

You may have heard that now is the time to start a drone business. But why now and where should you start? It's the fun aspects of starting a drone business like choosing a name and creating a logo that don't necessarily need to be laid out in a complete guide. However, the aspects that will make your drone business stand out and succeed in this growing industry is why DARTdrones UAV Training School created this comprehensive guide.

If you are wondering how to make money with a drone or how to start a drone business, this guide will teach you all of the essential steps, tips, and information. We will cover how to obtain a Part 107 Remote Pilot Certificate, FAA rules and regulations, drone insurance, and more!

Why Start a Drone Business?

Over the past few years, the drone market has been rapidly growing with various industries integrating Unmanned Aerial Vehicles (UAVs) into their daily operations. As the industry has become more viable, aeronautical experts predicted that it was primed for entrepreneurial growth on all fronts.

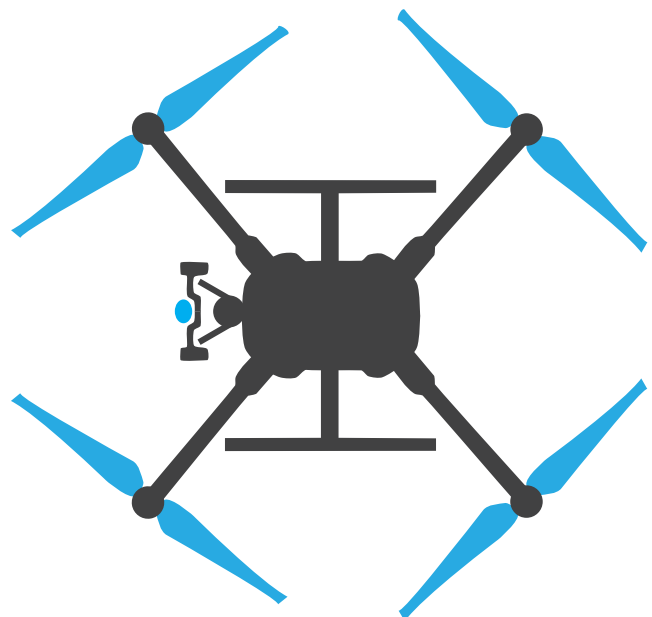
A recent report shows that the market is expected to grow from \$17.82 billion in 2017 to \$48.88 billion by 2023. According to MarketsandMarkets, the growth of the industry is driven by increases in venture funding, the rise in demand for commercial data, and technological advancements.

The Association for Unmanned Vehicle Systems International (AUAVSI) released an economic impact report on the integration of drones in the U.S. The full report lays out all economic benefits including the impact each U.S. state will have. The main economic changes include:

- The economic impact of the integration of drones will total more than \$82.1 billion between 2015 and 2025
- Integrating drones will create an estimated 103,776 jobs by 2025
- Tax revenue to the states will total more than \$482 million by 2025
- For every year that drone integration is delayed, the U.S. loses more than \$10 billion (\$27.6 million per day) in potential economic impact.

Top Reasons to Start a Drone Business:

- Industry growth
- Relatively low start up costs
- High demand
- Numerous vertical opportunities
- Reasonable certification process





How to Start a Drone Business Under Part 107 FAA Drone Rules

There is a lot that goes into starting a drone business. These seven steps are a great way to start planning and get started.

Part 107 Certification

Before doing anything for your business, it is crucial to take and pass the Part 107 exam. Without a Part 107 certification, you cannot legally fly a drone for any business purpose. Here are the steps to getting your Part 107 certification:

1. Study for the exam - recommended 15+ hours
2. Register with IACRA - you will need to register for an account with the FAA's electronic application system, IACRA
3. Choose an approved testing center - find a local FAA testing center and register to take the Part 107 exam. Once you select a location, call to schedule your exam
4. Take the exam - you will need a passing score of 70% or higher
5. Submit Part 107 exam score - after passing the exam, you will finalize your application and submit your test score on IACRA. You will receive your test score immediately after completing the exam
6. Receive a temporary certificate - you will receive a temporary drone certificate within one week. Under the Part 107 FAA drone rules, you can legally fly for business purposes with a temporary drone certificate
7. Receive a permanent Part 107 certificate - Within 1 - 3 months, you will receive your permanent certificate in the mail
8. Two-year renewal - you must pass a biannual flight review every 2 years

Developing Your Drone Business Structure

You have most likely already asked yourself how to start a drone business and how to make money with your UAV. The following research and decisions will help you get to where you need to be in launching your drone business.

- Drone Market Analysis
- Personal Fit
- Competitive Analysis
- Identifying a Target Market
- Target Market Pros and Cons
- Service Offerings
- Pricing Strategy (tip: see what your competition is charging for their products/services)
- Branding (this includes brand messaging, company voice, marketing materials, etc.)
- Choosing a Company Name
- Designing a Logo
- Developing a Tagline

Drone Business Operations

How will your drone business actually operate? Make business decisions such as hiring staff, having an outside business create your website, and implementing a lead generation system. Consider the below components:

- Building to scale
- Establishing your website
- Website hosting
- Web development tools
- External phone system
- Setting up business emails
- Hiring strategically
- Developing a organizational chart
- Customer relationship management (CRM) systems
- Project management systems
- Tools for internal communication



Finding Customers for Your Drone Business

How will customers know about your products and services? How are you going to get the word out about your new business? Regarding the question of how to make money with a drone, this is the step that will lead to money generation by finding the right customers through marketing initiatives. Consider the following forms of marketing:

- Digital marketing
- Content marketing
- Search engine marketing
- Pay per click strategy
- Creating your first AdWords campaign
- Display ads
- Search engine optimization (how will customers find your business online without paid ads?)
- Identifying search engine optimization (SEO) keywords
- SEO strategy
- Social media marketing
- Creating a Facebook ad
- Advertising in newspapers and magazines
- Public relations strategy

Legal Considerations and Liabilities

- Obtaining liability for drone pilots
- Types of business organizations
- Sole proprietorships
- Partnerships
- Limited liability companies
- Employment contracts
- Copyright law
- Trademarks
- Privacy considerations (*tip: although there are no specific FAA drone rules prohibiting certificated drone pilots from flying over private property, some local laws have been put into place that do limit where commercial operators can fly. Be sure to know the local rules.*)

Drone Insurance

Accidents happen - even a certified pilot with UAV training can crash a drone or have a mishap while in flight. Unpredictable weather, interference from radio towers, and UAV malfunction are all possibilities that can cause a drone to crash or fly away. This is why it is absolutely essential to obtain drone insurance. There are currently two types of drone insurance:

1. Drone Liability Insurance - covers the cost of property damage or personal injury resulting from an sUAS operation. Liability insurance carries the highest premiums and provides the greatest amount of coverage.
2. Drone Hull Insurance - protects your aircraft should damage occur to the drone during flight.

Our UAV Training School recommends either Verify or Global Aerospace. Aside from obtaining insurance for your drone business, it is also important to consider the following:

- UAV insurance
- Insurance vs. warranty
- How much coverage do you need?
- Why buy drone insurance?
- Factors affecting coverage
- Insurance options
- Warranties
- Risk mitigation

Advanced UAV Training

To set your services apart from the competition, it is smart to consider additional or advanced UAV training. Once your drone business is launched, you will want a standardized training model to be sure everyone on your team is conducting flights at the same level, especially if you bring on additional pilots to your team. DARTdrones UAV Training School offers advanced training workshops in aerial mapping and modeling as well as aerial roof inspections.



Overview of Part 107 FAA Rules for Starting a Drone Business

Under the Part 107 FAA rules regarding UAVs, all flights for your drone business must meet the following criteria:

- Drones weighing greater than 0.55 pounds must be registered
- Pilots must be at least 16 years of age, understand all FAA drone rules, and have a Part 107 certification
- Prior to each flight, the pilot must conduct a preflight inspection to ensure safe operations
- There must be a designated remote pilot in command
- Drones cannot fly from a moving vehicle
- Drones must remain within visual line of sight at all times
- Drones can only fly during daylight
- Drones cannot fly over people
- Drones cannot fly higher than 400 feet or faster than 100 mph
- Drones must always yield the right of way to all aircraft
- Drones cannot fly in Class A through Class E airspace

Waivers can be requested from the FAA on the above regulations

Obstacles, Challenges, and Tips

Starting a drone business is not an easy task. Here are 11 obstacles and challenges that you might face as an entrepreneur:

1. Insurance – general liability and sUAS related insurance
2. Marketing – how to you get your name out there and find jobs
3. Portfolios – various samples of the products you provide — this is nice to show potential customers
4. Flight records management – includes pilot hours, total aircraft flight hours, maintenance logs, FAA record keeping, authorizations, waivers, work order, etc.
5. Service contracts – customizable documents for every client
6. Pricing structure – this will depend on geographic location, type of work/clients you have, and a variety of other factors; to eliminate the hassle and also have some financial security, we recommend considering long-term service contracts (6 months minimum) as opposed to “one-off” projects and better ensure your income over time
7. Travel policy/rate – how far will you travel and what should be factored into the client invoice for travel expenses
8. sUAS routine maintenance schedules – in order to prevent total failure of components that may result in the loss of an aircraft, it is wise to develop a scheduled maintenance/replacement timeline for all sUAS systems owned by your drone business
9. Billing terms – net 7, net 30, prepay — determine what makes the most sense for your business and your clients
10. Filing for FAA waivers/authorizations – it’s important to be proactive and apply for necessary Part 107 waivers before you have solid contracts, otherwise the client may need to wait 90 days for the waiver to be approved and the operation carried out
11. FAA regulations – in order to have a legitimate drone business, you must always be operating within legal bounds, which means staying on top of all FAA regulations