

OHIO STATE UNIVERSITY EXTENSION


*Ohio Food, Agriculture and Environmental Law
Webinar Series*

**Big Data and Unmanned Aerial Vehicles:
Legal Issues for Agriculture**

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The webinar will begin at 1 PM.

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

OSU Agricultural & Resource Law Program
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*Big Data and Unmanned Aerial
Vehicles: Legal Issues for Agriculture*

Ohio Food, Agriculture and Environmental Law Webinar Series
Ohio State University Extension
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Drones and the Law



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A rose by any other name . . .

- Drones
- sUAS
 - Small unmanned aerial systems (FAA’s favorite)
- UAV
 - Unmanned aerial vehicle

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Types of Drones – Rotary/Propeller-Based



- Operation
 - Remote control
 - GPS
- Flight time
 - 10-30 minutes
- Pros
 - Costs
 - Ease of operation
- Cons
 - Less flight time
 - You will crash at least one




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Types of Drones – Fixed Wing

- Operation
 - GPS (for most)
- Flight time
 - 20-50 minutes
- Pros
 - Flight time
 - Reduced operator error
- Cons
 - Costs
 - Not useful for spot checking

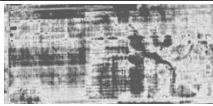
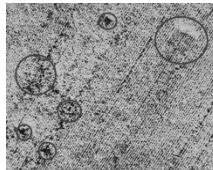

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Agricultural Applications

- Crop Scouting
 - Plant health
 - Insect damage
- Precision Agriculture
- Irrigation Monitoring
- Future applications
 - Animal health monitoring
 - Farm appraisals



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8

Drones and the Law

- Are drones legal?
- Property laws
 - Trespass
 - Nuisance
- State Privacy Laws
- Negligence
- Criminal penalties
- Can I shoot them?


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9

ARE DRONES LEGAL?



Federal Aviation
Administration

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Are drones legal?

- It depends . . .
 - Recreational uses – YES
 - Commercial (farm) uses – UNCLEAR, but it will be

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11

Model/Recreational Aircraft

- 2012 FAA Reauthorization Act definition
 - Flown within visual line of sight
 - Flown for hobby or recreational purposes
 - No connection to a commercial enterprise
 - Operated within recognized safety guidelines
 - 55 pounds or less (unless certified)
 - Yields to and does not interfere with manned aircraft
 - Prior notice if flown within 5 miles of an airport

Aircraft meeting this definition are exempt from further FAA regulations

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12

Are drones legal?

- It depends . . .
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Upcoming Commercial Drone Regulations

- Congress (2012)
 - FAA to integrate commercial drones into the national airspace by Sept. 30, 2015
- FAA plans to propose rules for small commercial drones (<55 lbs., under 400 ft.)
 - Focus on agriculture, aerial photography, film industry
- FAA will miss 2015 deadline for larger drones
 - May never finalize regulations
 - Instead, require case-by-case approval

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14

Legality of Commercial Drone Operation (Today)
– FAA’s Position

- Commercial operations are only authorized on a case-by-case basis
 - There is no “gray area”
- Requirements same as manned aircraft
 - Certified aircraft
 - Licensed operator
 - Operating approval
- Approved uses
 - Pipeline operations in Arctic Ocean, Alaska’s North Slope

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Legality of Commercial Drone Operation (Today)
– FAA’s Position

Section 333 Exemptions

- Petition FAA for permission to operate sUAS
 - Exempt “airworthiness” certificate
- Considerations
 - Do the proposed uses of the small drones, if flown in line of sight, present hazard to airspace or national security?
 - Is certificate of waiver, certificate of authorization or airworthiness certification required?
- Current exemptions
 - Film studios
 - Aerial photography




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16

Legality of Commercial Drone Operation (Today)
– not FAA’s side

Huerta v. Pirker (NTSB Dkt. # CP-217)

- Professional photographer used drone to capture images for UVA Medical School promotional video
 - Flew near people, buildings, traffic, statues, railroads
- FAA issued \$10,000 fine for reckless operation of an aircraft
 - FAA defines “aircraft” as “any contrivance invented, used, or designed to navigate or fly in the air”




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17

Legality of Commercial Drone Operation (Today) – not FAA’s side

Huerta v. Pirker

- Photographer’s position:
 - Small drone is “model aircraft,” not “aircraft”
 - Only subject to voluntary safety guidelines
 - FAA’s position that commercial drones are illegal is only supported by “guidance” documents, not regulation
 - No Act of Congress or public rulemaking
 - If not “aircraft,” not subject to FAA aircraft regulations



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18


Legality of Commercial Drone Operation
(Today) – not FAA’s side

Huerta v. Pirker

- NTSB Appellate Board:
 - Small drones are still aircraft
 - FAA has the authority to regulate drones
- Still unclear whether FAA’s has outlawed commercial use of drones

You can be held liable for reckless flight

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19

Where do we stand today?

- Despite FAA’s insistence, there may be some “gray area”
- Increased use of 333 exemptions
- Still awaiting regulatory proposals for small drones (finalized in either 2016 or 2017)
 - Flight restrictions
 - Operator qualifications
 - Aircraft requirements

Commercial drone regulations will clear the air


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20

COMMON LAW TORTS



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21

Respecting Private Property - Trespass

- Causing or committing an unlicensed entry on real property
 - Liable for property damages
- Difficult to determine trespass into airspace
 - Can only trespass into airspace that a property owner actually controls
 - Below tree line, roofline, etc.
- Simply flying over a property does not incur trespass liability
 - *U.S. v. Causby*, 328 U.S. 256 (1946)

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Respecting Private Property - Nuisance

- Causing a “substantial and unreasonable interference” with the “quiet use and enjoyment” of real property
 - Harassment
 - Residents
 - Livestock
- Liable for difference in rental value of property

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STATE PRIVACY LAWS




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State Anti-Surveillance Laws


- State laws
 - Illinois & Iowa (and others)
 - State and local governments must obtain warrants for surveillance
 - Idaho
 - Prohibits *private* surveillance of farms, dairies, and ranches without written consent
 - Virginia
 - 2-year moratorium for use by state & local law enforcement
- More states are considering restrictions that would apply to government, activist surveillance


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NEGLIGENCE





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Negligence

- Failure to exercise *reasonable care*, resulting in damages to either property or people
 - Can also result in punitive damages
- If you operate a drone, you accept responsibility for your actions
 - Also employees acting within course of their employment


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27


Negligence

Examples of Reasonable Care

- Training
- Equipment maintenance
- Manufacturer's instructions
- Compliance with safety regulations, guidelines
- Avoid potential for collisions with people, property
- Avoid manned aircraft
 - Including aerial applicators

Employ Common Sense!


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28

CRIMINAL LIABILITY



CRIMINAL LIABILITY

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29

Criminal Liability

- Improper drone use can lead to arrest, fines
- Examples of arrests
 - Flying near aircraft
 - Flying near pedestrians
 - Obstructing emergency personnel
 - Low-flying surveillance over cattle feedlot

Employ Common Sense!



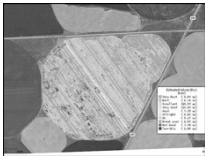
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Big Data



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What is “Big Data”?

- Aggregated data gathered from numerous farming operations
 - Shared with agriculture technology provider (ATP) through cloud-based systems
- Assists in developing prescriptive planting programs
 - Customized fertilizer, pesticide application
 - Hybrid seed selection, seed population



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“Big Data” Risks

- Data breaches
 - Contains geospatial data that can identify farms
- Sales to third-parties
 - Potential competition for leased acres
 - Will owner receive compensation for data?
- Market manipulation


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“Big Data” – Legal Issue

- Contract law

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“Big Data” – Legal Issue

- Contract law
 - Farmer’s rights
 - Data privacy
 - How will it be anonymized?
 - Time limitations
 - Compensation (if any) for sharing with third-parties
 - ATP’s rights
 - How can data be used?
 - Who can it be shared with?

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35

What to look for in a contract

- What data will be collected?
 - Limited to data useful for prescriptive planning?
- How will that data be used?
 - Shared with third parties?
 - Used beyond purposes of prescriptive planting?
- What control will the farmer have over the data?
- Is the data portable?
 - Can the farmer share the data if switching to another ATP?
- How will it be aggregated, anonymized?
 - Can it later be deleted?

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36

What to look for in a contract


- Does contract require affirmative consent before data is shared with ATP?
- What data will be collected?
 - Limited to data useful for prescriptive planning?
- How will that data be used?
 - Shared with third parties?
 - Can farmer opt out?
 - Used beyond purposes of prescriptive planting?
- What control will the farmer have over the data?


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37

What to look for in a contract

- Is the data portable?
 - Can the farmer share the data if switching to another ATP?
- How will it be aggregated, anonymized?
 - Can it later be deleted?
- Will farmer be notified of changes to ATP's privacy policies?
- Does agreement prohibit ATP from using data for speculation in commodities markets?


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38

Privacy and Security Principles for Farm Data

- American Farm Bureau Federation-facilitated agreement on November 13, 2014

Signatories

- AFBF
- American Soybean Assoc.
- Beck's Hybrids
- Dow AgroSciences LLC
- DuPont Pioneer
- John Deere
- Nat'l Ass'n Wheat Growers
- Nat'l Corn Growers Assoc.
- National Farmers Union
- Raven Industries
- The Climate Corp. (Monsanto)
- USA Rice Federation



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39

Privacy and Security Principles for Farm Data

- Education
 - Grower's should understand their rights and responsibilities
- Ownership
 - Farmers own the data
 - Farmers control how they share data with others
 - Farmers are responsible for ensuring only data they own is provided to account with ATP
- Consent Prior to Data Collection
 - Affirmative consent should be required

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40

Privacy and Security Principles for Farm Data

- Notice
 - Growers should have notice when data is collected
 - How it is used
- Transparency and Consistency
 - ATPs shall notify farmers about purposes of data collection
 - Farmers should have options to limit uses of data

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41

Privacy and Security Principles for Farm Data

- Choices
 - ATPs should explain effects and abilities of a farmer's decision to opt in, opt out, disable ATP services
- Portability
 - Farmers should be able to retrieve that data for storage or use in other systems
- Terms and Definitions
 - ATPs should clearly explain substantive terms of their contracts

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Privacy and Security Principles for Farm Data

- Disclosure, Use and Sale Limitation
 - ATPs will not sell data to third-parties unless third-party is bound to same limitations as ATP
 - Farmers must be notified prior to data sales and be able to opt out
- Data Retention and Availability
 - Each ATP should provide for removal, secure destruction and return of original farm data
 - Upon farmer's request
 - Pre-agreed period of time
- Contract Termination
 - Procedures for contract termination should be clearly stated to growers

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43

Privacy and Security Principles for Farm Data

- Unlawful or Anti-Competitive Activities
 - Data should not be used for unlawful activity, antitrust violations
 - Market manipulation
- Liability & Security Safeguards
 - ATP should clearly define terms of liability
 - Farm data should be protected with reasonable security safeguards
 - Growers should be notified if there is a data breach

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44


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Friday, January 9, from 1-2 pm EST:

The 2014 Farm Bill: Guiding a Client through the New Law

Presented by: Bill Bridgforth
Ramsay, Bridgforth, Robinson & Raley LLP, Pine Bluff, Arkansas

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