Drones: Present and Future Challenges for Airports

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KAPLAN KIRSCH ROCKWELL
projects that keep life moving™
Delivery
Proliferation

No air traffic rules (yet)
Interference with traditional aircraft
This summer with Cape Cod as a drone test site...

Obviously part of drone surveillance training...

Click! Click! Click!
FAA has this under control?

NO DRONE ZONE
We've heard about:
  • Drone delivery
  • Drones and privacy
  • 'No drone' zones
  • Drone technology

But precious little about
**DRONES AND AIRPORTS**
What do airports really need to know about drones?
Basic (and Really Hard) Questions

- Are drones aircraft?
  49 U.S.C. 40102

- Where does the FAA regulate?
  14 C.F.R. 91.119
  500' or 1000'

- Where is the navigable airspace?
  49 U.S.C. 40103

- Where, when, how does FAA have exclusive authority?
An evolving legal and practical landscape

**FAA Modernization and Reform Act of 2012**
- Safely integrate UAS into national airspace system by 9/30/15
- Case-by-case approval of public operations
- Reduced burden - model/hobby UAS

**FAA Regulations**
- Proposed regulations on small UAS
- Blanket certificate of authorization authority
- Guidance and more guidance!

**Forthcoming statutes and regulations**
- FAA Reauthorization (?)
- FAA annual appropriations
- Final small UAS regs
- Large UAS regs
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Bottom line

- Heavily but not exclusively federally regulated
- Vehicle vs. operations vs. operator
UAS authority depends on use

PUBLIC AGENCIES
Certificate of Authorization (COA)
- Only public agencies
- Specific for particular vehicle
- Operator must have pilot license
- Specific use authorized
- Conditions imposed

COMMERCIAL OPERATORS
- Generally prohibited
- Case-by-case exemptions under Section 333
- Recent exemptions: film industry, aerial surveying, inspections
- Up to 400’ AGL

RECREATIONAL USERS
- Section 336 - special rule prohibits regulation
- But...
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An airport toolbox
B4UFLY

- FAA-designed app
- Geo-referenced map
- 5 mile circles around airports...
- AND EVERY HELIPAD
- Directs user to "notify" airport/helipad operator
- Notification...No power given to operator to veto flights
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B4UFLY
v1.3

Safety is everyone's responsibility. Unmanned aircraft must never interfere with manned aircraft operations. B4UFLY provides situational awareness of your current or planned operational area, as well as additional reference resources.
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Know Before You Fly

DO: FLY YOUR UNMANNED AIRCRAFT BELOW 400 FEET
DO: FLY WITH LOCAL CLUBS
DO: INSPECT YOUR AIRCRAFT BEFORE YOU FLY
DO: TAKE A LESSON BEFORE YOU FLY

DON'T: FLY YOUR UNMANNED AIRCRAFT BEYOND LINE OF SIGHT
DON'T: FLY NEAR AIRPORTS OR ANY MANNED AIRCRAFT
DON'T: FLY NEAR PEOPLE OR STADIUMS
DON'T: BE CARELESS OR RECKLESS, YOU COULD BE FINED IF YOU ENDANGER PEOPLE OR OTHER AIRCRAFT
DON'T: FLY ANYTHING THAT WEIGHS MORE THAN 55 LBS.
DON'T: FLY FOR PAYMENT OR COMMERCIAL PURPOSES UNLESS SPECIFICALLY AUTHORIZED BY THE FAA

www.faa.gov/uas  •  www.knowbeforeyoufly.org
Must airports allow UAS activity?

• FAA *may* consider it to be aeronautical activity **but**

• UAS don't need an airport to operate, **so**

• Uncertain scope of airport regulation
Permitting UAS on the airport

- Reasonable rules/regulations
- **Insurance and risk allocation**
- Grant assurances 20 (airspace) and 21 (land use)
- Flexibility to adapt to changing climate
- Separation from other aeronautical activity
- Distinguish by type of use
Off-airport regulation

Local authority ---

- Trespass
- Nuisance
- Privacy
- Hunting!
Latest News

- FAA reauthorization - preemption of state and local authority
- Micro UAS rulemaking committee report
- Expansion of online registration to small UAS
- Increased ceiling to 400' for commercial section 333 exempted operations
- Regulations forthcoming
  - Final regulations on small UAS
  - Draft regulations on larger UAS
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Questions?

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