

# Unmanned Aircraft Integration

## AMWA Water Policy Conference

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Date: 27 March 2017

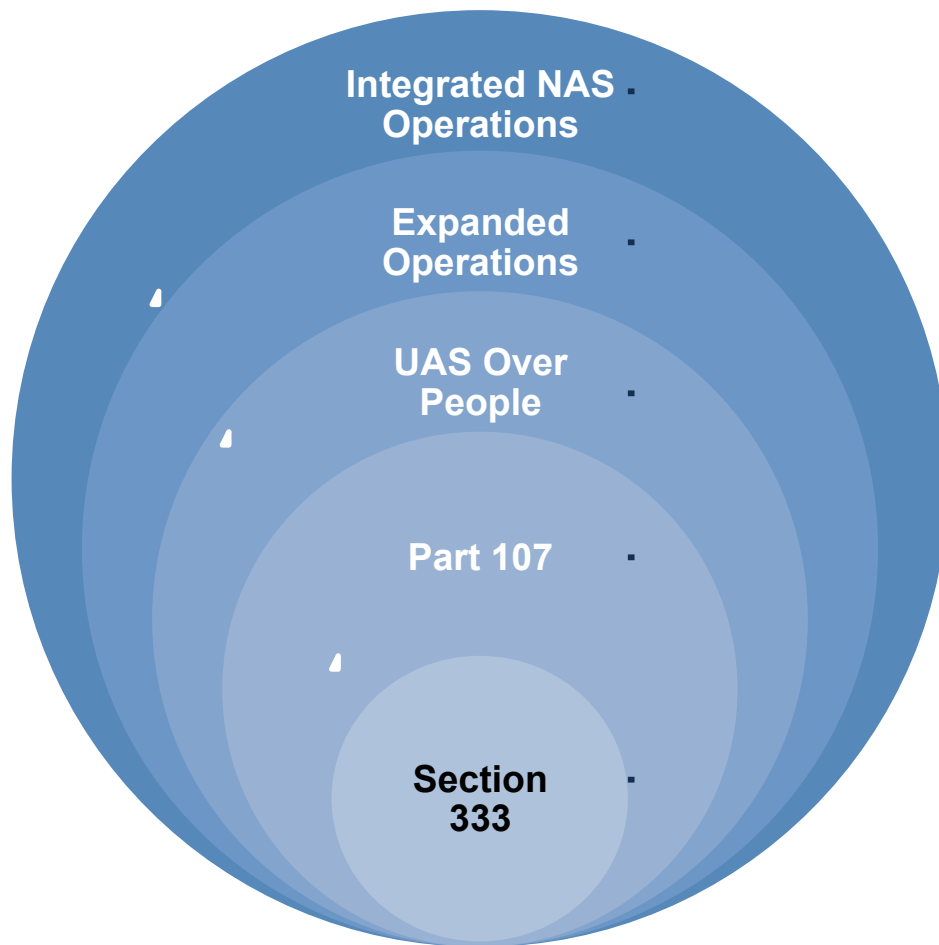


# Overview

- Review current regulatory state for UAS operations
- Law Enforcement Tools
- FAA Outreach



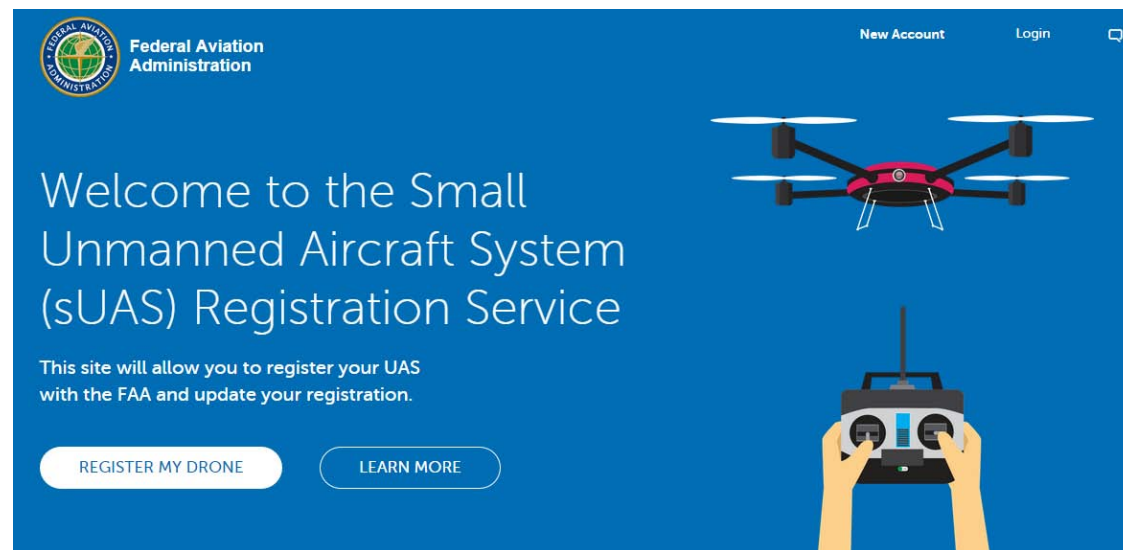
# Building the Regulatory Framework



- Interaction with ATC
- > • Safety achieved via compliance to conventional aircraft operating principles
- Expand part 107 to facilitate low altitude operations through Airworthiness certification
- > • Routine Focus Area Pathfinder 2 and 3 operations
- Expand part 107 to incorporate standards for flight over non-participating people
- > • Routine Focus Area Pathfinder 1 operations
- Regulatory framework for routine sUAS operations
- > • Safety achieved through VLOS and operating limitations
- Case-by-case exemptions granted to existing regulations
- > • Enables non-recreational UAS operations before final part 107 rulemaking
- Safety achieved with operating conditions and limitations

# Online UAS Registration

- Applies to small UAS 0.55-55 lbs. flown outside
- Owner must provide name, address, email
  - Non-recreational owners must provide make, model, and serial number (if available) of each sUAS



# Facility Safety Concerns

## FAA Extension, Safety, and Security Act of 2016 (FESSA), § 2209

- Requires the FAA to develop a process to prohibit or restrict the operation of an unmanned aircraft in close proximity to a fixed site facilities
- Allow operators or proprietors of fixed site facilities to apply for designation individually or collectively
- Only the following may be considered fixed site facilities
  - Critical infrastructure, such as energy production and transmission equipment
  - Oil refineries and chemical facilities
  - Amusements parks
  - Other locations that warrant such restriction
- Establishment of procedures are on going



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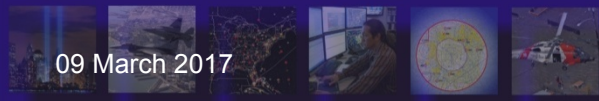
# Temporary Flight Restrictions

## WHO CAN REQUEST A TFR

A TFR may be requested by various entities, including: military commands; federal security/intelligence agencies; regional directors of the Office of Emergency Planning, Civil Defense State Directors; civil authorities directing or coordinating organized relief air operations (e.g., Office of Emergency Planning; law enforcement agencies; U.S. Forest Service; state aeronautical agencies); State Governors; FAA Flight Standards District Office, aviation event organizers, or sporting event officials.

## WHO CAN ISSUE A TFR?

FAA Headquarters or the Directors of Terminal or En Route and Oceanic Area Operations (or their designee) having jurisdiction over the area concerned may issue a TFR.



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# Section 99.7 Special Security Instruction

## **What is the purpose and use of a TFR issued under this section?**

The FAA, in consultation with the Department of Defense, or other Federal security/intelligence agencies may issue special security instructions to address situations determined to be detrimental to the interests of national defense.

## **Who can request a TFR under this section?**

The Department of Defense, or other Federal security/intelligence agency may request a TFR under this section.



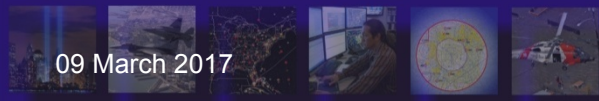
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# Education, Compliance, and Enforcement

- FAA's primary approach to new UAS operators is education
- FAA has authority to take enforcement action against any persons who operate a UAS:
  - In violation of the Federal Aviation Regulations (FARs)
  - In a manner that endangers the safety of the NAS or people and property on the ground
- Enforcement tools include:
  - Warning notices, letters of correction, civil penalties



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# Law Enforcement's Role

- State and local Law Enforcement Agencies (LEAs) are often in the best position to respond to unauthorized or unsafe UAS operations
- FAA works with LEAs to educate and provide guidance on authority
- Law Enforcement Guidance is available at:  
[www.faa.gov/uas/law\\_enforcement](http://www.faa.gov/uas/law_enforcement)



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# Basic Law Enforcement Response **D.R.O.N.E.**

**D**irect attention outward and upward, attempt to locate and identify individuals operating the drone. (Look at windows/balconies/roof tops).

**R**eport incident to the FAA Regional Operations Center (ROC). Follow-up assistance can be obtained through FAA Law Enforcement Assistance Program special agents.

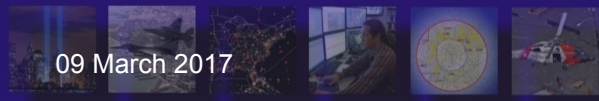
**O**bserve the UAS and maintain visibility of the device, look for damage or injured individuals.  
**Note:** Battery life is typically 20 to 30 minutes.

**N**otice features: Identify the type of device (fixed-wing/multi-rotor), its size, shape, color, payload (i.e., video equipment), and activity of device.

**E**xecute appropriate police action: Maintain a safe environment for general public and first responders. Conduct a field interview and document ALL details of the event per the guidance provided by the FAA. [www.faa.gov/uas/resources/law\\_enforcement/](http://www.faa.gov/uas/resources/law_enforcement/)

**Always follow agency policies** – Take appropriate action based on the facts and circumstances of the incident and site/area-specific laws and rules. The FAA's enforcement action does NOT impact ANY enforcement action/s taken by law enforcement.

**Local ordinances that may apply include, but are not limited to:** Reckless endangerment, criminal mischief, voyeurism, inciting violence.



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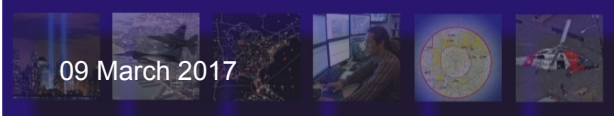
# FAA Drone Incident Reporting

## Document and provide the following information to FAA:

- Identity of operators and witnesses (name, contact information)
- Type of operation (hobby, commercial, public/governmental)
- Type of device(s) and registration information (number/certificate)
- Event location and incident details (date, time, place)
- Evidence collection (photos, video, device confiscation)

## Contact your FAA LEAP agent or an FAA Operations Center for assistance.

FACILITY	STATES	PHONE NUMBER	EMAIL
Western ROC	AK, AZ, CA, CO, HI, ID, MT, NV, OR, UT, WA and WY	425-227-1999	9-WSA-OPSCTR@faa.gov
Central ROC	AR, IA, IL, IN, KS, LA, MI, MN, MO, ND, NE, NM, OH, OK, SD, TX and WI	817-222-5006	9-CSA-ROC@faa.gov
East ROC	AL, CT, FL, GA, KY, MA, ME, MS, NC, NH, PR, RI, SC, TN, VI and VT	404-305-5180	9-ASO-ROC@faa.gov
East ROC	DC, DE, MD, NJ, NY, PA, VA and WV	404-305-5150	7-AEA-ROC@faa.gov



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# UAS Outreach and Education



**I FLY SAFE**



All drones are aircraft—even the ones at the toy store. So when I fly a drone I am a pilot. Before I fly I always go through my pre-flight check list. I regularly check the safety guidelines at [faa.gov/uas](http://faa.gov/uas)

**FLY SMART, FLY SAFE, AND HAVE FUN!**

[knowbeforeyoufly.org](http://knowbeforeyoufly.org)  
[faa.gov/uas](http://faa.gov/uas)

**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/uasfr](http://faa.gov/go/uasfr)
- 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

