

FAA Unmanned Aircraft Systems (UAS) Update

Presented to: JITI International Seminar on Drones for Transport

Presented by:

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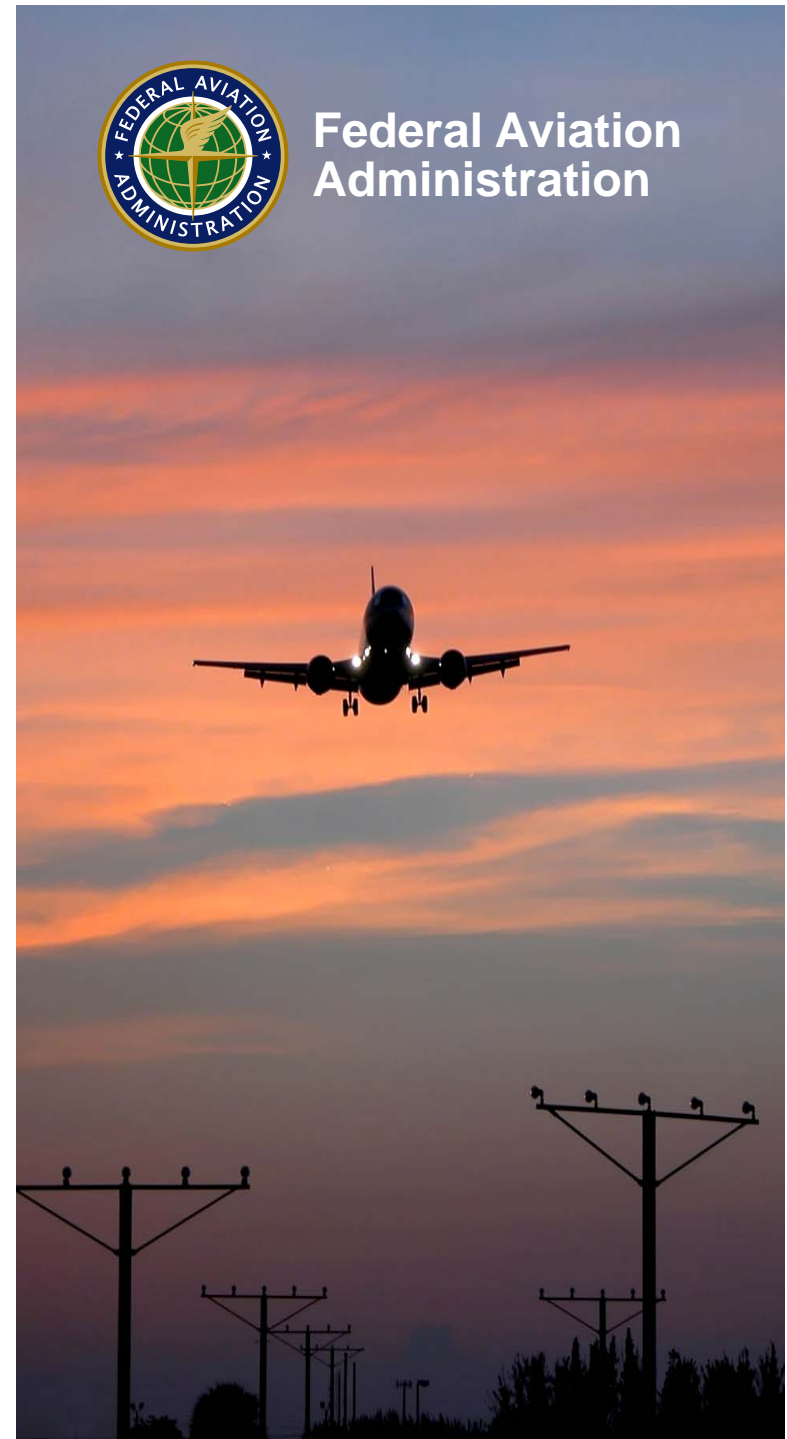
Vice Chairman/United States Representative to ICAO

Remotely Piloted Aircraft Systems Panel

Date: February 17, 2016



Federal Aviation
Administration



Overview

- **Who is operating UAS**
- **Proposed New Small UAS Rule**
- **Section 333 Exemptions**
- **Focus Area Pathfinder Program**
- **Safety Pathfinder Partner**
- **Model Operators**
 - **UAS Registration**
 - **FAA Education and Outreach**



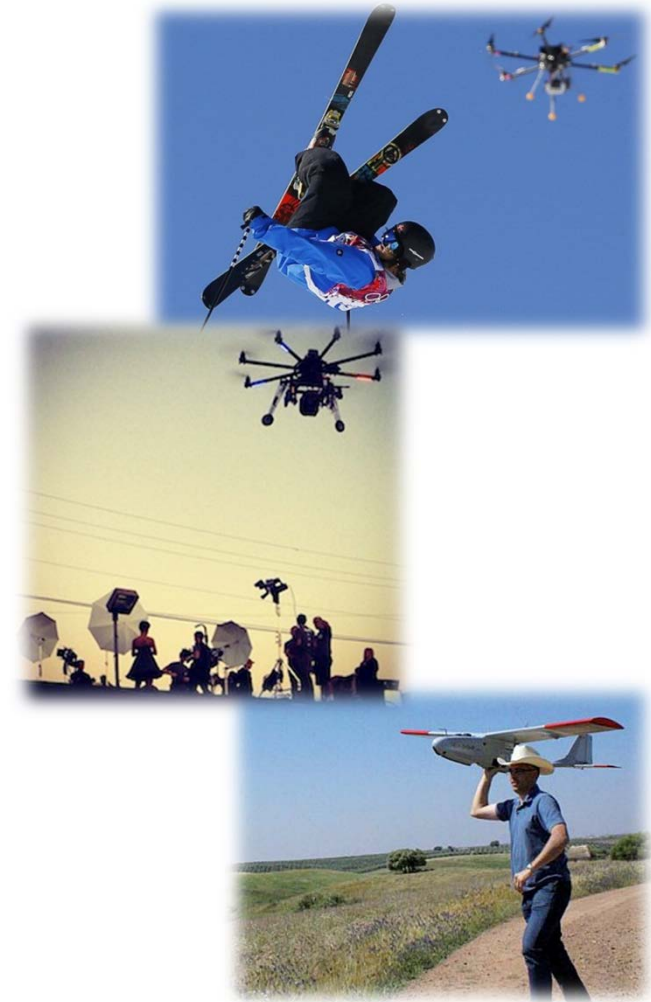
Who is Operating UAS in the U.S. National Airspace System (NAS)?

	Public Operations	Civil Operations (including Section 333)	Hobby or Recreational
Type	<ul style="list-style-type: none"> Governmental 	<ul style="list-style-type: none"> Commercial/ Compensation for Hire 	<ul style="list-style-type: none"> Hobbyist
Requirements	<ul style="list-style-type: none"> Must verify Public Aircraft Operator eligibility and be issued a Certificate of Waiver or Authorization (COA) 	<ul style="list-style-type: none"> Must be granted Exemption AND Certificate of Waiver or Authorization (COA), or Special Airworthiness Certificate <ul style="list-style-type: none"> – Restricted Category – Experimental 	<ul style="list-style-type: none"> Must comply with Section 336 of FAA Modernization and Reform Act of 2012
Rules	<ul style="list-style-type: none"> Detailed in COA Self-certification of crew and equipment 	<ul style="list-style-type: none"> Detailed in COA; restrictions outlined in Exemption 	<ul style="list-style-type: none"> Generally must operate in visual line-of-sight, under 400', avoid manned aircraft, operate during daylight hours and fly according to community-based safety guidelines
Examples	<ul style="list-style-type: none"> Federal Agencies State and Local Entities 	<ul style="list-style-type: none"> Industry <ul style="list-style-type: none"> – Manufacturers – Section 333 petitioners 	<ul style="list-style-type: none"> Members of Community Based Organization General Public



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 in late Spring 2016**



Petitions for Section 333 Exemption

- **Bridge for commercial UAS operations before finalization of small UAS rule**
- **More than 8,000 petitions received; more than 3,300 exemptions granted to date**
- **FAA responded to demand by improving process:**
 - Streamlined Blanket COA (March 23)
 - Under 200', within visual line of sight, during daylight hours, certain distances away from airports and heliports
 - Streamlined evaluation process (March 30)

Focus Area Pathfinder Program

- **Purpose:** Identify the safety mitigations that can lead to expanded access for UAS and inform future rulemaking
- **Approach:** Work with industry partners to gain operational approval for key UAS operations and establish a repeatable process
- **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



New Safety Pathfinder Partner

- **Growing concerns about potentially unsafe small UAS operations**
- **FAA entered into research partnership with CACI International**
- **Partnership will evaluate how CACI's technology may help detect, identify, and track unmanned aircraft and their ground-based operators near airports**

CACI

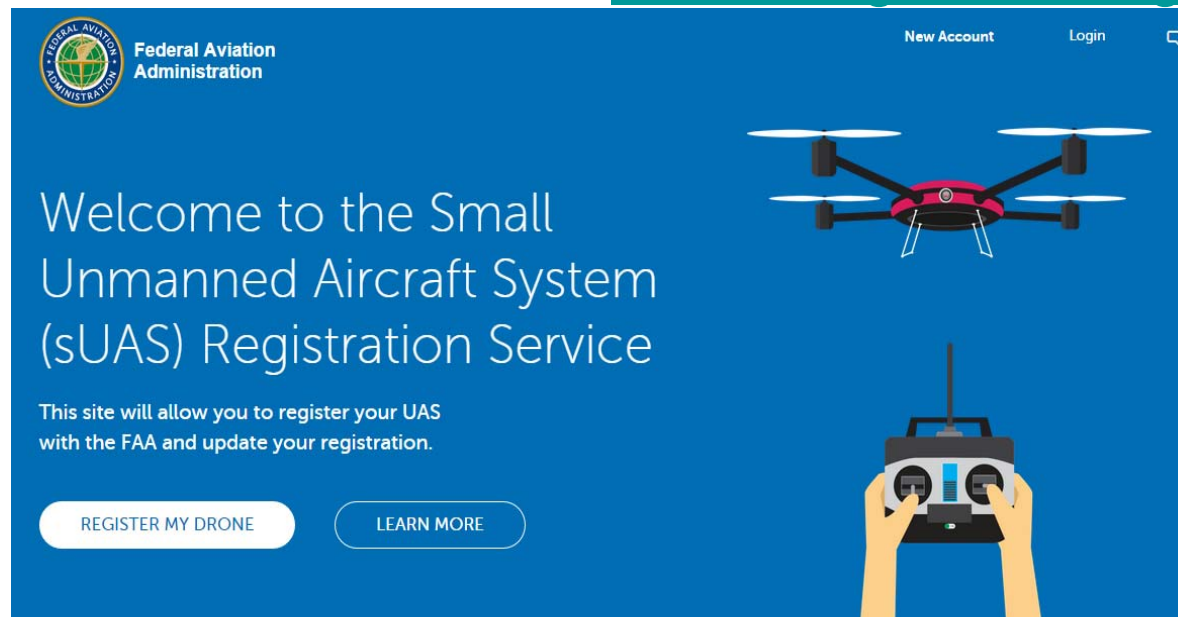
New World for Recreational Aircraft

- **New entrants into the model aircraft community**
- **Aircraft may be purchased at a hobby shop or online for a few hundred dollars**
- **Many new modelers have little or no aviation experience, may not know the law (Sec. 336) or FAA model aircraft guidelines (AC 91-57A Change 1):**
 - Avoid manned aircraft
 - Remain within visual line of sight
 - Fly only for hobby/recreation



UAS Registration Requirement

- **Registration requirement effective Dec. 21**
 - Small UAS > 0.55 lbs. flown outside must be registered
- **Over 325,000 have registered to date**
- **Full details available at: www.faa.gov/uas/registration**



UAS Education and Outreach



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

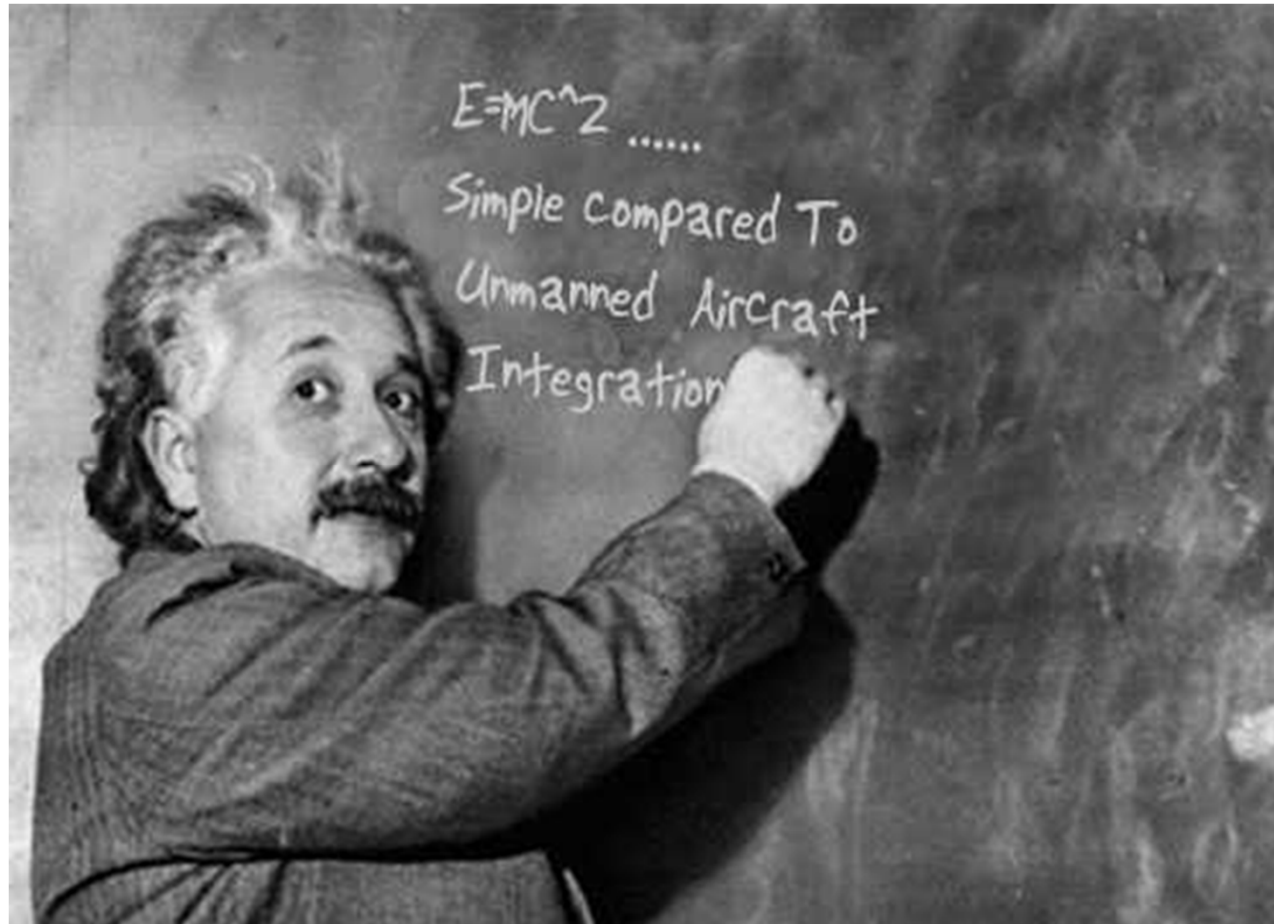
FLY SMART, FLY SAFE, AND HAVE FUN!

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

Questions?



www.faa.gov/uas