Obtaining Your FAA License to Operate a UAV for Commercial Use

Matt Brugger (Associate Consultant)
matt@tilthag.com
Who Are We?

Mission Statement: Provide independent crop monitoring services and recommendations that are based on firm economic, environmental, and scientific standpoint to agriculture and industry.
UAS (Unmanned Aerial System)

- Aerial Photography
- Enhanced Scouting
- NDVI/Crop Health
Commercial Certification

- Required for Commercial Drone piloting
- Commercial is more than getting paid
- Enforcement?
Certification Requirements

- 16 years old
- Be able to read, speak, write, and understand English
- Be in a physical and mental condition to safely operate a small UAS
- Pass Initial Aeronautical Knowledge Exam
Drone Registration

- $5 for 3 years

- Must be 13 to register a drone

- Need:
  - Email address
  - Credit or debit card
  - Physical address and mailing address (if different from physical address)
  - Make and model of your unmanned aircraft.
Enroll Today for $50 Off Drone Pilot Ground School (Now Through February 28th)

If you don’t pass the Aeronautical Knowledge Test on your first attempt, we’ll pay for your test. We’ve served 5,900+ students and more than 99% of them passed the first time.

We offer a top-notch, comprehensive curriculum created in partnership with a Gold Seal Certified Flight Instructor (CFI) and former Chief Pilot of a Part 107 Flight School. Our course covers all the knowledge concepts that the FAA requires drone pilots to learn.

Enroll in Training for $299 $199

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Fox Valley Technical College

Drone Certificate

Commercial and consumer drone usage is rapidly rising across the country and around the world. Agriculture, construction, and photography are just a few of the industries that are using drones (also called “copter” or “unmanned aerial vehicles”) to meet business needs in a cost-effective way. Evidently, you are also helping drone usage to rise.

Allow your interest in UAVs to take flight with the WATC Drone Certificate. With the certificate's three courses you'll learn to:

- Fly drones safely
- Abide by local and federal laws and regulations
- Explore drone technology and application

Whether you are self-employed, part of a small business or large company, or an aspiring amateur drone pilot, you can benefit from the WATC Drone Certificate.

Program Code: 99595

TILTH AGRONOMY

Unmanned Aircraft Systems Certification

UNMANNED AIRCRAFT SYSTEMS CERTIFICATION

This course is designed to help you understand everything you need to know in order to successfully pass the FAA’s Drone certification written test. Completion of this test provides license for legal operation of an Unmanned Aircraft Systems for commercial applications within the National Airspace system.

ADDITIONAL INFORMATION

- Learn About
  - Drone laws & FAA regulations
  - Weather & Micrometeorology
  - National Airspace System (NAS)
  - Drone flight operations

- Benefits & Outcomes
  - After course and exam completion, receive your Drone (UAS, Unmanned Aircraft Systems) license
Spend four hours in the classroom receiving training and insight from researchers and a certified Part 107 Remote Pilot. Leave the training with study materials, practice exams, and all your questions answered.

Event Details:
- Registration limit of 30 seats
- Register at: https://go.to/FlySafe5/1IDMyAVKx1
- Cost: $50 paid on arrival (Cash or Check—made payable to UW-Madison)

Included:
- 4 hours of classroom training on the FAA Remote Pilot Knowledge Test
- Printed study materials (yours to keep)
- A study book with practice exams (yours to keep)
- Box Lunch

Topics Covered:
- Part 107 Summary — An overview of the Part 107 Rule
- Regulations — A general overview of the FAA Regulations as they pertain to the Part 107 Exam
- Airspace Considerations — An overview of the National Airspace System, an important distinction between hobbyist and Part 107 pilots required knowledge.
- Airport Operations — An overview of the air traffic patterns at new airports and how pilots communicate.
- Aviation Weather — Weather theory and topics typically found on the Part 107 Exam and explanation of aviation weather reports.
- Emergency Procedures — An overview of the FAA specific rules regarding what to do in the case of an emergency in flight.
- Software for Remote Pilots — Record keeping, pre-flight planning, websites, and apps useful for commercial operation of UAVs.

* Attending this course does not guarantee that you will pass the FAA Remote Pilot Knowledge Test. However, you will be provided with ample study material on all exam topics including those not covered in the event.
Cost Associated

- Classes From $50-$700
- FAA Test Cost $150
- Some Classes Include the Exam Cost
Test Information

- [https://www.faa.gov/training_testing/testing/media/test_centers.pdf](https://www.faa.gov/training_testing/testing/media/test_centers.pdf)
- Need 70% to pass
- IACRA
- Renewal
METARS and TAF

- Pilot weather
- One of the Largest Determining Factors for Flight
- Coded Messages
Example

- **Airport**: KJAX
- **Date**: 02 02 56Z
- **Time**: 02 00 30KT
- **Wind Speed**: 10SM
- **Visibility**: TSRA
- **Weather**: OVC01OCB SCT100 BKN130
- **Temp/Dew Point**: 18/17
- **Altimeter**: A2996
SkyVector

- https://skyvector.com/?ll=43.139879139,-89.337504472&chart=301&zoom=3

- Airport Weather

- NOTAMS (Notice to Airmen)

- Airspace and Restrictions
Certificate

- Must be easily accessible by the remote pilot during all UAS operations
- Valid for 2 years - certificate holders must pass a recurrent knowledge test every two years
Insurance

- $1,000,000 Liability, $600 per year
- Not required in U.S., but it is in Canada
- May be required for commercial operations outside Ag
Line of Sight

- Have to be able to see drone
- Visual Observer
- Communication
Waiver

- Can’t do what you need to/want to, get a waiver
- Catch all for Operations outside the regulations
- Have to identify risks and propose mitigation
- No guarantees
Need a Waiver
Need a Waiver
Additional Laws and Fines


Photos

- https://www.youtube.com/watch?v=cOE_JY0ROIo
- https://www.youtube.com/watch?v=HZRp6iRjnhQ
- https://www.buildyourowndrone.co.uk/dji-inspire-1-phantom-3-smartphone-monitor-hood
- https://www.thedroneu.com/blog/are-the-phantom-4s-see-and-avoid-features-all-theyre-cracked-up-to-be/
How We Use a Drone in Our Crop Consulting Business
Nitrogen
Compaction
Spread Pattern
Tile
Pests
Waterhemp
Thank You!
Any Questions?

Jeff Polenske (Partner)
jeff@tilthag.com

Nathen Nysse (Partner)
nathern@tilthag.com

Bill Schaumberg (Partner)
bill@tilthag.com

Todd Schaumberg (Partner)
todd@tilthag.com

Jake Geiger (Associate Consultant)
jake@tilthag.com

Matt Brugger (Associate Consultant)
matt@tilthag.com

Doug Hinz (Associate Consultant)
doug@tilthag.com

Troy Christenson (Associate Consultant)
troy@tilthag.com