

Small UAS in Agriculture: Preparing for the Legal Issues

Presented by the Agricultural & Food Law Consortium
June 30, 2015

Peggy Kirk Hall

Ohio State University Agricultural & Resource Law Program

Rusty Rumley

National Agricultural Law Center

Webinar Topics

- Regulatory landscape for small UAS
 - Proposed rule for sUAS
 - Flying legally now
- State law issues:
 - Privacy
 - Trespass
 - Nuisance
- Liability issues

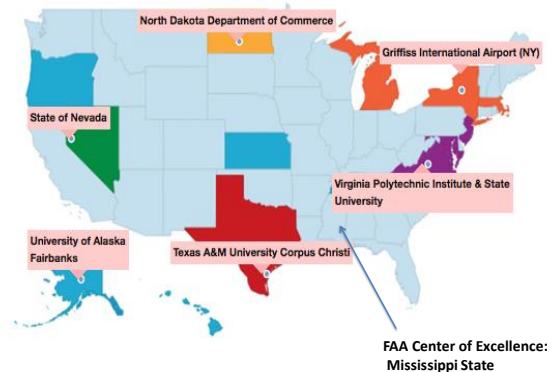
OHIO STATE UNIVERSITY EXTENSION

The Regulatory Landscape

- UAS: a promising technology
- Increased UAS in airspace = increased safety concerns
- FAA Modernization and Reform Act of 2012:
 - Requires FAA to address "safe integration" of UAS via a "five year roadmap"
 - Roadmap announced November 2013
 - UAS Test Sites announced December 2013
 - Proposed rule for sUAS issued in February 2015
 - Pathfinder initiative announced May 2015

THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

3



FAA Center of Excellence:
Mississippi State

FAA Announces Six UAS Test Sites

4

OHIO STATE UNIVERSITY EXTENSION

Proposed FAA Rule for sUAS

- Published February 15, 2015
 - Comment period ended April 24, 2015
 - Expect final rule by Spring of 2016?
- Establishes regulations for operation of sUAS < 55 lbs.:
 - Operator certification
 - Aircraft registration and marking
 - Operation requirements

THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

5

OHIO STATE UNIVERSITY EXTENSION

Operator Certification

- At least 17 years of age
- Identity verification
- Drug, mental, physical condition
- Knowledge test every two years
 - Regulations, airspace classification, flight restrictions, weather, loading and performance, emergency procedures, crew management, radio communications, airport operations, drugs and alcohol

THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

6

Aircraft Requirements

- Registration of aircraft with FAA
- Nationality and registration markings on aircraft
- Maintaining aircraft in condition for safe operation

Operation Requirements

- Pre-flight inspection and assessment before each flight
- Operation limitations
 - Operator must maintain visual line-of-sight
 - May use a “visual observer” to help with view
 - Within 500 feet above ground level
 - Only during daylight hours
 - No more than 100 mph

FAA UAS Pathfinder Initiative

- Announced May 6, 2015
- “Even as we pursue our current rulemaking effort, we must continue to actively look for future ways to expand non-recreational UAS uses.”

FAA UAS Pathfinder Initiative

- **Visual line-of-sight operations in urban areas**-- CNN will examine how UAS might be safely used for newsgathering in populated areas.
- **Extended visual line-of-sight operations in rural areas**--PrecisionHawk will explore how flights outside the pilot's direct vision might allow greater UAS use for crop monitoring in precision agriculture operations.
- **Beyond visual line-of-sight in rural/isolated areas**-- BNSF Railroad will explore command-and-control challenges of using UAS to inspect rail system infrastructure.

May I Fly My sUAS Now?

- “Hobby and recreational” rule—may fly without a certificate or license but must follow safety regulations:
 - Fly under 400 feet above ground level
 - Not near populated areas or other aircraft
 - Notify air traffic control if within 3 miles of airport

May I Fly My sUAS Now?

- Using sUAS to monitor crops
 - If crops are for personal use, then hobby/recreational rules apply
 - If crops are for business use, then is a commercial use that requires:
 - Certificate of airworthiness or Section 333 exemption from airworthiness requirement
 - Certificate of authorization (COA)

Authorization for a Commercial Use

- FAA Section 333 exemption application
 - Exempts operator from certificate of airworthiness process
 - New streamlined “summary grant” process announced in April for “typical” applications
 - Also added recreational/sport pilot license recognition and removed medical card requirement
 - Online application process; see FAA website.
 - 120 days

Certificate of Authorization (COA)

- New “blanket COA” announced in March:
 - FAA automatically grants a COA to any sUAS operator granted a Section 333 exemption
 - For flights up to 200 feet that operate during daytime Visual Flight Rules conditions, within visual line of sight of the pilot within certain distances away from airports or heliports
 - Operator may apply for an additional COA if blanket conditions not sufficient

FAA Enforcement

- FAA will issue cease and desist letters for unauthorized flights
 - Identifying flights through hotline, internet
- FAA has fined operators who fly without authorization and present a “*medium to high actual or potential risk to safety*,” such as “endangering the safety of another aircraft or of persons or property on the ground”

Research and Development

- *By government, public universities:*
 - Public Certificate of Authorization (COA) required
 - For research related to: testing of aircraft, control systems, equipment on aircraft, flight profiles, functions, capabilities
 - Permits to operate a particular aircraft, for a particular purpose, in a particular area
- *By others:*
 - Experimental Certificate of Airworthiness or Section 333 exemption

STATE ISSUES

State UAS Laws

According to the National Conference of State Legislatures in 2013:

- 43 states introduced 130 bills and resolutions addressing UAS issues.
 - Available at <http://www.ncsl.org/research/civil-and-criminal-justice/unmanned-aerial-vehicles.aspx>

Currently 22 states have passed UAS laws and the language is available on the registration page.

State Issues

- Privacy
- Use by law enforcement
- Nuisance / trespass



The Right to Privacy – What is it?

- The short answer is...we don't really know, but we have some guidelines
 - Constitution
 - Case Law
 - Statutory Law
 - Executive Memorandum

Constitutional right to privacy?

- Privacy is not mentioned in the Constitution
- Case law tells us that there is a "right" to privacy buried in the Bill of Rights
- Griswold v. Connecticut, 381 U.S. 479 (1965) - "penumbras" and "emanations" of other constitutional protections

The Right to Privacy, continued

- The Open Fields Doctrine (4th Amend):
 - No expectation of privacy in an open field (although it could still be trespass) – *Oliver v. United States*, 466 U.S. 170 (1984)
 - Potentially an expectation of privacy around the curtilage (areas immediately around a building).
 - Right of privacy surrounding homes
 - Thermal Imaging is a violation - *Kyllo v. United States*, 533 U.S. 27 (2001)

The Right to Privacy, continued

- Statutory Rights to Privacy
 - Health Insurance Portability and Accountability Act (HIPAA)
 - Video Privacy Protection Act
 - State and federal UAS Privacy Laws and Memoranda

Typically these are strong protections for a limited subject area.

Privacy

- Many of the proposed (and passed) state laws focus on privacy
- Typically work to make the capture of images with a UAS a crime under certain circumstances



Ex: Tex. Gov't Code Ann. art. 4, §423

- A person commits an offense if the person uses an unmanned aircraft to capture an image of an individual or privately owned real property in this state with the intent to conduct surveillance on the individual or property.

Ex: Tex. Gov't Code Ann. art. 4, §423

- "Image" means any capturing of sound waves, thermal, infrared, ultraviolet, visible light, or other electromagnetic waves, odor, or other conditions existing on or about real property in this state or an individual located on that property.

Ex.:Tex. Gov't Code Ann. art. 4, §423

- Exemptions:
 - Researchers and professors
 - UAS Test sites
 - Military
 - Law enforcement with restrictions
 - Utility companies...
- Otherwise it is a Class C misdemeanor to take or possess images
 - Additional potential civil penalties

Law Enforcement Use

- Very popular topic for state legislatures
- Some common themes:
 - Cannot use an UAS without a warrant except:
 - Search & Rescue
 - In pursuit of a fugitive
 - Controlled substance investigations
 - Documenting crime/accident scenes
 - Cannot keep recorded images on file
 - In TX, law enforcement must publish biannual reports on the use of UAS, total # of hours, what and when they were used, the evidence gathered, and the cost of deploying the UAS

Idaho Law Enforcement / Ag Gag

- Idaho Code Ann. § 21-213 – Absent a warrant it is illegal to conduct surveillance on:
 - (ii) A farm, dairy, ranch or other agricultural industry without the written consent of the owner of such farm, dairy, ranch or other agricultural industry.

PETA and UAVs



- PETA is selling "Air Angels" complete with wi-fi and an HD camera to monitor illegal hunting and fishing
 - Has a range of about 165 feet
- Hunters and UAVs...

Illinois Statute - 720 ILCS 5/48-3

- (b) A person commits hunter or fisherman interference when he or she intentionally or knowingly:
 - ... (10) uses a drone in a way that interferes with another person's lawful taking of wildlife or aquatic life. For the purposes of this paragraph, "drone" means any aerial vehicle that does not carry a human operator.

Executive Memorandum & Action

- "Promoting Economic Competitiveness While Safeguarding Privacy, Civil Rights, and Civil Liberties in Domestic Use of Unmanned Aircraft Systems"
 - Released earlier this year
 - Deals with government use of UAS
- National Telecommunications and Information Administration (NTIA) took comments for Privacy, Transparency, and Accountability Regarding Commercial and Private Use of Unmanned Aircraft Systems

Nuisance and Trespass



Background

- Common Law - *Ad coelum* doctrine
 - Landowner owns from the center of the earth to the heavens above
 - Mineral interests partially derive from this doctrine
- Air Commerce Act of 1926
 - Designated the airways, license pilots, airworthiness certificates
 - 49 USCA § 180 – sets "navigable airspace" at 1000 ft. over populated areas and 500 ft. elsewhere

How much Airspace does a landowner control?

- A landowner's property interest in land extends to the airspace directly over the property, to the extent that the airspace can be used to benefit the underlying land.
 - *Persyn v. U.S.*, 34 Fed. Cl. 187 (1995)
- Flexible Standard?
 - High rise building vs. a potato field

Nuisance and Aircraft?

- Nuisance – an unreasonable interference with another's use and enjoyment of their property.
 - Fault – the defendant intentionally, negligently, or recklessly caused the interference
 - Level – Substantial and ongoing
 - Not petty or short-lived
 - Reasonableness – Test of utility vs. harm

The first aerial nuisance claim?

- The proprietor of the Cackle Corner Poultry Farm, Garrettsville, Ohio, complained to the Postmaster General that low-flying planes were disrupting egg production.
 - Jan 31, 1928

Trespass and Nuisance

- For a flight by aircraft in the air space above the land of another to constitute a trespass, there must be substantial interference with the use and enjoyment of the underlying land, rather than reasonable interference. Flights taking place in the navigable airspace cannot constitute trespass.
 - *Beyers v. Gaylord Broadcasting Co., L.P.*, 30 Media L. Rep. (BNA) 2586, 2002 WL 1582286 (Tex. App. Dallas 2002) (holding that a helicopter's single ten-minute hover over a resident's house at 300 to 400 feet, while obtaining aerial footage for a news story, did not rise to the level of substantial interference with the use and enjoyment of the underlying land, and thus the helicopter's flight did not constitute a trespass).
- What about the UAS flying at 50 feet? This is a very state specific area of the law.

What about Liability?

- Harm caused by sUAS to your property
- You cause harm with your sUAS
- Your sUAS is harmed
- Insurance coverage is now available for operators

Questions



Rusty Rumley
National Agricultural Law
Center
rrumley@uark.edu

Peggy Kirk Hall
Ohio State University
aglaw@osu.edu

Please take a moment to complete the evaluation question in the top right hand corner of the screen ~ thank you!