



Local Government Operation and Regulation of Unmanned Aerial Systems (UAS)

Rules, requirements, and recommend best practices

Local Government Interest in UAS Technology

- Local governments wear two hats with concern to UAS technology: operators and regulators.
 - Operator
 - Police and fire
 - Property management
 - GIS
 - Resource Management
 - Code Enforcement
 - PEG Programming
 - Utilities
 - Regulator
 - Public Safety
 - Airport Safety
 - Proprietary Interests





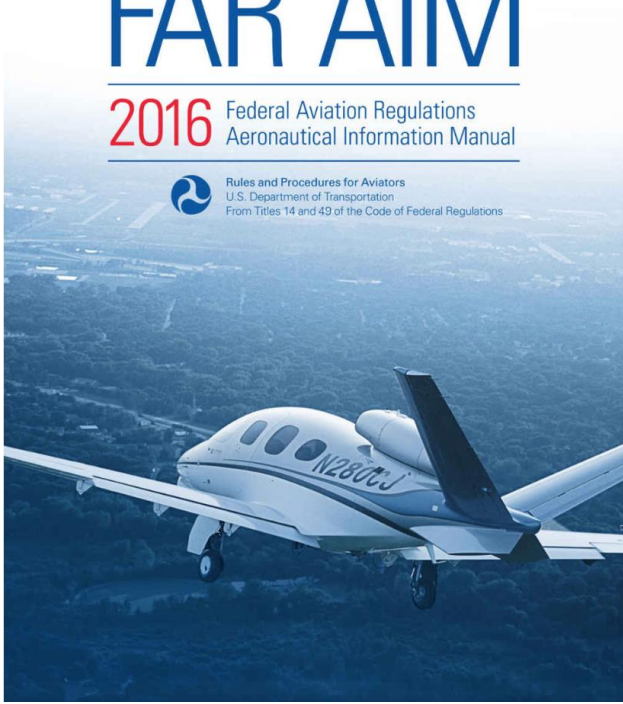
UPDATED
12/10/2015

FAR AIM

2016 Federal Aviation Regulations
Aeronautical Information Manual



Rules and Procedures for Aviators
U.S. Department of Transportation
From Titles 14 and 49 of the Code of Federal Regulations



Local Governments As Operators

Introduction to Federal Aviation Regulations
and
14 CFR Part 107 Overview



14 CFR Part 107 Basics

- On June 21, 2016 the Federal Aviation Administration (FAA) finalized the first operational rules for commercial use of small unmanned aircraft systems (“UAS” or “drones”)
- Requires operators to become Certified as Remote Pilots in Command
- Requires UAS to be registered with FAA
 - Over 60,000 commercial registrations and 700,000 hobby registrations
- Effective August 29, 2016

49 CFR Part 107 Basics

- Public Operators can operate under the new Part 107 Regulations (for small UAS) or under a Public Certificate of Authorization (“COA”)
 - Most public UAS needs will be met by 107 but some applications may require a Public COA
- If you have an existing COA and Exemption you can continue operating under those authorizations.
 - Need to switch to 107 or renew exemption before existing authorization expires
 - Cannot operate under both Part 107 AND 333 Exemption.

14 CFR Part 107 Basics

- Can be used for Hobby and Recreation
- Can be used for First Responders, Police and Fire Rescue, other law enforcement agencies
 - Must act as civil operators
- Preserves authority of state and local governments to adopt their own regulations
 - Recommend working with FAA to ensure legal compliance
- The FAA wants the majority of end users under Part 107 regulations

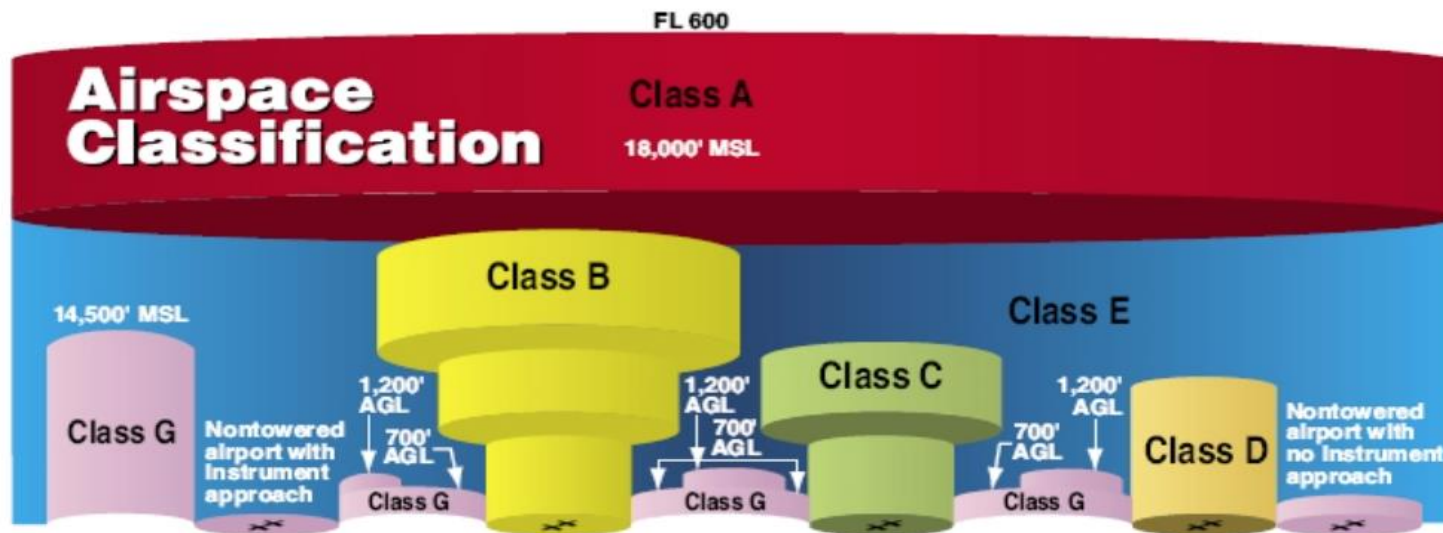
Court of Appeals Decision

- *Taylor v. Huerta*, D.C. Circuit Court
 - Strikes down Registration Rule requiring owners of UAS weighing between 0.55–55 lbs. to pay a \$5 fee and register their UAS with FAA to the extent that it applies to **model aircraft**.
 - Registration requirement conflicts with Section 336 of the FAA Modernization and Reform Act of 2012, which expressly prohibits FAA from promulgating and enforcing rules and regulations with respect to model aircraft
 - **Public Operators still need to comply with 107 or Public COA**

Part 107 Remote Pilot in Command Test Areas

1. Regulations pertaining to Small UAS (“sUAS”) rating privileges, limitations, and flight operation;
2. Airspace classification and operating requirements flight restrictions on sUAS operations;
3. Weather;
4. sUAS loading and performance;
5. Emergency procedures;
6. Crew Resource Management (CRM);
7. Radio communication procedures;
8. Determining performance of sUAS;
9. Physiological effects of drugs and alcohol;
10. Aeronautical decision-making (ADM) and judgment;
11. Airport Operations; and
12. Maintenance and preflight inspection procedures.

Operational Limitations Under 107



- No operations in Class A airspace (18,000 ft and above)
 - Operations in B, C, D, and within the lateral boundaries of the surface area of class E airspace allowed with permission from Air Traffic Control determined on case by case basis
- Maximum altitude 400 above ground level (AGL)
 - Unless within 400 feet of a structure

Operational Limitations Under 107



- One unmanned aircraft at a time, no “swarming” (can be waived)
- Operations over people (can be waived)
- No carrying hazardous materials (Part 137 applications)
- No careless or reckless operations
- No operations from a moving vehicle while carrying the property of another
- No fully autonomous operations (no pilot)
- Requires pilot self-certify he or she is in good physical and mental health

Public Operators

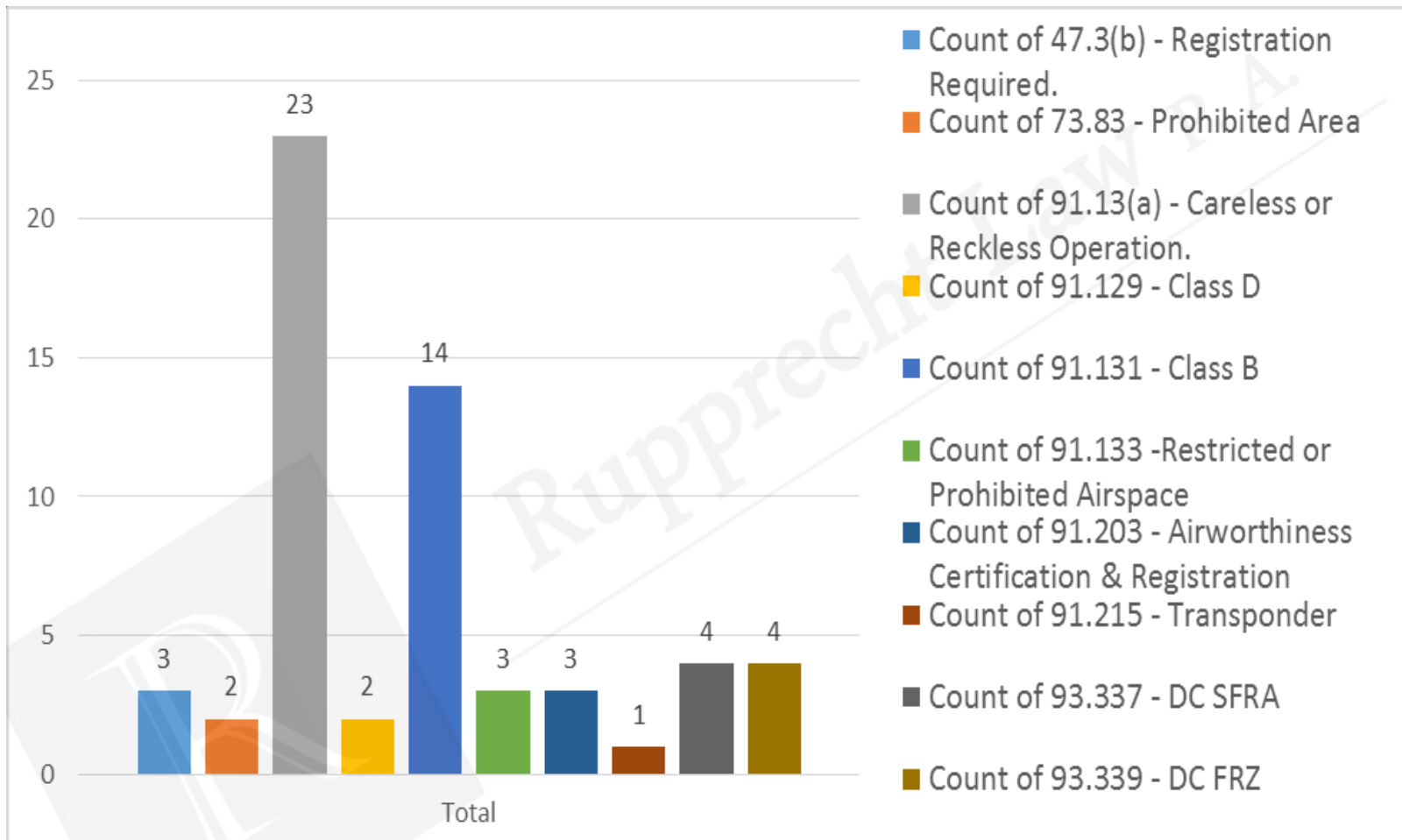
- Whether an operation may be considered public is determined on a flight-by-flight basis, under the terms of the statute 49 U.S.C. 40102 and 49 U.S.C. 40125 and considers aircraft ownership, operator, the purpose of the flight and the persons on board the aircraft
- Flight must be for an essential government function
- Public Operators can elect to operate under Part 107



Enforcement

- Regulations will be enforceable in the same way as any other portions of the Federal Aviation Regulations (FARs).
- FAA Civil Penalty system will apply to violations of the new regulations.
- FAA will take certificate actions against unsafe UAS Operators.
- The FAA may assess civil penalties up to \$27,500. Criminal penalties include fines of up to \$250,000 and/or imprisonment for up to three years for each incident.

Enforcement Actions





Local Governments As Regulators



New UAS Federal Legislation – FAA Reauthorization Act



- H.R.636 - FAA Extension, Safety, and Security Act of 2016
 - Became Law July 15, 2016

- Number of New Requirements for UAS
 - Requires creation of remote identification system for UAS and UAS operators
 - Manufacturers of sUAS need to provide a safety statement
 - FAA, DOE, and USDA interoperation on using UAS for firefighting and utility restoration
 - Civil penalty for interference with law enforcement or firefighting
 - Waiver process of use of UAS in disasters

- Research Programs for UAS

New UAS Federal Legislation – FAA Reauthorization Act

- SEC. 2209. APPLICATIONS FOR DESIGNATION.
 - (a) Applications For Designation.—Not later than 180 days after the date of enactment of this Act, the Secretary of Transportation shall establish a process to allow applicants to petition the Administrator of the Federal Aviation Administration to prohibit or restrict the operation of an unmanned aircraft in close proximity to a fixed site facility.
 - (b) Review Process.—
 - (1) APPLICATION PROCEDURES.—
 - (A) IN GENERAL.—The Administrator shall establish the procedures for the application for designation under subsection (a).
 - (B) REQUIREMENTS.—The procedures shall allow operators or proprietors of fixed site facilities to apply for designation individually or collectively.
 - (C) CONSIDERATIONS.—Only the following may be considered fixed site facilities:
 - (i) Critical infrastructure, such as energy production, transmission, and distribution facilities and equipment.
 - (ii) Oil refineries and chemical facilities.
 - (iii) Amusement parks.
 - (iv) Other locations that warrant such restrictions.

Scope of Local Government Authority



- Part 107 noted that local government leaders should play a role in regulating how, when and where drones operate in their communities
- While the new rule put in place a number of new regulations, including hours of operation, height and line of sight requirements, they specifically preserved local authority to adopt essentially time, place and manner regulations
- In the final rule, the FAA stated that the agency was "not persuaded that including a preemption provision in the final rule is warranted at this time," concluding that "certain legal aspects concerning small UAS use may be best addressed at the state or local level."
- **But....**"It is the FAA's responsibility to maintain a safe air transportation system, including an airspace "free from inconsistent state and local restrictions[.]" *Id.* at 2-3 (citing *Montalvo v. Spirit Airlines*, 508 F.3d 464 (9th Cir. 2007); *French v. Pan Am Express, Inc.*, 869 F.2d 1 (1st Cir. 1989); *Arizona v. U.S.*, 132 S. Ct. 2492, 2502 (2012); *Morales v. Trans World Airlines, Inc.*, 504 U.S. 374, 386-87 (1992)).
- Still undecided: How the preservation of local authority under the new FAA rules will interact with apparent restrictions of local authority under HR 636

Regulatory Uncertainty

- Executive Order on Reducing Regulation and Controlling Regulatory Costs (“two for one” EO)
 - Indefinitely delayed several key rulemakings
 - Operation Over Human Beings FAA Regulations
 - Some indication FAA working behind the scenes
 - DOT’s implementation of Section 2209
 - Even Industry wants more regulations
 - Commercial Drone Alliance Letter to Office of Information and Regulatory Affairs (OIRA)



Municipal Drone Ordinances: A Tale of Two Cities



- Given the current regulatory uncertainty municipalities have struggled to craft ordinances to legally regulate drones
- Restrictions on flight operations - **generally preempted**
 - Limitations on operating UAS within city limits, within airspace above a city, or within certain distances from landmarks
 - Required equipment or training for UAS operators within jurisdiction related to safety
- Traditional state and local police power – **generally not preempted**
 - Land use, planning and zoning, health, safety, advertising, general welfare.

Orlando Florida

- On January 23, 2017 City Council Passed Ordinance No. 2016-87
 - Restricts drone use within 500 feet of city property
 - Restricts drone use within 500 feet of gatherings of more than 1000 people
 - Permit requirements for drones
 - Civil and criminal penalties that go beyond federal law
- If challenged, **likely preempted**



San Diego California

- Drafted in ordinance in coordination with the FAA
- Creates local enforcement mechanisms for compliance with FAA Regulations
 - Operations near airports
 - Operations near emergency responders
- Hailed by the Academy of Model Aeronautics (AMA) as sensible regulation
- If challenged, **likely upheld**



Other Local Regulator Considerations



- 4th Amendment Considerations
 - Lot of uncertainty here generally
 - NTIA has recently released voluntary guidance on UAS privacy, transparency, and accountability
 - https://www.ntia.doc.gov/files/ntia/publications/voluntary_best_practices_for_uas_privacy_transparency_and_accountability.pdf
- Trespass, Nuisance, Stalking, and Peeping Tom laws are all enforceable against drones.
 - Boggs v. Merideth

State Legislative Trends

■ Trends 2013-2017

○ 2013

- 43 states considered bills and resolutions
- 13 states enacted 16 bills and 11 adopted resolutions

○ 2014

- 35 states considered bills and resolutions
- 10 states enacted 11 bills and 3 states adopted resolutions

○ 2015

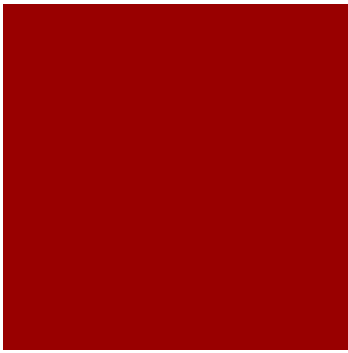
- 45 states considered bills and resolutions
- 26 states enacted bills and three states enacted resolutions

○ 2016

- At least 41 states considered bills and resolutions
- 26 states enacted bills

• 2017

- 38 States have considered bills and resolutions
- 12 states enacted bills and 3 states adopted resolutions and counting!!!



A Look at Virginia

- 2015 – VA. Code Ann. § 19.2-60.1
 - Replaced 2013 moratorium
 - Requires a warrant for law enforcement use of UAS
 - Statute does not prohibit the use of drones for private, commercial, recreational, or research and development use
- Local Government Preemption through 2019 – HB 412
 - VA. Code Ann. § 15.2-926.3 (2016) - forbids local governments and municipalities from regulating UAS until 2019
- Trespass Illegal – VA. Code Ann. § 18.2-130.1 (2017)
 - UAS use to intentionally enter a property of another and spy is illegal
- City of Charlottesville – February 2013
 - Made City a No Drone Zone
 - \$10,000 fine for use of a drone or up to a year in prison
 - Preempted by HB 412



A Look at Virginia – State Legislation

- Five UAS bills have failed
 - SB 584, HB 89, HB 413, HB 538, HB 2197
- SB 584 would have created a civil cause of action for the invasion of privacy.
- HB 89 use of UAS during commission of a crime
- HB 413 would have created UAS authority
- HB 538 would have created civil cause of action for use of UAS in connection with trespass
- HB 2197 would have created civil cause of action for invasion of privacy



Recent Federal Developments

- S.631 - Drone Aircraft Privacy and Transparency Act of 2017
 - Would make large volumes of drone data public
 - News Organizations excepted, **but not government**
- S. 1272 - A bill to preserve State, local, and tribal authorities and private property rights with respect to unmanned aircraft systems, and for other purposes.
 - model aircraft to have the permission of the land owner 200ft AGL. – Introduced May 25th 2017
 - Any future FAA rulemaking will explain preemptive effect on local regulation.
 - FAA “shall ensure that the authority of a State, local, or tribal government to issue reasonable restrictions on the time, manner, and place of operation of a civil unmanned aircraft system that is operated below 200 feet above ground level or within 200 feet of a structure is not preempted.”



Recent Federal Developments

- Creation of the FAA Drone Advisory Committee (DAC)
 - 35 Members – 2 from local government
 - San Francisco Mayor Ed Lee
 - Former Riley County Kansas Commissioner Robert Boyd
 - Second Meeting on February 31, 2017
 - Local regulation a hot topic, but no resolution
 - Third Meeting May 3rd
 - FAA requested set of recommendations on local regulation... didn't get it.
 - Fourth Meeting July 21st
 - Fifth Meeting Nov 8th





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FLY SMART, FLY SAFE, AND HAVE FUN!

Federal Aviation Administration

PRE-FLIGHT CHECKLIST

- I fly below 400 feet
- I always fly within visual line of sight
- I'm aware of FAA airspace requirements: faa.gov/go/uastfr
- I never fly over groups of people
- I never fly over stadiums and sports events
- I never fly within 5 miles of an airport without first contacting air traffic control and airport authorities
- I never fly near emergency response efforts such as fires
- I never fly near other aircraft
- I never fly under the influence

Recommended Best Practices

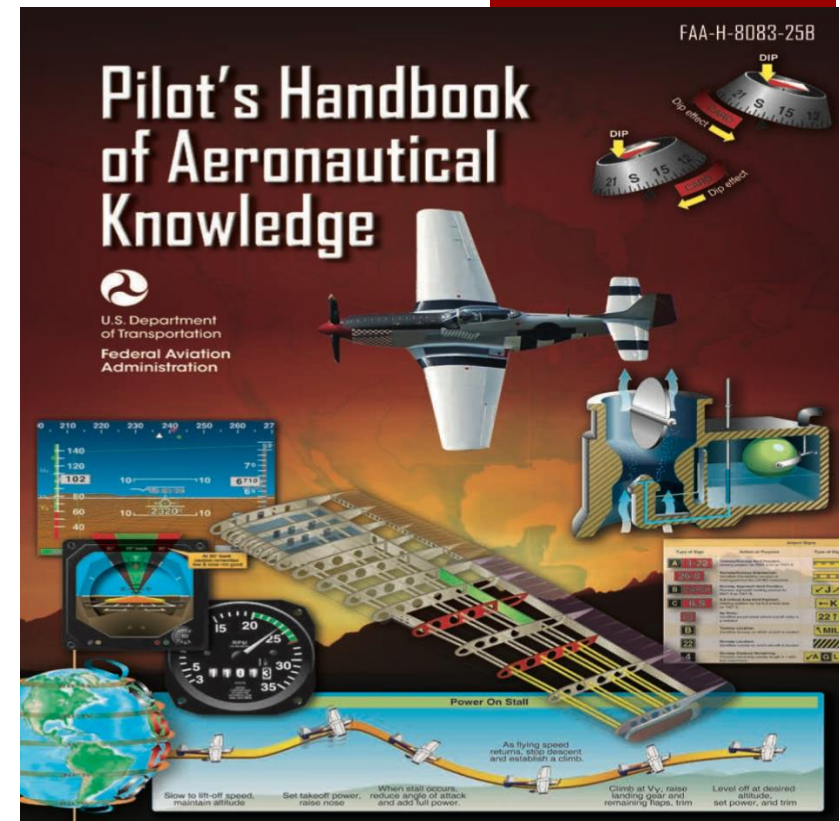
Recommendations for local governments as operators and regulators

Recommendations - Operations

- Decide whether your organization should you own and operate, lease a UAS, or hire a third-party UAS services company.
- Examine the scope of the public entity's insurance – most policies do not (yet) cover UAS
- Review any relevant mutual aid agreement provisions (police and fire)
- Develop internal policies regarding use
 - Safety
 - Data retention/chain of custody
 - Use of video/images
 - PEG programming

Recommendations - Operations

- If hiring the services of a third party provider: ensure that they have necessary FAA exemptions or authorizations and are properly insured
- If owning or leasing: determine if your organization will operate under Part 107, Public COA



Recommendations – Regulator

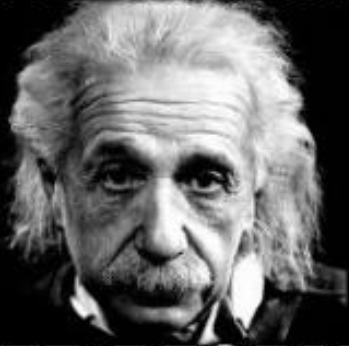


- **Consult with the FAA!!!**
- Examples of laws which are likely prohibited - restrictions on flight operations
- Laws that not likely to be preempted – traditional state and local police power
- Passage of FAA Reauthorization Act makes the muddy picture of local regulatory authority even muddier
- Watch what comes out the July DAC meeting

THANKS!



**THERE'S NOTHING WRONG
WITH BEING UNSURE**



**CLEVER PEOPLE ASK
THE MOST QUESTIONS**

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