

Drone Use Regulation

Program Review and Investigations Committee
Staff Update
October 1, 2014

Outline

- What are drones and what are they used for?
- What is the federal role?
- What is the state role?
- What has Connecticut done?
- What are the major issues and concerns?
- Next steps

What are Drones?

- Unmanned powered aircraft capable of sustained flight
 - Remote operation
 - Autonomous control
- Provide more than just flight
 - Often equipped with additional technology

What are Drones Being Used For?

- Capture images
- Delivery
- Recreation

- Many different applications
 - Agriculture
 - Filmmaking
 - Photography
 - Surveillance

What are Drones?

- Weight
 - Less than 2 pounds
 - Several thousand pounds
- Size
 - Less than 6 inches
 - More than 50 foot wingspan
- Flight time
 - Few minutes
 - Multiple hours

Fixed Wing or Rotary

- Fixed wing
 - Good for surveying
 - Longer flight times
- Rotary
 - Hover capability
 - Greater maneuverability
 - Vertical takeoff

Examples of Drones

- Two product videos
 - Different types/shapes
 - Different uses
 - Different target user groups
- Selling systems and capabilities
 - Not just flight

PrecisionHawk

Embedded Video Link: https://www.youtube.com/watch?v=V244qPNz_4k

ShadowHawk – Vanguard Defense

Embedded Video Link: <https://www.youtube.com/watch?v=oFw5hMRbM-E>

What is the Federal Role?

What is the Federal Role?

- FAA controls flight and most aircraft
- FAA Modernization and Reform Act of 2012
 - “Develop a plan to accelerate the safe integration of UAS into the national airspace system”
 - By September 2015

What is the Federal Role?

- Develop drone test sites
 - 6 sites nationally
 - Designated areas to test drones and components
 - Allows FAA access to help regulation development

What is the Federal Role?

- Prohibition on UAS operation, with exceptions
 - Allows recreational use
 - Limited governmental use
 - Law enforcement and research universities
 - Almost no commercial use
 - Pipeline monitoring in Alaska
 - Select filmmaking companies

What is the Federal Role?

- Definition of unmanned aircraft
 - “an aircraft that is operated without the possibility of direct human intervention from within or on the aircraft”
- Differentiates between UAS and model aircraft
 - Model aircraft exempt from most FAA regulation

What is the Federal Role?

- What are model aircraft?
 - 55lbs or less
 - Operated within line of sight
 - Flown for hobby or recreational purposes

What is the Federal Role?

- Model definition based on use/user
 - Not just technical specifications of vehicle
- Most drones on market *could be* classified as model aircraft
 - Most drones are classified as commercial UAS
- Definition of commercial use is very broad
 - Legal challenges

What is the State Role?

What is the State Role?

- Clear state authority
 - Determine allowable drone uses for state and local governmental functions
 - Law enforcement
 - Emergency response
 - Search and rescue
 - Other

What is the State Role?

- Possible state authority
 - Determine use on state lands
 - Probably limited to operator and takeoff/landing
 - Add penalties for certain drone uses
 - Possibly duplicative of existing laws/penalties

What Have Other States Done?

- 20 states passed drone-related laws
 - 2013-2014
- 12 states limit law-enforcement use of drones
 - Warrant restrictions
 - Exceptions for imminent threat of loss of life
- 2 states issued moratoriums on government use

What Have Other States Done?

- 7 states criminalized some use of drones
 - Private surveillance of others
- 4 states added civil law remedies
- Some only fund test sites

What has Connecticut Done?

What has Connecticut Done?

- Considered drone bill in 2014 session
 - HB 5217 – included:
 - warrant requirements
 - added criminal penalties
- DEEP clarified ban on use in state parks
 - Under existing disorderly conduct regulation
 - Special use exemptions

**What are the Major
Issues and Concerns?**

What are the Issues and Concerns?

- Privacy
 - Private use towards others
 - Law enforcement use towards the public
- Safety
 - Use of drones to make people safer
 - Concerns about malfunctions/accidents
- Economics
 - Potential for new/cheaper services or manufacturing jobs
 - May eventually eliminate some jobs

Next Steps

Next Steps

- Monitor federal developments
- Gather information on stakeholder concerns
- Detailed descriptions of other states
 - what concerns the regulations addressed
 - how well those concerns were addressed
 - measureable impact from regulation
 - which concerns and remedies apply to CT

Next Steps

- October 8, 2014
 - 12:30 pm - Drone demonstration (weather permitting), Capitol Grounds
 - 1:00 pm – Panel discussion (LOB 2B)
 - Emphasis on interaction of law enforcement and drones
 - 3:00 pm – Public hearing (LOB 2B)

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