



U.S. Department
of Transportation

General Counsel

1200 New Jersey Ave., S.E.
Washington, DC 20590

Office of the Secretary
of Transportation

June 3, 2016

John Tran
EPIC FOIA Counsel
Coordinator, EPIC Open Government Project
1718 Connecticut Avenue, NW, Suite 200
Washington, DC 20009

File No.: FY 2016-0041

Dear Mr. Tran:

This is the second in a rolling production of documents to your Freedom of Information Act (FOIA) request dated November 6, 2015. You requested all documents related to the November 3-5, 2015 meetings of DOT's Unmanned Aircraft System (UAS) Task Force, including, but not limited to, meeting minutes, paper or electronic handouts, and presentations.

On May 6, 2016, we provided you with 55 pages of responsive documents, including the meeting minutes, summaries of the meeting, a listing of non-Federal members, and the task force recommendations final report.

Enclosed with this production are 30 additional pages, including a PowerPoint presentation entitled "Unmanned Aircraft System (UAS) Registration Task Force Aviation Rulemaking Committee, November 3-5, 2015; Federal Aviation Administrator Michael Huerta's introductory remarks; and a document entitled "sUAS International Registration Requirements."

We are continuing to receive and review documents from the custodians. We note that many of the documents we have reviewed are either outside the scope of the request or duplicative of documents already produced.

We will provide you with another production of documents as soon as possible.

Sincerely,

KATHLEEN M RAY

Digitally signed by KATHLEEN M RAY
DN: c=US, o=U.S. Government, ou=DOT
Headquarters, ou=OSTHQ, cn=KATHLEEN M RAY
Date: 2016.06.03 14:44:19 -04'00'

Kathy Ray
FOIA Officer

Enclosures

Unmanned Aircraft System (UAS) Registration Task Force Aviation Rulemaking Committee November 3-5, 2015



John Duncan, Director, FAA Flight Standards Service

UAS Registration Task Force Aviation Rulemaking Committee

November 3-5, 2015



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FAA Compliance Philosophy

- **Aviation and public safety are first priority**
- **Intentional and criminal enforcement have not changed**
- **Risk-Based Decision Making (RBDM)**
- **Safety Management Systems (SMS)**



Aircraft Registration Is Not New

- **Aircraft Registration Statutory Requirements**
 - Title 49 United States Code (U.S.C.) – Transportation
 - Subpart III – Safety
 - Chapter 441 – Registration and Recordation of Aircraft



49 U.S.C. Sections 44101 to 44109

- **44101 – Operation of Aircraft**
 - A person may operate an aircraft only when it is registered.
- **44102 – Registration Requirements**
 - Not registered under the laws of a foreign country.
 - Is owned by a U.S. citizen, Resident Alien, Non-Citizen Corp. based and primarily used in the U.S., or owned by the U.S. Government or State.
- **44104 – Registration of Aircraft**
 - Administrator shall register and issue a certificate to its owner.
 - Certificate is evidence of nationality for international purposes; not evidence of ownership in a proceeding in which ownership may be in dispute.
 - Operator shall make certificate available for inspection when requested by U.S. Government or Law Enforcement.



49 U.S.C. Sections 44101 to 44109

- **44109 – Reporting transfer of ownership**
 - A person having an ownership interest in an aircraft shall file a notice NLT 15 days after transfer of ownership.



Aircraft Registration

International Treaty Obligations

- **Convention on International Civil Aviation (Chicago) [61 Stat. 1180]**
 - Article 8: No unmanned aircraft shall be flown over the territory of a contracting State without special authorization by that State.
 - Article 18: An aircraft cannot be validly registered in more than one State, but may be transferred from one State to another.
 - Article 20: Every aircraft engaged in international air navigation shall bear its nationality and registration marks.
 - Article 21: Each contracting State to supply any other State or to ICAO, on demand, information concerning the registration and ownership of any aircraft registered in that state.



Nathan Tash, Deputy Assistant Administrator, Acquisition and Business Services

UAS Registration Task Force Aviation Rulemaking Committee

November 3-5, 2015



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Acquisition Factors

- **Need to maximize UAS registration participation**
- **Existing Cloud contract provides best solution**
 - Security and Personally Identifiable Information (PII)
- **Supports timeline commitments**
- **Initial work will evolve**



Earl Lawrence, Director, FAA UAS Integration Office

UAS Registration Task Force Aviation Rulemaking Committee

November 3-5, 2015



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Thank You for Your Support

- **Task Force Participants**
 - Members
 - Industry
 - Subject Matter Experts
 - Other Government Agencies
- **FAA Task Force Support Team**
 - Suzanne Chandler, Emmanuel Cruz, Darrin Donlon, Chris Harm, Mark Hitt, Timothy Tenne, and Meredith Tracey



Why Are We Here?

- **FAA's mission is to provide the safest, most efficient aerospace system in the world**
- **Over the past year, the FAA has received increasing reports of unlawful, unauthorized, or unsafe use of small UAS (under 55 lbs.)**
 - Pilot and bystander reports of UAS sightings in 2015 are double the rate of 2014
 - Pilots and others have reported seeing UAS at altitudes up to 10,000 feet, in the flight paths of aircraft, and near runways



Task Force Charter

- **By November 20, 2015, this Task Force will provide the Department of Transportation with recommendations in the following areas:**

Objective 1	Develop and recommend minimum requirements for UAS that would need to be registered
Objective 2	Develop and recommend registration processes
Objective 3	Develop and recommend methods for proving registration and marking



ARC Roles and Responsibilities

- **Represent your organization by contributing knowledge and expertise**
- **Attend meetings and participate**
- **Advise on matters of importance to aviation industry and public**
- **Participate in assigned working groups**
- **Collaborate with constituents in representing viewpoints**
- **Contribute to the recommendation report**
- **Do not distribute draft documents until released by FAA**
- **Do not disclose the arc's work until released by FAA**

Note: The FAA will produce a daily summary of RTF activities



Defining the Task Force “Box”

LAWS & REGULATIONS

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Small UAS (under 55lbs.)
Requirements for UAS Registration
Registration Process and System
Unique Identification of UAS

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DIRECT RISK MITIGATION

UAS Registration Task Force Aviation Rulemaking Committee

November 3-5, 2015



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ARC Deliverable

- **Recommendation report in accordance with the Registration Task Force Aviation Rulemaking Committee Charter**
 - Due no later than November 20, 2015
- **FAA will evaluate recommendations, along with comments received on the request for information**



Preparation for RTF Meetings

- **FAA Support Team conducted interviews with approximately 30 organizations over past 2 weeks, including:**
 - RTF members
 - Subject matter experts
 - Trade groups
- **Participants were asked for input and perspective on UAS registration**
- **Goal: identify commonalities across industries and stakeholders**
- **Summary results**



RTF Members and SME Interviews

UNMANNED AIRCRAFT SYSTEMS (UAS)
REGISTRATION TASK FORCE (RTF)
AVIATION RULEMAKING COMMITTEE (ARC)

RTF MEMBER & SME INTERVIEWS

FINDINGS

Findings document is in your packets

UAS Registration Task Force Aviation Rulemaking Committee

November 3-5, 2015



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Rules of Engagement for Breakout Sessions

- **Make introductions**
- **Set expectations**
- **Pick a leader**
- **Determine recommendation(s) at conclusion**



Michael Huerta
Unmanned Aircraft Task Force Meeting
Washington, DC
November 3, 2015

Introduction

Thank you for that introduction, Earl [*Lawrence*].

Good morning, everyone. Thank you for taking the time to be here.

Unmanned aircraft use has increased dramatically in recent years. With this surge in popularity has come growing concerns about their safe operation in our nation's airspace.

In recent months, we've seen an increase in reports of UAS coming too close to manned aircraft and airports. Some have interfered with wildfire fighting in California, and one crashed into a stadium during a U.S. Open tennis match.

These incidents make it clear: we must work harder to ensure a strong culture of safety and responsibility among unmanned aircraft enthusiasts.

There's no single solution for how we do this. The integration of unmanned aircraft is multi-faceted, and our approach must be as nimble as the technology itself.

One tool we're going to use is registration – and that's why we're here today.

Task Force Expectations

Unmanned aircraft have countless potential uses – from package delivery to tasks that are dangerous for people or manned aircraft to perform. No one wants to see this promising technology overshadowed by an incident or accident that could easily be avoided with proper training and awareness of the safety principles that are now second nature in manned aviation.

We invited you to assist us on this task force because each of you brings extensive knowledge about unmanned aircraft, technology, public policy and the aviation industry. You represent a wide range of viewpoints. And you are all united by a common goal: the safe integration of unmanned aircraft.

We're hopeful this task force can provide the FAA guidance on some important questions as to how we determine the best way to register aircraft under 55 pounds:

- How do we make registration as easy as possible for consumers while providing accountability?
- What products should we exclude from registration based on weight, speed, altitude and flying time?
- What information should we collect during the registration process, and what should we do with the data?
- Should every unmanned aircraft sold have its own serial number, or how to tie particular aircraft to a particular user?
- Should the process include a formal education component before an aircraft can be registered?
- Should registration be retroactive and apply to unmanned aircraft that are now in the system?
- Should there be an age requirement for registration?

Ultimately, we want to make registration as easy as possible for consumers, to relieve them of the complexity associated with registering larger, manned aircraft.

Your recommendations will be invaluable as the FAA moves quickly to stand up this new system.

We're working on a tight timetable – Secretary Foxx set a deadline of November 20th for the task force to complete its recommendations. This reflects the urgency of the task at hand.

The holidays are weeks away, and unmanned aircraft are going to be a popular gift item. By some estimates, 700,000 new aircraft could be in the homes of consumers by the end of the year. This means unmanned aircraft could soon far outnumber manned aircraft operating in our nation's airspace.

Many of these new aircraft are bringing new users to aviation – most with little or no experience with aviation regulations.

Education and Enforcement

Registration will give us an opportunity to educate new operators about airspace rules so they can use their unmanned aircraft safely. It will also help us more easily identify and take enforcement action against people who intentionally violate the rules or operate unsafely. A perfect example of this occurred last week, when a drone carrying mobile phones, drugs and hacksaw blades crashed into a prison yard in Oklahoma. Perhaps registration would have helped authorities quickly identify the owner.

We realize that most people want to use their aircraft safely for enjoyment. Registration benefits users and the government alike because it encourages education while providing a mechanism for helping the FAA fulfill its mission of keeping the nation's skies safe.

I recently announced the FAA's new Compliance Philosophy, which uses education and training to ensure we have safe operators.

At the same time, this doesn't mean we're going to go easy on enforcement.

But in cases where we find simple mistakes or a lack of understanding, we'll use tools like training and education to ensure compliance with the regulation and compliance with the standard.

This starts with giving operators the tools and knowledge they need to fly safely. Toward this end, we released the beta version of a new smartphone application called "B4UFLY," which alerts UAS operators to restrictions or requirements in effect at their current or planned flight location.

The FAA and its government and industry partners are also conducting outreach through the Know Before You Fly and No Drone Zone campaigns, most notably during the recent visit by the pope.

But for those who don't follow the rules, we need to continue our enforcement efforts.

Last month, the FAA proposed a \$1.9 million civil penalty against a company that we allege knowingly conducted dozens of unauthorized flights over Chicago and New York. This sends a clear message to others who might pose a safety risk: Operate within the law or we will take action.

Commercial Operations

As registration, education and enforcement focus on enhancing safety around recreational use, we're also working to put a commercial regulatory framework in place.

Earlier this year, we proposed a rule that would routinely allow small unmanned aircraft operations we know to be safe, and we plan to finalize it by late spring.

Meanwhile, we're approving requests for commercial operations on a case-by-by-case basis. To date, we've approved

more than 2,200 authorizations that allow unmanned aircraft to be used for a wide variety of different purposes.

Under our Pathfinder program, we're working with industry to determine how to safely expand unmanned aircraft operations beyond the parameters of our proposed rule. BNSF Railway recently used an unmanned aircraft to inspect miles of its tracks in New Mexico, demonstrating beyond visual-line of sight capabilities. The flight marked the first of what we hope will be many successful Pathfinder tests and flights.

Conclusion

Integrating unmanned aircraft into our nation's airspace is a big job, and it's one the FAA is determined to get right. We know that we need to work closely with our partners in government and the private sector for this to succeed. This task force is a sign of our commitment to that partnership and we thank you for your work.

Please think big, and think outside the box. Take the interests of all stakeholders, of everyone who will be affected by registration, into consideration, and you need to factor that into your conversations and deliberations. And please – do not worry about achieving perfection. Your ideas will enable us to lay the groundwork for registration, but by no means is it the last word on registration.

You have a lot to accomplish in the next three days. I have no doubt this group will be able to meet the challenge, and I look forward to your recommendations. Given the urgency of this issue, the DOT and the FAA will move quickly to consider your suggestions as we create a registration system that works for the FAA, consumers, and the safety of our nation's airspace.

Thank you again for dedicating the time to this important undertaking.

sUAS International Registration Requirements



Nation	Current Phase of Regulation	Category Definition	Pilot Requirements	Aircraft Requirements	Registration Requirements	Operational Flexibility
United States	NPRM	Micro UAS, up to 4.4lbs	Self-certify; no age specified	Frangible materials	Registration required	VLOS, flight over people permitted
		Small UAS, up to 55lbs	Knowledge test	None	Registration required	VLOS, no flight over non-participants
Canada	NPA	Very Small UAV, 4.4lbs or kinetic energy table	No pilot permit; no age requirement with adult supervision, otherwise 16 years; online self-study program	No design standard	No marking or registration required	VLOS; no operations over people, but allowed to operate within 9km of a "built-up" area
		Small UAV (limited ops), up to 25kgs	Basic knowledge test, no age requirement with adult supervision, otherwise 16 years	Meet a design standard	Registration required	VLOS; no operations over people, liability insurance required
		Small UAV (complex ops), up to 25kgs	Knowledge test, experience requirement, minimum age 14, Category 4 medical certificate	Meet a design standard	Registration required	VLOS; flight over people permitted, liability insurance required, allowed to operate at night
EASA	ANPA	Open category (low risk) with 3 subcategories. Toys or mini drones A0<1kg; Very small drones A1<4kg; small drones A2<25kg	No pilot permit, but needs to have basic aviation awareness	Comply with applicable general product safety directive; have means to automatically limit airspace it can enter; means to allow automatic identification	Via the auto identification means	VLOS, maximum altitude (A0 =50m; A1/A2 150m) and minimum distance with respect to uninvolved persons on ground. Flight above crowds prohibited
Australia	NPRM	"low risk" RPA: <2kg	No pilot permit, if operated within the limitations	No requirement, if operated within the limitations	No requirement, if operated within the limitations	VLOS in non-populous areas, must be >30m from any person not directly involved in operation, day VMC only
	Current Part 101 (promulgated in 2002)	"micro UAV": <100g	CASA certification required	No requirement	No marking or registration required	VLOS in non-populous areas, must be >30m from any person not directly involved in operation, day VMC only

