

Unmanned Aircraft Systems (UAS)

Regulations & Rulemaking

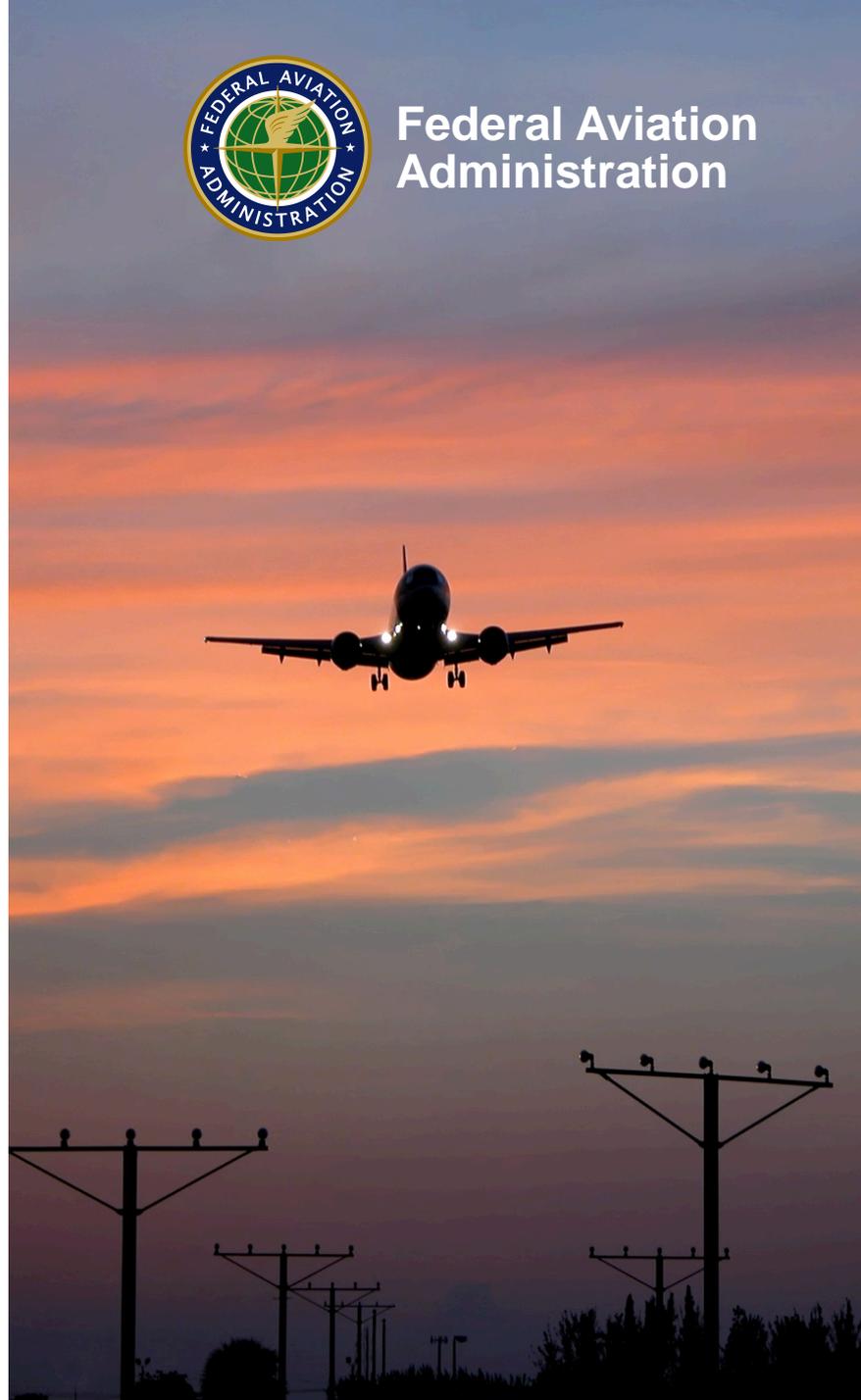
Presented to: ICAO RPAS and Remote ATS
Symposium

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Federal Aviation Administration

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Federal Aviation
Administration



Overview

- **FAA Authority**
- **Current Regulations for UAS**
- **Rulemaking Efforts**
 - Section 333 Exemptions
 - Proposed Small UAS Rule
 - Micro UAS
 - Pathfinder Initiatives & Extended Operations
 - Lessons Learned & Path Forward
- **UAS Registration**
- **Outreach and Education**



FAA Authority



- **U.S. airspace is public space**
 - 49 U.S.C. §40102(a)(1)
- **UAS are aircraft subject to regulation**
 - 49 U.S.C. §40102(a)(6); 14 CFR 1.1; PL 112-95 §331, §336
 - An aircraft is any device used for flight.
- **UAS must comply with regulations that apply to all aircraft**
 - Some state and local laws may impact UAS

Enabling Commercial Operations via Section 333



FILMING | POWER LINE INSPECTION | PRECISION AGRICULTURE | FLARE STACK INSPECTION



Proposed Small UAS Rule

- **Currently in DRAFT**
 - Notice of Proposed Rulemaking (NPRM) Published to Federal Register on February 23, 2015
 - Public comment period concluded on April 24, 2015
 - Produced approximately 4,500 public comments
- **Expected to be finalized late spring 2016**





Micro UAS Rulemaking

- **Advisory Rulemaking Committee of industry stakeholders delivered final report to FAA**
- **Report outlines four small UAS categories for operations over people**
 - Defined primarily by level of risk of injury posed
 - Subject to the restrictions of proposed part 107
- **Category 1 = 250 grams or less**
- **Category 2, 3, 4 = impact energy thresholds based on industry-consensus test methods**

Focus Area Pathfinder Initiative and Extended Operations

- **Purpose:** Explore the next steps in UAS operations beyond the type proposed in the draft small UAS rule
- **Approach:** Partner with industry to evaluate requirements for key UAS operations
- **Three Focus Area Partners:**
 - CNN
 - UAS in visual line of sight, urban/over people
 - Precision Hawk
 - UAS in extended visual line of sight, rural
 - BNSF Railways
 - UAS beyond visual line of sight, rural



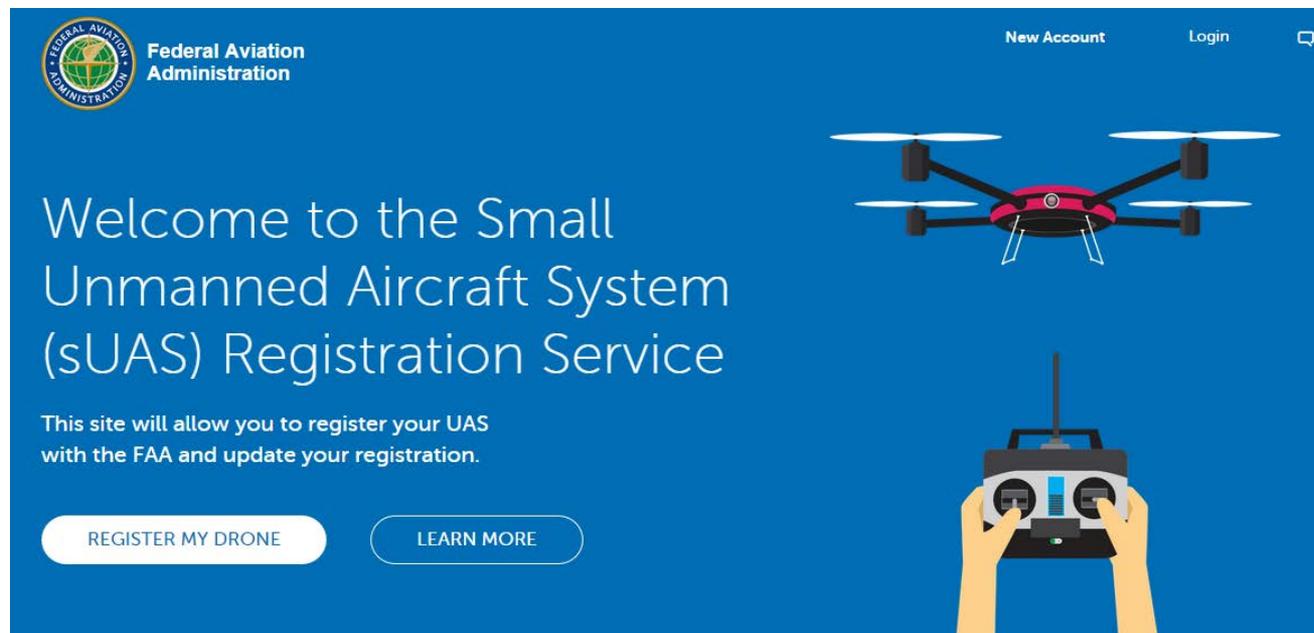
Lessons Learned & Path Forward

- **Incremental Approach**
- **Government Collaboration**
 - Airspace Management System
 - Executive Committee
- **Industry Engagement**
 - UAS Symposium
 - Drone Advisory Committee



UAS Registration Requirement

- **Registration requirement effective Dec. 21**
 - Small UAS > 0.55 lbs. flown outside must be registered
- **Full details available at:** www.faa.gov/uas/registration



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

FLY SMART, FLY SAFE, AND HAVE FUN! knowbeforeyoufly.org
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/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

Federal Aviation Administration

