytime only.
- VFR flight rules only, VFR conditions only.
- No operation beyond visual line of sight.
- Lateral separation distances from airports:
  - 5 nautical miles (NM) from an airport having an operational control tower;
  - 3 NM from an airport with a published instrument flight procedure, but not an operational tower;
  - 2 NM from an airport without a published instrument flight procedure or an operational tower;
  - 2 NM from a heliport with a published instrument flight procedure.
- Commercial use requires a Section 333 exemption, a pilot's license and a COA.
- A "blanket" COA (Certificate of Authorization) may be issued with your exemption.
- A COA details special procedures, areas and limitations of your drone flight.
- The blanket COA is limited in scope and you likely need to apply for more COA's.

The "blanket" 200-foot COA allows flights anywhere in the country except restricted airspace. The US has a LOT of restricted airspace. You need to be able to read an airspace map (Sectional Chart). Some flights will require an additional COA.

### **16. What is Section 333, a Section 333 exemption, and how can I get one?**

Section 333 is a small part of H.R. bill 658, also known as the FAA Modernization and Reform Act of 2012. Subtitle D (which includes Section 333) provides guidelines for the integration of Unmanned Aircraft Systems into the national airspace system. A 333 exemption is not an exemption from Section 333, rather it is an exemption made available by provisions in Section 333.

A Section 333 exemption is a document that will exempt a particular drone from certain FAR's. For instance, there is a regulation that requires aircraft to display registration numbers in characters 12 inches high. This obviously is not practical on small drones, thus you need an exemption from that regulation. Most common drones systems require from 5 to 10 of these exemptions.

Learn more and find instructions on filing an exemption request:

[http://www.faa.gov/uas/legislative\\_programs/section\\_333/](http://www.faa.gov/uas/legislative_programs/section_333/).

**17. If I get a Section 333 exemption but don't have a pilot's license, can I fly under the exemption?**

No. You need a pilot's license to fly commercially. Hopefully in 2016 the FAA will begin to issue a drone operator's license, which will ease your financial and knowledge requirements considerably.

**18. How do I get a COA?**

The somewhat restrictive "blanket" COA is typically issued with the Section 333 Exemption. Additional COA's can be applied for at

<https://oeaaa.faa.gov/oeaaa/external/uas/portal.jsp>

**19. Do I have to register my drone once I get my Section 333 & pilots license?**

Yes, if you want to fly. Once you receive your Section 333 exemption you must request an aircraft registration form 8050-1 from the FAA. It is a hard-copy form. Ask for it here: <http://registry.faa.gov/aircraftemail/aircraftemail.aspx>. First you go online and fill out the email form to request the 8050-1 form. Then they will mail you the pink carbon-copy form which is difficult to interpret but very cute. You will also need to file a certificate of origin ( acquired from the manufacturer ), or an affidavit of ownership if you custom built your drone.

While currently there is no online registration for drones used commercially, one is scheduled to open by March 31 2016:

[https://www.faa.gov/licenses\\_certificates/aircraft\\_certification/aircraf...](https://www.faa.gov/licenses_certificates/aircraft_certification/aircraf...)

**20. If I am operating commercially, do I need separate drone insurance and where can I get it?**

Yeah, you need liability insurance that covers you for drone damage. It is readily available through an online search and you should also check with your insurance provider to see if they have a policy that would cover you. You might expect to spend between \$800 to \$1500 yearly.

**21. Where can I find more info?**

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