

06/19/15

Task

Force

Meeting

<TARGET><BILL></BILL><SUBJECT>06-19-15 Task Force Meeting</SUBJECT><COMM><TARGET></COMM></TARGET>

## **Legislative Task Force on Unmanned Aircraft Systems**

**June 19, 2015 Meeting**

**Anchorage Legislative Information Office ~ 716 W 4<sup>th</sup> Ave ~ Auditorium**

**1:00pm – 5:00pm**

### **Task Force Members:**

- Representative Shelley Hughes, Co-Chair
  - Ginger Blaisdell, Staff to Rep. Hughes
- Senator Peter Micciche, Co-Chair
- Ethan Tyler, Commissioner Designee, Department of Commerce, Community Economic Devel.
- Mike O'Hare, Commissioner Designee, Department of Military and Veterans' Affairs
- Lieutenant Steve Adams, Commissioner Designee, Department of Public Safety
- John Binder, Commissioner Designee, Department of Transportation, Public Facilities
- Ro Bailey, University of Alaska Fairbanks
- Steve Strait, Aviation Advisory Board, Governor's Office and DOT/PF
- Steve Colligan, Representative Member for the Academy of Model Aeronautics
- John Parker, Integrated Robotics Imaging Systems
- Steve Wackowski, Tulugaq II
- Bob May, Gallery Lodge, Kasilof

### **Task Force Responsibilities**

The duties of the task force shall include

1. reviewing regulations and guidance from the Federal Aviation Administration regarding unmanned aircraft systems;
2. providing written recommendations, together with suggested legislation, for a comprehensive state policy for unmanned aircraft that protects privacy and allows the use of unmanned aircraft systems for public and private applications;
3. evaluating complaints and concerns expressed to the task force;
4. identifying potential privacy and public safety concerns associated with unmanned aircraft systems and determining whether legislation is necessary to address them;
5. considering recommendations for public education related to unmanned aircraft systems;
6. studying the Federal Aviation Administration's "Integration of Civil Unmanned Aircraft Systems (UAS) in the National Airspace System Roadmap," issued November 7, 2013 (1<sup>st</sup> ed. 2013) and its application to the development of unmanned aircraft systems in the state;
7. conducting a public hearing concerning privacy and the capture of data by unmanned aircraft systems at the University of Alaska's test site;
8. further studying the nonpublic use of unmanned aircraft systems to encourage development of the private sector unmanned aircraft system industry; and
9. further studying and making recommendations with respect to ensuring unmanned aircraft users comply with applicable laws.

# AGENDA

**1:00pm Welcome and Introductions ..... Representative Shelley Hughes**

- Review of Meeting Summary from February 11, 2015
- Introduction of guests and new task force representative

## AGENDA

1. Summary of military briefing – Pages 1 - 23
  - Russia to Deploy Military UAS to Monitor Arctic
  - Senators, Congressmen, Praise New UAS Research
  - Alaska Delegation: Fort Wainwright Soon Welcoming Gray Eagle “Sky Warriors”
  - Alaska Command PowerPoint: DoD UAS in Alaska
2. Current events:
  - News Articles Pages 24 – 37
  - FAA Articles Pages 38 – 52
  - Department of Justice Guidelines Pages 53 – 58
    - [www.alaskadrones.org](http://www.alaskadrones.org)
3. Invited testimony
  - Ryan Marlow, Alaska Aerial Media
  - Captain Dave Koch, Anchorage Police Department
4. Privacy document and legal memo regarding privacy for Alaska citizens
  - [www.alaskadrones.org](http://www.alaskadrones.org)
5. Drone insurance for commercial and recreational users
6. Public testimony
7. Wrap-up and adjourn
  - Future Meeting Agenda:
    - Next meeting: September 3<sup>rd</sup> 1 – 5pm
  - Follow Up – To Do
    - Letter to Congressional Delegation regarding funding of FAA Test Sites

**Legislative Task Force on Unmanned Aircraft Systems  
February 11, 2015 Meeting  
State Capital, Juneau Alaska, Room 13**

**1:00 – 3:00pm**

**Task Force Members:**

- Representative Shelley Hughes, Co-Chair
- Joe Jacobson, Commissioner Designee, Department of Commerce, Community Economic Devel.
- Mike O’Hare, Commissioner Designee, Department of Military and Veterans’ Affairs
- Lieutenant Steve Adams, Commissioner Designee, Department of Public Safety
- Ro Bailey, University of Alaska Fairbanks
- Steve Colligan, Representative Member for the Academy of Model Aeronautics
- Steve Wackowski, Tulugaq II
- Bob May, Gallery Lodge, Kasilof
- Ginger Blaisdell, Staff to Rep. Hughes

Not in attendance:

- Senator Peter Micciche, Co-Chair
- John Binder, Commissioner Designee, Department of Transportation, Public Facilities
- John Parker, Integrated Robotics Imaging Systems
- Steve Strait, Aviation Advisory Board, Governor’s Office and DOT/PF

**MEETING SUMMARY**

**1:00pm Welcome and Introductions .....Representative Shelley Hughes**

- Thank you all for coming to Juneau and attending the Lunch and Learn hosted by the University of Alaska Fairbanks and contributors

**Items in meeting packets:**

- Dec 5 meeting minutes – to be emailed
- Letters to department heads
- Letter to delegation
- Congressional bills introduced by Young and Murkowski – encourage public private partnerships to provide funding

- KBYF safety guidelines and the alaskadrones.org web site
- FAA is trying to ramp up drone education and regulation process
- You tube link to Swiss team 'cage' that won \$1m from UAE
- FAA issued guidance for law enforcement
- UAS improvement act 2015 congressional legislation – procurement, homeland security, etc.
- Young and Murkowski bill
  - a. Ro Bailey worked with congress on this legislation (Allison/Murkowski)
  - b. Test sites are experiencing issues where the FAA is interpreting aspects of UAS research that makes the work they are doing very difficult
  - c. Trying to break the FAA lose from restricting operations at the test sites
  - d. Can't be paid to fly but can receive money for milestones

**Joe Jacobson, Department of Commerce, Community and Economic Development**

Update: final report on UAS economic advantages for Alaska is in today's packet

- Cultivating a resource, workforce, university program
- Entrepreneurial focus to attract them
- Canada forming alliances across industries (maritime and UAS)
- Recommending incentives to attract business without increasing cash outlay
- Job creation and revenue to the state

**Barbara Johnson** (past position with FNSB)

- Economic development work to establish military development zones
- Looked at a tech park near Salcha, now considering Hightop Park using University lands about 20 miles outside Fairbanks
- NOAA is very interested in what Alaska is doing
- Great opportunities in the Arctic

**Steve Colligan, Academy of Model Aeronautics**

- Hobby industry has the best you tube information on flying UAS you might want to see
- Safety is directly related to skills and knowledge
- "We" need to get information out there virally
- Know Before You Fly campaign
- Asks Task Force (alaskadrone.org) to "sign on" to national campaign Know Before You Fly – send a letter and a logo to the national campaign
- Discussion: letter to campaign, recommendation from Gov/Task Force?, what logo?, want all Alaska communities-agencies-vendors to 'sign on' to alaskadrones.org?, wants Gov to endorse, ask congressional delegation to draft letters
  - Joe and Steve Colligan will work with Gov office to request a letter
  - Knowbeforeyoufly.org

**Bob May, Public member** - Very interested in the privacy for Alaskans

Steve Wackowski, Fairweather Inc. – Top 40 Under 40

Mike O'Hare, Department of Military and Veterans' Affairs

- Offer to host next meeting on base
- Update on how military plans to use UAS

Ro Bailey, University of Alaska Fairbanks

- Interest Group Meeting
  - Interest group meeting begins on September 1, she would like the task force meeting to coincide with the interest group, consider meeting September 3 or 4 in Fairbanks
- Ro Bailey also noted that the Test Site now includes operations in Kansas and Tennessee for test site operating locations but not as a key partner

## PRIVACY DOCUMENT \_\_\_\_\_

Privacy considerations for Alaskans

- Most privacy issues around the USA have been with regard to law enforcement privacy
- Ro Bailey: once we put the privacy document out, we should include the "who to call" info

Creating a document:

- Want the privacy document to fit on one page (similar to KBYF)
  - Who is the target audience?
  - How will this document be used?
  - Might be different audiences with different needs?
  - Hobby Use – Commercial Use – Law Enforcement
    - Semi-professional videographers occurring in Alaska already
    - Section 333 exemptions in the FAA reform act of 2012
- Guidelines vs Law?
- **FAQ version** of common questions to add to the web site – FAQ's would allow ginger to research statutes with legal services – questions provided to Ginger by Feb 15 - Generic or specific examples to use in the FAQs?
  - Who owns the airspace above your house?
  - How to apply the protections that Alaska already has in statute?
  - Reasonable expectation of privacy
  - How is data going to be used, stored and maintained?
  - Can I shoot it down if it's flying over my house? Destruction of another's property.
  - Circumstance: is it private or not?
  - What do I do if there's a drone flying over my house?
  - Can I use this for my business?
  - Noise ordinance?
  - Chasing my dog?
- **"Cartoon"** some of the scenarios to grab everyone's attention

## Timing

- Get the information out to the public quickly and we can continue to refine
- Get our web site to the national level

## New information to put on website

- Put the 5-page excerpt on the alaskadrones.org web site
- Why Alaska? Joe Jacobson has a great flyer developed
- Who do you contact and how do you contact re inappropriate drone flights?
  - Jay Skaggs – call me...
  - Get contact information on alaskadrones.org
  - Can individuals contact local police? – yes
  - DPS form/content to be made available on alaskadrones.org so individuals know what information to provide to local police (or forwarded on to FAA)
  - Don't dial 911

## Public Testimony

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Bill Tart, Arctic Slope Regional Corp – no testimony provided

## Next meeting

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- **June 19 in Anchorage on Base coordinated by Mike O'Hare – would like a UAS demo**
  - Would not be able to get the public on the base for a general meeting – look into the rules for this.
- FAA should kick out some rules by June
- Letter to congressional delegation regarding test site funding
- Matrix and Education plan to be worked on by Steve Strait and Ginger
  - KBYF one page document (and this privacy document) really delivers the education plan
- Military update
- Unmanned Traffic Management System – how do they fly, where do they fly, communication capabilities
  - Steve Colligan is aware of the relationship with NextGen, detect and avoid technology
  - Ro Bailey is under contract with NextGen working on airspace reservation information and ultimately integrate with manned aviation
  - Steve Wackowski is working with major entities and University, on the slope to be first to integrate the UTM in Alaska

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## Russia to Deploy Military UAS to Monitor Arctic



Russian drones will start monitoring the situation in the Arctic as well as on a part of the Northern Sea Route starting May 1, authorities announced. The vehicles can be used in navigation as well as in search and rescue missions.

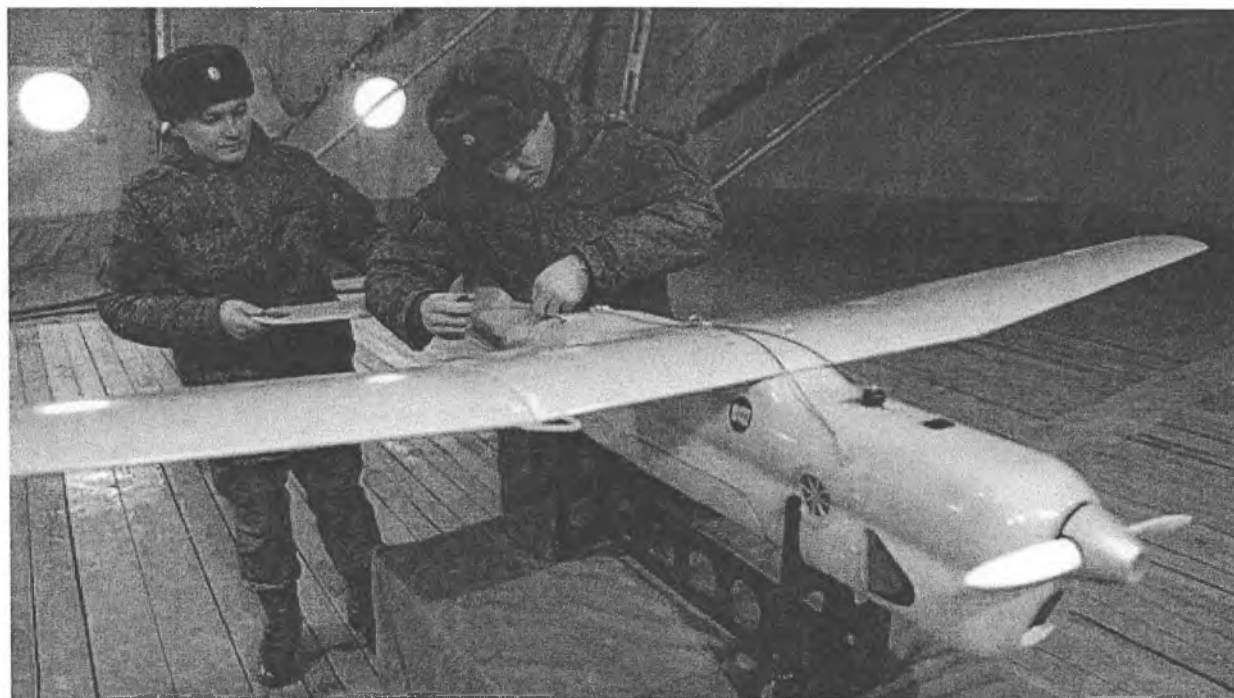
*"The drones' task is to maintain impartial control of the situation in the Russian sector of the Arctic, including the ecological and ice situation in the adjoining sea areas and along the Northern Sea Route," Colonel Aleksandr Gordeev said.*

The division of UAV [Unmanned aerial vehicle] Orlan-10 of Eastern Military District will deploy in Chukotka [Peninsula] from May 1.

Produced at the Special Technological Centre of Saint Petersburg, the Orlan-10 drones are capable of reaching speeds of 90-150kph.

The drones will perform such tasks as *"managing objective control over the situation in the Russian Arctic,"* and section of the Northern Sea Route, Gordeev added.

The vehicles will be delivered aboard Mi-26 heavy transport helicopters to any area for monitoring the situation in the Russian Arctic, navigation as well as in search and rescue missions.



Plans to implement drones in the Arctic were revealed at the end of 2014. The test flights of Orlan-10 started in March 2015.

Russia has recently started developing its northern regions, which includes the production of hydrocarbons, with national companies developing the exploration and construction of drilling facilities.

Home to the largest icebreaker fleet in the world, Russia is the only nation to use nuclear-propelled icebreakers. With climate change making the Arctic region more accessible, Moscow sees its development a priority both for the sake of its natural resources and as a potential route for transport vessels from Asia to Europe.

*Photos: Orlan 10 - RIA Novosti / Evgeny Biyatov*

Source: RT



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Posted in News on April 27, 2015 by The Editor. [Leave a comment](#)

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US AIR FORCE ORDERS 25 MORE QF-16S →

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## Senators, Congressmen, Praise New UAS Research



Members of the U.S. Senate and House of Representatives pledged to continue their support for a newly-designated FAA Center of Excellence for Unmanned Aircraft Systems that will research and develop technologies and policies for the use of unmanned aerial systems, or drones, in the United States.

At a news conference Thursday, lawmakers praised the Federal Aviation Administration (FAA) selection of Alliance for System Safety of UAS through Research Excellence (ASSURE), a consortium of universities headed by Mississippi State University (MSU), to lead the UAS COE. ASSURE is tasked with identifying issues critical to the integration of unmanned aircraft systems (UAS) into the nation's airspace and engaging in research and policy development on the growing use of unmanned aerial systems.

FAA Administrator Michael Huerta, MSU President Mark Keenum and consortium members joined U.S. Senators Thad Cochran (R-Miss.), John Hoeven (R-N.D.), Lisa Murkowski (R-Alaska), Roger Wicker (R-Miss.), and U.S. Representatives Kevin Cramer (R-N.D.) and Gregg Harper (R-Miss.) at the event to discuss the next steps and goals for the COE UAS.

“Unmanned aircraft technology is here to stay, and we are all excited that our states will have an active role in figuring out the safest and most efficient way to incorporate this evolving technology into our airspace to assist on issues ranging from precision agriculture to disaster recovery,” Senator Cochran said. “We are interested in continuing to support what will be a collaborative process to address the complicated nature of integrating unmanned aircraft into our national airspace system, as well as privacy and other issues that arise with their use.”

“We are extremely pleased that UND is a key member of the UAS team selected for the Center of Excellence,” Senator Hoeven said. “UND brings not only its resources as a premier school of aviation, but also the northern tier UAS test site and the Grand Sky Technology Park.”

“From the Alaska perspective, unmanned aerial systems can be game changers for my state - to work around our vast distances and lack of infrastructure. Whether in the form of Arctic research, delivering goods in the Bush, fire-fighting or policing in rural areas, UAS deserve serious and thoughtful consideration as we map out an intelligent rule book for their use and applications,” Senator Murkowski said.

“Advances in Unmanned Aircraft Systems are making a big impact on the ways we live and work - revolutionizing how we engage with the world,” Senator Wicker said. “These technologies help create tens of thousands of jobs, grow our crops more efficiently, improve our response to humanitarian crises, and protect our troops. This consortium of research universities, led by Mississippi State University, will play a leading role in the future development of this exciting, emerging field.”

“This alliance is its own evidence of excellence. In addition to the scientific and intellectual assets of these institutions, North Dakota brings the highest ethical standards born out of the culture of the prairies to be applied to the execution of technology,” Congressman Cramer said.

“I commend FAA Administrator Huerta’s search selection of the ASSURE consortium, headed by Mississippi State University, to lead the UAS Center of Excellence,” Congressman Harper said. “Over the past decade and a half, we have seen UAS technology and capabilities grow exponentially and this selection speaks strongly to the important partnership between the FAA and academia. I applaud Senator Cochran’s leadership on this issue. Dr. Keenum, Mississippi State University and ASSURE are uniquely positioned to be an integral part of the growth of UAS research and technological advancements.”

The directive to the FAA to establish the national center has been included in congressional appropriations bills since FY2012, with Congress appropriating \$5.0 million to support a five-year agreement with the COE UAS. Federal funding will be matched by ASSURE team members.

The FAA expects the COE to begin research in 2015 and be fully operational in 2016 in its exploration of evolving new technological developments regarding unmanned aircraft and their uses, including detect-and-avoid technology, low-altitude operations safety, privacy safeguards and other areas. Research will also involve the deployment of UAS for emergency response, bio-fuel and clean fuel technologies, law enforcement activities, and agricultural and environmental monitoring.

Moreover, the COE UAS will coordinate research and development activities with the National Aeronautics and Space Administration, the Department of Defense, the Department of Homeland Security, Department of Agriculture and other agencies. Its work will also lead to recommendations on aircraft certification, flight standards and air traffic requirements, and facilitate UAS technology transfer to other civilian and defense agencies.

In addition to Cochran, Hoeven, Murkowski and Wicker, other Senators who have been instrumental in supporting the formation of the COE UAS include Ron Wyden (D-Ore.), Pat Roberts (R-Kan.), Heidi Heitkamp (D-N.D.), Richard Shelby (R-Ala.), Jeff Sessions (R-Ala.), Bill Nelson (D-Fla.), Richard Burr (R-N.C.), Bob Casey (D-Pa.), Tom Udall (D-N.M.), Jeff Merkley (D-Ore.), Jerry Moran (R-Kan.), Martin Heinrich (D-N.M.), Jon Tester (D-Mont.).

ASSURE members include Mississippi State University, Drexel University, Embry-Riddle Aeronautical University, Kansas State University, Montana State University, New Mexico State University, North Carolina State University, Oregon State University, University of Alabama-Huntsville, University of Alaska-Fairbanks, University of Kansas, University of North Dakota, Wichita State University, Ohio State University, University of California-Davis, Auburn University (associate member), Concordia University (associate member), Indiana State University (associate member), Louisiana Tech University, Tuskegee University (associate member), and University of Southampton (associate member).

Source: Political News



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Posted in Regulatory Matters on May 18, 2015 by The Editor. [Leave a comment](#)

# ALASKA CONGRESSIONAL DELEGATION

## NEWS RELEASE



SENATOR LISA MURKOWSKI  
SENATOR DAN SULLIVAN  
CONGRESSMAN DON YOUNG

Matthew Felling 202-224-9301  
Mike Anderson 202-224-6727  
Matthew Shuckerow 202-225-0722



### Alaska Delegation: Fort Wainwright Soon Welcoming Gray Eagle “Sky Warriors”

*U.S. Army Informs Lawmakers of Basing Decision,*

*Further Reinforcing Alaska’s Military Footprint*

**WASHINGTON, D.C.** – Alaska’s Congressional Delegation received good news today from the United States Army, that Fort Wainwright will be the home base for nine “Gray Eagle” Unmanned Combat Air Vehicles. This announcement solidifies the Department of Defense’s investment of manpower and infrastructure in Alaska, the “most strategic location in the world.”

The Gray Eagle Company will bring 128 military personnel and their families to Interior Alaska beginning next month, and represents a major addition of military hardware that complements Alaska’s two combat infantry brigades, the Apache helicopters and Air Force assets.

The U.S. Army also informed the delegation that while the aircraft will be housed at an existing facility in the short-term, it plans to seek constructing for a UAV facility in the President’s 2017 budget.

“Alaska is the tip of the spear when it comes to the Pentagon’s strategic shift to the Asia-Pacific, but the Pentagon clearly sees it as a superior choice to also respond to increasing military activities in the Arctic region,” said **Senator Lisa Murkowski**. “It was not too long ago that the Department of Defense was taking a closer look at its investment and presence in Alaska; it’s now evident that officials came away from examining Alaska extremely impressed and convinced that we are the optimal location and community for men and women in uniform.”

“Today’s announcement from the Army is the latest in a string of good news for military basing and positioning in Alaska. The Gray Eagle Company will provide benefit to Alaskan service members by allowing them to train as they fight—with support from Gray Eagles, Apaches, and Air Force assets at JBER and Eielson,” said **Congressman Don Young**. “I proudly supported the procurement of the Gray Eagle in this year and last year’s National Defense Authorization, so I was thrilled to learn they would be positioned at Ft. Wainwright.”

“In an increasingly dangerous world, Intelligence, Surveillance, and Reconnaissance (ISR) capability has never been in greater demand,” said **Senator Sullivan**. “Now more than ever, ground commanders need to see and understand the battlefield, and the Gray Eagle is a critical component for the U.S. Army to do that. Importantly, basing the Gray Eagle at Ft. Wainwright, near the Joint Pacific Alaska Range Complex (JPARC), will give the U.S. Army access to some of the world’s most expansive and robust training ranges. I am pleased to see a

company of Gray Eagles on its way to Alaska, and I am hopeful that the U.S. Army will continue to see value in the benefits of Alaska's great training ranges and strategic location, as the Senate Armed Services Committee already has."

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## Ginger Blaisdell

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**From:** McKenzie, Connie (Sullivan) <Connie\_McKenzie@sullivan.senate.gov>  
**Sent:** Thursday, June 04, 2015 4:12 PM  
**To:** Ginger Blaisdell  
**Subject:** FW: Alaska Delegation: Fort Wainwright Soon Welcoming Gray Eagle "Sky Warriors"  
**Categories:** Drone

Hi Ginger,

I thought Rep. Hughes would be interested in this release dealing with UAVs.

Best,

*Connie McKenzie*

Delegation Representative – Juneau

U.S. Senator Lisa Murkowski

U.S. Senator Dan Sullivan

800 Glacier Ave., Suite 101

Juneau, AK 99801

Ph: 586-7277

Fax: 586-7201

**Sent:** Thursday, June 04, 2015 3:51 PM

**To:** Anderson, Mike (Sullivan)

**Subject:** Alaska Delegation: Fort Wainwright Soon Welcoming Gray Eagle "Sky Warriors"

**Note to journalists:** For photos of the Gray Eagle aircraft, [click here](#). For video/b-roll of the Gray Eagle in operation, [click here](#).

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# Sam's Club Bets Drones Will Fly Off the Shelves at Christmas

NEWS NEWS REPORTS June 11, 2015 by DRONELIFE News - No comments

(Source: wsj.com)



Move over BB guns and videogames. Christmas morning may have a new menace.

Sam's Club is betting drones will be a popular holiday gift this year and plans to stock about a dozen kinds—from \$100 models to \$4,000 versions with high resolution cameras or the ability to pick up small objects, said Dawn vonBechmann, senior vice president of technology,

entertainment and office products for the wholesale chain owned by Wal-Mart Stores Inc.

The move comes as drones are capturing attention at a time when little else in the battered consumer electronics market is clicking at the register. Sam's started thinking about expanding its drone line after noticing a \$1,169 model with a digital camera was selling "like crazy" online, Ms. vonBechmann said.

Sam's surveyed customers earlier this year and found about half bought the pricey drone for professional reasons; real-estate agents taking bird's eye view pictures of their high-end properties, wedding photographers hoping to get a client's ceremony from a new angle—and at least one rancher who uses it to check whether perimeter fences are intact from the comfort of his home. The rest are buying it for fun, Ms. vonBechmann said.

The Bentonville, Ark.-based discount chain, with \$58 billion in annual sales, is hoping it can grow sales and increase memberships by offering more new and unexpected products.

Sales at U.S. Sam's Club existing stores inched up 0.4% in the most recent quarter excluding gas, while competitor Costco Wholesale Corp. notched a 5% gain in the same period.

To boost its sales, Sam's Club needs more excitement and newness, "re-engaging there like we did when we first started Sam's Club," said Rosalind Brewer, chief executive of the retailer. Ms. Brewer spoke during a news conference ahead of Wal-Mart's annual meeting of shareholders last week.

Drones are a niche part of the consumer electronics market that includes emerging technologies such as 3-D printers, Ultra High Definition televisions, wearable fitness devices and smartwatches. Such sales are expected to reach almost \$11 billion this year, according to trade group Consumer Electronics Association. Three years ago, those sales were too small to track, the association said.

## BUY A DRONE

Why do you want a drone?

Recreational Photography

How much do you want to pay?

\$ \$1000 \$\$\$

FIND MY DRONE



## BEFORE YOU BUY

### Where Are All The DJI Phantom 3 Reviews?



When DJI's Phantom 3 was first announced in April, it seemed like every media outlet ran a story about it.... Read More »

### Drone Safety: What You Should Know Before You Fly With 3DR



by Roger Soilenberger It's getting easier and easier to fly drones—or, like with Solo, to have the drones fly... Read More »

### My New Contingency Plan for Drone Fly Aways



As drone fliers we tend to go to great lengths to protect our investments from flying away. There's nothing... Read More »

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The Parrot Bebop is an excellent drone for beginners and is the perfect model for demonstrating why has drones... Read More »

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Summer is (finally) right around the corner. As people gear up to go on vacation this year, drones are sure to be... Read More »

### The 5 Best "Bang-for-Your-Buck" Drones



With cultural icons like Amazon.com flying into the Game of Drones, there's little doubt that UAVs will soon ... Read More »

### 6 Things to Consider Before You Hire a Drone

24

Ninety percent of Sam's electronics come from six big companies including Samsung Electronics Co. and Apple Inc., a spokeswoman for the retailer said. The retailer hopes that drones, like flat screen TVs and computers in years past, will appeal to shoppers looking for a holiday gift that makes a big splash.

	<b>Phantom 2 Vision</b> by DJI	<b>\$699</b>
	<b>Battery Life:</b> Under 30 Minutes	<b>PURCHASE INFO</b>
	<b>Camera:</b> 1080p HD	
	PRODUCT INFORMATION	

Sam's found the \$1,169 DJI Phantom Vision 2+, made by SZ DJI Technology Co., as part of an event that gives smaller companies 30 minutes to pitch their products. The company put the drone on its website, which it often uses to test interest in new products, Ms. VonBechmann said.

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**Tags:** Christmas, Sam's Club, Wal-Mart

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On Wednesday, DJI unveiled the latest in consumer drone technology, the Phantom 3. Upon seeing the first official... [Read More »](#)

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It has been a tough couple months for drone pilots in the Northeast. But the snows are finally melting and the... [Read More »](#)

**Drone Buying Guide for Spring 2015**



How to Buy a Drone this Spring After a strong holiday season, the consumer drone market is expected to grow even... [Read More »](#)

**Do You Need Drone Insurance?**



The FAA has finally indicated it will be opening up the sky to commercial drones but, before you go out and start... [Read More »](#)

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There were many takeaways from this year's CES but one that really stuck with me was the fact that we are... [Read More »](#)

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**How to Fly a Drone the Dronelife Way**



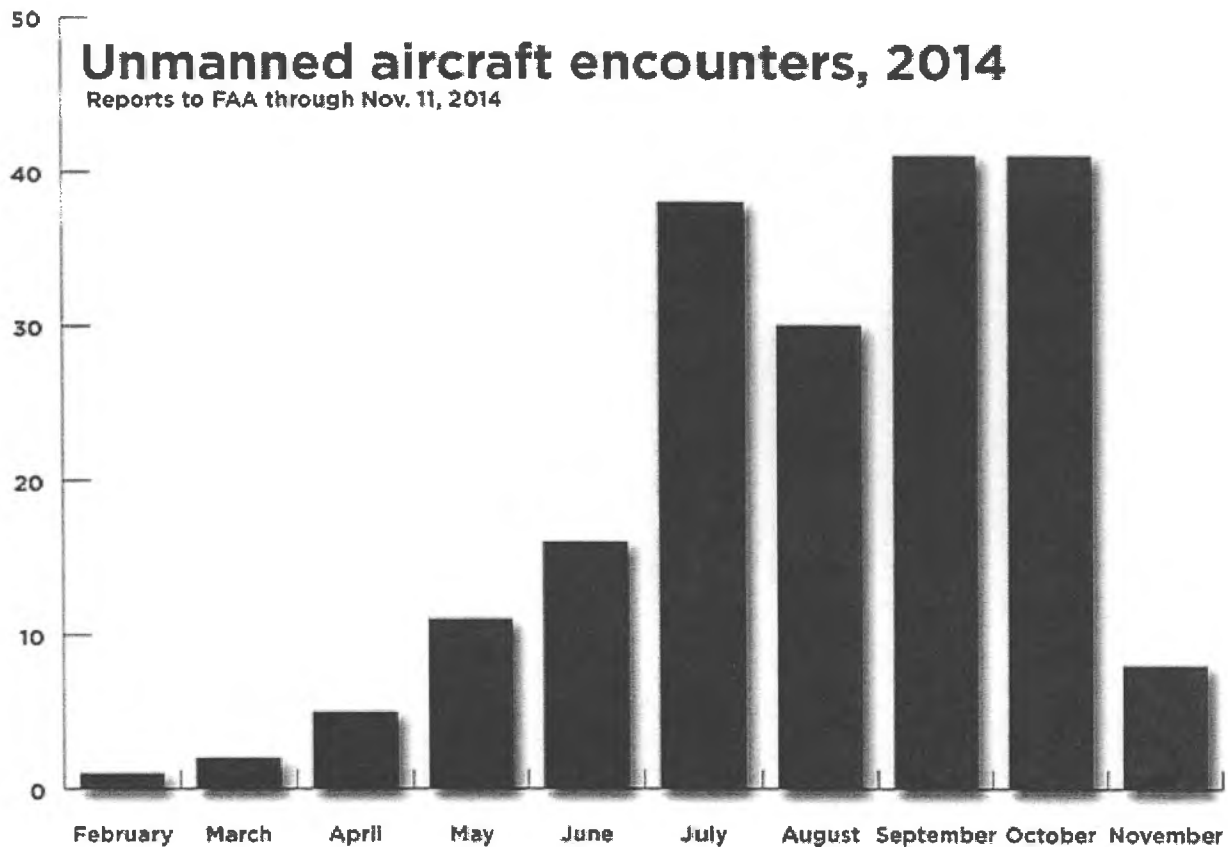
The Globe and Mail recently published an excellent preemptive intervention for amateur drone pilots warning the... [Read More »](#)

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## Unmanned Aircraft Encounters Increasing in USA



Nearly 200 encounters with unmanned aircraft, ranging from amusing to chillingly dangerous, were reported to the FAA between February and November of 2014; a list published by a New Orleans television station May 26 documents the growing use of drones—authorized and otherwise—and their infiltration of the National Airspace System.

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The U.S. Coast Guard reported that a DJI Phantom quadcopter operated by a photographer flew over the admiral's residence at Diamond Head Lighthouse on Nov. 8, though no property damage or National Airspace System penetration was noted. But many of the reports documented on the list published May 26 by Fox 8 News, a copy of which was sent to AOPA on request, detail more troubling encounters: unmanned aircraft flying much higher, in some cases near manned aircraft, airports, or navigation aids.

The reports were collected by various FAA facilities (most of them relayed through air traffic control, according to an FAA spokesman), and show a steady increase from just one report in February 2014 to 41 reports in July and August of 2014. The FAA is working to establish a systematic process for collecting these reports. So far they have been supplied by flight crews and public safety agencies on their own initiative. The FAA redacted the names and telephone numbers of those filing reports, a spokesman said, and "anything related to national security," but the reports are otherwise unaltered.

One report details unmanned aircraft activity being conducted on a runway in Joplin, Missouri, while the airport also hosted normal operations, though no notam was published for the unmanned operation. The person filing the report investigated and was told the activity was apparently illegal, and the operation ceased after the airport manager was notified. At least one aircraft in the pattern for the runway requested a different runway.

That same month, a report filed in Oklahoma documented an aircraft taking evasive action to avoid a small unmanned aircraft at 4,800 feet; the unmanned aircraft was described as two feet wide and black, with a camera attached. The pilot who took evasive action reported that the drone came within 10 to 20 feet of a collision.

Such near-misses were the exception, though several reports document unmanned aircraft operating well inside controlled airspace. In many cases the intention of the operators is unknown, though at least one military drone (a small, hand-held model) flew onward after losing data communication with the ground station. "The UAS last known altitude 650 feet, SW bound with a fuel exhaust time of approx 40 minutes. Expected to remain in the restricted area," the report, filed Oct. 24 in Columbus, Georgia, states.

In another case, operators lost control of an unmanned aircraft being used to record a high school football game in Madison, Mississippi, and it flew into controlled airspace. Local police investigated the incident, which resulted in no property damage or injuries, though that unmanned aircraft was spotted a mile from an airport by a passing pilot.

AOPA has long advocated for safety above all when it comes to unmanned operations, stressing the need for all aircraft operators to be able to “see and avoid” other aircraft at all times, whether the pilots are on the ground or in the air. AOPA participated on the FAA’s Small Unmanned Aircraft Systems (UAS) Aviation Rulemaking Committee, which started meeting in 2008 to develop recommendations for the agency to integrate UAS safely. In 2009, the committee recommended that small UAS operators be required to keep the craft in sight and take training. In April, AOPA submitted formal comments on proposed rules, asking the FAA to limit commercial-use UAS to 400 feet agl to mirror the regulations already in place for model aircraft. AOPA asserted that lowering the ceiling for UAS from the FAA’s proposed 500 feet to 400 feet would add a “small buffer between manned and unmanned operations in most areas.”

The FAA is testing a smart phone application for unmanned aircraft operators designed to help them avoid dangerous or illegal operations; a link to that app, currently in testing, is posted online along with other information about current regulations, limitations, and other aspects of unmanned aircraft operations.

The AOPA Air Safety Institute offers a free online course, *Unmanned Aircraft and the National Air-space System*, to educate pilots on the different types of unmanned aircraft and how to safely co-exist. AOPA has also joined with unmanned aircraft organizations to support the “Know Before You Fly” education campaign.

Source: AOPA

g+1



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Posted in Regulatory Matters on June 2, 2015 by The Editor. [Leave a comment](#)

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– ANTI-UAV DEFENCE SYSTEM DETECTS UAVS AT 8KM    NEW ZEALAND SOON TO INTRODUCE UAS LEGISLATION –

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## DJI and Accel Announce SkyFund

04:15



**HD**

Accel invested \$75 million into DJI this month, sparking this new partnership. Skyfund will make \$250,000-plus investments in early stage drone startups through convertible notes or traditional seed and Series A rounds. DJI and Accel will have the option to make follow-on investments.

Along with a closer relationship with DJI's hardware business, portfolio companies will get access to expert advisors, including Dropcam founder Greg Duff, former head of Facebook product management Sam Lessin, Twitter director of developer platform Jeff Seibert, and Emmy award-winning TV producer Dick Wolf, who has used drones in shows like Law & Order.

Both Airware (with its recently announced investment fund) and DJI seem to have realized that the drone industry is too big and the use cases too broad for a single company to build the whole technology stack. Instead, both are trying to become platforms, making flexible core software and hardware that can be customized for niche needs in different verticals. Just like Apple or Facebook didn't try to build every end application, these drone giants are trying to become the foundation of an ecosystem.

Companies around the world are eager to replace dangerous and expensive helicopters, planes, and satellites, and dangling humans with drones. Airware and DJI could entrench themselves in this budding commercial drone business by building a network of startups around themselves. At this rate, Airware and DJI could emerge as the software and hardware titans of dronetech.

Source: Tech Crunch



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Posted in [Business News, Non-Military & Commercial UAS](#) on June 1, 2015 by [The Editor](#). [Leave a comment](#)

— [US DRONE DOWN IN IRAQ](#)

[AIRWARE LAUNCHES DRONE INVESTMENT FUND](#) —

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## Airware Launches Drone Investment Fund



Airware is announcing the Commercial Drone Fund, which will invest \$250,000 to \$1 million in dozens of early stage startups that are building out other components of the enterprise drone ecosystem. The fund's first two investments are in RedBird, a Paris-based drone data processing startup, and Sky-Futures, a London company that builds drone sensors for monitoring oil and gas infrastructure.

Airware has raised over \$40 million to scale its drone flight computer, operation software, and cloud data system.

Rather than invest from its own balance sheet of venture capital, or simply co-invest with traditional firms, Airware raised a separate fund from a set of limited partners. Airware's founder and CEO Jonathan Downey will be its general partner. The fund's size and LPs aren't being disclosed, but the backers may include traditional VCs, as Downey says they're open to investing in follow-on growth rounds beyond the fund.

"In the same way Airware's platform is acting as a catalyst on the technology side of things for companies looking to deploy drones for commercial applications, we're launching the Commercial Drone Fund to help catalyze these companies in a different way — by investing directly into them" Downey tells me. "These are technologies that are critical to scaling commercial drones."

The commercial Drone Fund will concentrate on five areas over the next two to three years:

1. **Sensor Hardware** – to improve the precision, speed, cost, and scale of what data drone can collect
2. **Software Applications** – that make deploying commercial drones easier
3. **Cloud-Based Aerial Data Analysis Tools** – for pulling insights from the data collected
4. **Drone-Based Services** – including companies that fly drones or sell data
5. **Complete Solutions For Specific Industries** – that pull together different hardware and software systems into full packages for commercial customers

Portfolio companies will get access to Downey, who built drones for MIT and Boeing, and help raising additional funding. Airware's own investors, including Andreessen Horowitz, First Round, Kleiner Perkins, Google Ventures, and Felicis Ventures, give it plenty of connections to share.

Source: [Tech Crunch](#)



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Posted in [Business News](#), [Non-Military & Commercial UAS](#) on June 1, 2015 by [The Editor](#). [Leave a comment](#)

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## AMA Provides sUAS Education Online



The Academy of Model Aeronautics (AMA), an organisation that promotes the development of model aviation, has announced the latest addition to its [AMA Flight School](#) online learning centre: small Unmanned Aircraft Systems (sUAS) education with partner [Fly Robotics](#).

The Fly Robotics team brings with it an unprecedented portfolio of UAS experience and instruction. With multiple Department of Defense certified flight instructors and national champions, Fly Robotics will be an integral piece of AMA Flight School, serving as the sUAS online course and regional flight school provider. Additionally, Fly Robotics has provided basic safety and introductory sUAS content for anyone interested in learning more about drones.

Based upon the criteria presented in FAA's sUAS Notice of Proposed Rulemaking, this course will be of great value to anyone wanting to get a head start on the upcoming FAA sUAS commercial use certification test, or those wanting to learn safe unmanned aircraft operations.

The AMA celebrates nearly 80 years of safe operations in the National Airspace System and continues, through educational content, to provide the knowledge necessary to safely fly a drone or sUAS.

Source: Press Release



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Posted in [Non-Military & Commercial UAS](#) on April 21, 2015 by [The Editor](#). [Leave a comment](#)



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## Alaska Researchers Use Drones to Study Otters

Scientists wanting to know what sea otters eat while floating far from shore have turned to the sky. During an April mission in Kachemak Bay, researchers tested unmanned drones to see if they could be used for future sea otter surveys. The project also used drones to study the prevalence of sea grass in intertidal flats.

Using drones for the intertidal flats mission was mostly to streamline the process, allowing a larger area to be surveyed in a shorter amount of time.



When it comes to otters, scientists want to know what the predators regularly eat to better understand how it may affect fisheries management. Current observation techniques are restricted to watching sea otters with high-powered spotting scopes. The practice is only viable on land, as swells and turbulent boats make scopes unfeasible.

Close to shore, otters eat clams, crab, octopus, fish and the occasional sea urchin or star fish. But in open water, scientists “have no idea what they’re feeding on,” Brenda Konar, professor of marine biology at the University of Alaska Fairbanks, said.

During the project, most drone flights were conducted from land so researchers could use spotting scopes to see if otters avoided the drones.

According to Konar, the project was “really successful,” even without recording new feeding data. “At this point, all we did with them was to see how close we can get to them and see if they would try to freak out or not.”

Konar said drones were able to be flown within about 10 feet of the otters, and most animals paid the quadcopters no attention.

Kachemak Bay’s otter population is doing better than most around Alaska, Konar said. That is in contrast to the Bay’s crab population. “They’re not coming back the way people are hoping,” Konar said of crabs. Konar hopes drones can help determine if otters’ fishing habits contribute to low crab numbers.

Team members learned both from successes and challenges during the mission.

Sam Vanderwaal, project manager and drone pilot, said tricky technical issues arose. Maintaining connectivity with drones was problematic while trying to catch otters in the bay. Common issues — like recharging batteries in the field and keeping equipment dry — also popped up.

Vanderwaal is an embedded contractor at the Alaska Center for Unmanned Aircraft Systems Integration at UAF’s Geophysical Institute. The Center for Unmanned Aircraft has a certificate of authorization from the Federal Aviation Administration to operate drones professionally.

The GoPro cameras equipped on the drones also lacked sufficient resolution for the tidal flats survey. A better camera would require drones with larger payloads.

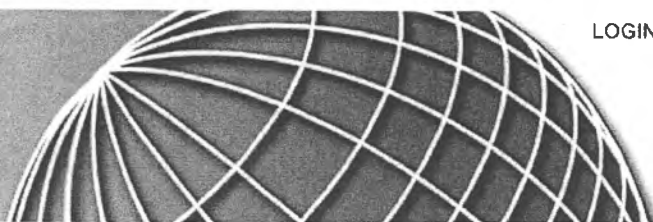
When it came to otters, simple techniques were practiced to get drones as close as possible. As otters dove to find food drone operators would lower the aircraft for when the animal resurfaced. “We learned if you did it in steps the otter didn’t seem to care,” Konar said.

Konar is working to procure funding for the next mission, when she would like to get some actual feeding data.

Source: [newsminer.com](http://newsminer.com)



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## FAA SELECTS MISSISSIPPI STATE-LED TEAM FOR UAS CENTER OF EXCELLENCE

**FAA Selects Mississippi State-Led Team for UAS Center of Excellence**

By AUVSI News posted Fri, May 08, 2015 07:41 PM



MSU demonstrates using UAS for a river survey in the Mississippi Delta in December 2014. Photo: AUVSI.



AUVSI President and CEO discusses unmanned systems with FAA Administrator Michael Huerta at AUVSI's Unmanned Systems 2015. Photo: Robb Cohen.

by **AUVSI News**

The U.S. Federal Aviation Administration has named a team led by Mississippi State University as its new Center of Excellence for Unmanned Aircraft Systems.

The new center will be run by MSU's Alliance for System Safety of UAS through Research Excellence, or ASSURE, which comprises top UAS research universities and over 100 government and industry partners. The COE will study technical issues needed for the successful introduction of UAS into the National Airspace System, including detect-and-avoid technology, low-altitude operations safety, control and communications, training and certification of UAS pilots, and compatibility with air traffic control operations. Other research areas may be added over time.

"This world-class, public-private partnership will help us focus on the challenges and opportunities of this cutting-edge technology," said U.S. Transportation Secretary Anthony Foxx. "We expect this team will help us to educate and train a cadre of unmanned aircraft professionals well into the future."

AUVSI President and CEO Brian Wynne congratulated the team and said AUVSI looks forward to working with ASSURE and the FAA to advance research and development on UAS.

"It's critical that we begin looking to the future now and laying the groundwork for more transformational uses of UAS technology, notably beyond-line-of-sight operations," Wynne said. "The Center of Excellence designation, the Pathfinder Program announced earlier this week and ongoing industry and government research efforts all point to a future where the possible will one day become reality."

The FAA announced at AUVSI's Unmanned Systems 2015 conference earlier this week that it has partnered with three companies to perform beyond-line-of-sight operations, which it called the Pathfinder Program.

The new Center of Excellence will coordinate with the six existing UAS test centers, but how that will be done hasn't yet been determined. When it issued the final solicitation for universities competing to house the center, the FAA said that process will be set up once the COE is selected and develops its own detailed research plans.

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"This has been a six-year effort for Mississippi State and three years for our partner universities," said ASSURE executive director James Poss, also a retired major general from the Air Force. "We picked our team because they know unmanned systems and they know the FAA. That will make it easier to turn UAS research into FAA rules quickly."

Congress approved \$5 million for the five-year agreement with the COE. The center's academic team members will match the federal grants dollar for dollar from nonfederal sources.

"This team has the capabilities and resources to quickly get up and running to help the FAA address the demands of this challenging technology over the next decade," said FAA Administrator Michael Huerta.

The FAA expects the COE will be able to begin research by September 2015 and be fully operational, with a "robust research agenda," by January 2016.

The center joins seven others set up by the FAA, which cover topics such as commercial space, general aviation, alternative jet fuels and the environment.

For more information about the members of ASSURE, visit the ASSURE website here.

Click here for more information on the MSU Center of Excellence and the university's plans.

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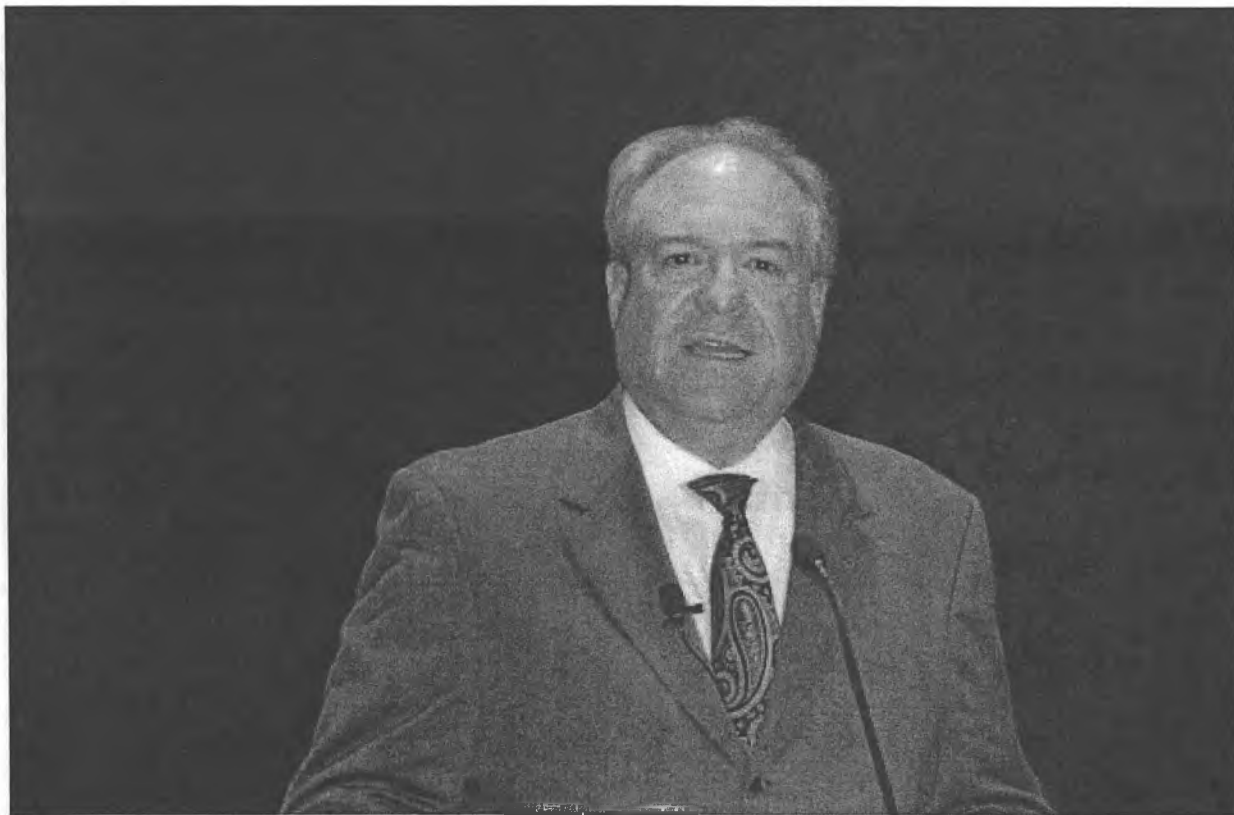
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## 7 Insights from the FAA's Former Leader



Jim Williams, who managed the FAA office to integrate drones into the U.S. airspace, retired last week. Before departing for a vacation of visiting ballparks with his family, Williams spoke at McKenna Long & Aldrige's unmanned aircraft systems symposium in Washington, D.C.

Now that he is outside the FAA Williams can speak more freely about the path and challenges to drones operating safely in American skies. Here are some points that stood out as he reflected on his time at the FAA, and looked to the future of unmanned flight:

### 1. He expects drone package delivery in five years

"That'll be fairly routine, be it in rural areas. It's going to be real tough to do it in a built-up major metropolitan area outside of Washington, D.C., because how do you deal with the helicopters that are flying sort of randomly," Williams said. "When they figure that out I think it'll happen. There's no other reason, no other barrier to doing that."

### 2. Amazon's drone program is a juggernaut, but seems out of touch with the challenges of flying safely in cities

"They're pushing the envelope in every realm. They want a fully automated system. They want it to be able to take random routes to deliver wherever they want to deliver. It's really a big challenge," Williams said. "If the small rule [for commercial drone flight] is walking then they're sprinting."

Williams stressed the challenges of autonomous drones flights in major cities, particularly working around helicopters and small planes.

"I think their understanding of the difficulties is probably on the low end," Williams said. "But they're working hard. They're motivated, they're well funded."

### 3. He thinks we may eventually see unmanned cargo jets

"In 20 years, who knows, large cargo aircraft could be flying and hauling cargo — especially over the oceans — those long, boring flights," Williams said. "There's already a couple of the air carrier type cargo haulers that want to look at reducing the crew required during a long-haul cargo flight to one."

### 4. He described his former job as enough work for three people.

Williams said he was pleased to have convinced the FAA's program management agency to take on one aspect of his former duties, managing radio spectrum and allocating it fairly for unmanned commercial flights. Williams described this as a big problem for the agency to solve.

"It really is a full-time job," Williams said. "I was the only one who was really working that for about three years. And it really is a big barrier for the industry."

The rest of Williams's former duties are being divided between two new positions, which will split up internal and external work.

"The job was worthy of three people doing it," Williams said. "Not that I could do three people's work."

#### 5. He would've liked to get the proposed rules for commercial drone flight done sooner

When moderator Mark Dombroff asked Williams about his greatest disappointment with respect to drones, he cited the time it took to release the proposed rules for drones weighing under 55 pounds. These missed deadlines were a point of frustration for many in the drone community.

"When I took over I thought we'd get it out in a few months," Williams said. "But the bottom line was what I inherited wasn't very good. And so it needed a lot of work. And what you see is I think a much better product than what I inherited when I took over."

#### 6. Having the White House's attention isn't fun

"Everybody who thinks having the White House interested in your program is a great thing, no," Williams said. "Just a lot of scrutiny from them and everything is questioned about how it is going to fit in the bigger scheme of things. It's very much a blessing and a curse to have that level of attention."

After all of the delays, the FAA surprised observers by releasing its proposed drone rules on the Sunday morning of President's Day weekend. On that same Sunday, the White House issued a presidential directive ordering federal agencies to publicly disclose where they fly drones in the United States and what they do with the data from aerial surveillance.

#### 7. He's not a big fan of the proposed drone legislation from Sen. Cory Booker (D-N.J.) and John Hoeven (R-N.D.)

"Their heart was in the right place. They really were trying to do what they could to help the FAA," Williams said. "They missed the mark. The good news is they did come to the FAA and ask what we thought of it. And we told them. So hopefully the bill — if there is one passed — it'll be different than the one that was proposed."

*Photo: Bill Carey*

Source: Washington Post

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### FAA Launches B4UFLY App for UAV Operators

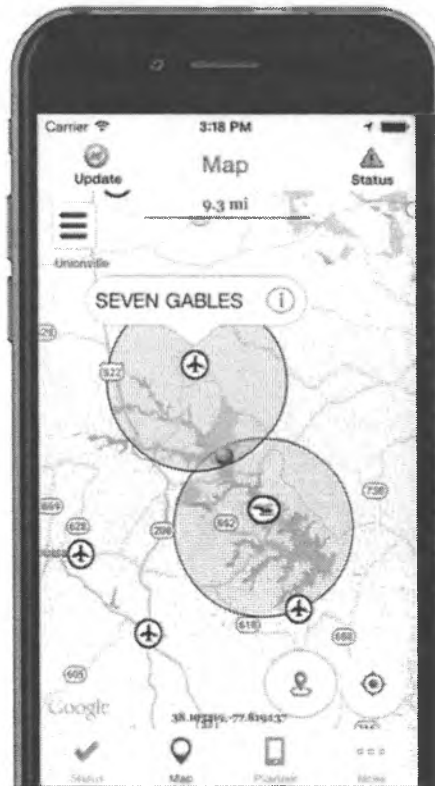


The FAA has announced a smartphone application that aims to make it clear to Unmanned Aerial Vehicle (UAV) enthusiasts where it's legal to fly in the National Airspace System (NAS). The B4UFLY app, announced at the 2015 Association for Unmanned Vehicle Systems International (AUSSI) Conference in Atlanta, Ga. will allow hobbyists to determine whether there are any restrictions or requirements in effect at the location where they want to fly a UAV.

"It's a simple, easy-to-use app that answers a very basic safety question: is it safe and legal to fly my unmanned aircraft at a particular location?" FAA Administrator Michael Huerta explained to journalists during a press conference for the roll out of the new app. "Longtime members of the unmanned aircraft community may already know the answer to that question. Someone who got their first unmanned aircraft as a gift under the Christmas tree probably doesn't. That's a knowledge gap we need to fill."

That's a knowledge gap we need to fill. The United States has the most complicated airspace in the world. We need to make sure hobbyists and modelers know where it's okay to fly and where it isn't okay to fly - because there can be very real consequences if you don't. The incident on the White House lawn earlier this year is a good example.

We plan to make B4UFLY available to approximately 1,000 beta testers using Apple devices this summer, and we'll be working on an Android app in the future.



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**Atlanta, GA**

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The B4UFLY app is the latest action the FAA has taken to encourage the responsible use of unmanned aircraft. In December, we partnered with the Academy of Model Aeronautics, the Small UAV Coalition, and our friends here at AUVSI to launch the "Know Before You Fly" campaign. This was an important first step in educating operators about the rules of the sky.



The B4UFLY app takes a lot of that information and puts it right in your pocket – available to use anytime, anywhere. It only takes a few taps to find out if you're cleared to fly. While other resources like this exist, we believe B4UFLY will have the most user-friendly interface with the most up-to-date information.

The agency is planning to release the app to an estimated 1,000 beta testers during the summer. Limited beta tests are expected to run for several months, after which the FAA will make the app available to the general public on Apple iOS devices, with an Android version to follow.

Key features of the B4UFLY app include:

- A clear "status" indicator that immediately informs operators about their current or planned location.
- Information on the parameters that drive the status indicator.
- A "Planner Mode" for future flights in different locations. Informative, interactive maps with filtering options.
- Contact information for nearby airports.
- Links to other FAA UAS resources and regulatory information.



click to enlarge

The app features interactive maps and a clear status indicator that immediately informs the operator about the area surrounding their current or planned flying location. For example, it would indicate that flying in Special Flight Rules Area around Washington, D.C. is prohibited and other similar restricted flight areas. It also provides information on such parameters that may restrict airspace, contact information for nearby airports and links to other FAA UAS resources and regulatory information to keep operators updated to the fullest extent.

Source: FAA



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# NOTICE

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

N 8900.292

National Policy

Effective Date:  
4/8/15

Cancellation Date:  
4/8/16

**SUBJ:** Aviation-Related Videos or Other Electronic Media on the Internet

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- 1. Purpose of This Notice.** This notice provides guidance to aviation safety inspectors (ASI) regarding actions to be taken when notified of videos or other electronic media posted to the Internet depicting the operation of aircraft in the National Airspace System (NAS) that may be contrary to Title 14 of the Code of Federal Regulations (14 CFR) or statute.
- 2. Audience.** The primary audience for this notice is all Flight Standards District Office (FSDO) ASIs, regional Flight Standards divisions (RFSD), and International Field Offices (IFO)/International Field Units (IFU). The secondary audience includes Flight Standards (AFS) branches and divisions in the regions and in headquarters (HQ).
- 3. Where You Can Find This Notice.** You can find this notice on the MyFAA employee Web site at [https://employees.faa.gov/tools\\_resources/orders\\_notices](https://employees.faa.gov/tools_resources/orders_notices). Inspectors can access this notice through the Flight Standards Information Management System (FSIMS) at <http://fsims.av.faa.gov>. Operators can find this notice on the Federal Aviation Administration's (FAA) Web site at <http://fsims.faa.gov>. This notice is available to the public at [http://www.faa.gov/regulations\\_policies/orders\\_notices](http://www.faa.gov/regulations_policies/orders_notices).
- 4. Background.** There are an escalating number of videos or other electronic media posted to the Internet which depict aviation-related activities. Some of these posted videos may depict operations that are contrary to 14 CFR, statute, or safe operating practices. ASIs and other AFS personnel are expected to use critical thinking when addressing electronic media showing such activity. The FAA will use education to encourage voluntary compliance with applicable statutory and regulatory requirements when appropriate. However, the FAA will use administrative action or legal enforcement action to gain compliance if such action is necessary to maintain safety within the NAS.
- 5. Unmanned Aircraft Systems (UAS).** UAS videos, in particular, are increasingly appearing on the Internet. UAS videos may depict aircraft being flown in a variety of classes of airspace and at varying altitudes. Inspectors are to follow the protocol below when receiving notification of videos with potentially noncompliant UAS operations posted to the Internet. This notice provides an outline and protocol for inspectors when initiating educational outreach. When responding to a notification that requires contact with a UAS operator, follow the guidance contained in FAA Notice N 8900.268, Education, Compliance, and Enforcement of Unauthorized Unmanned Aircraft Systems Operators. If counseling in the form of an informational letter is

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Distribution: Electronic Only

Initiated By: AFS-800

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warranted, send the UAS Informational Letter Template for Inspectors (see Appendix A). The letter must not be altered other than to fill in the appropriate address of the operator and FSDO along with your contact information and signature. If the educational outreach is ineffective in gaining compliance, the UAS operator is noncompliant or uncooperative, or the UAS operation resulted in a medium to high potential or actual endangerment to the NAS, the inspector is to continue their investigation as outlined in N 8900.268.

**6. Manned Aircraft.** When receiving notification of videos or other electronic media with potentially noncompliant manned aircraft operations posted to the Internet, inspectors are to follow guidance provided in FAA Order 8900.1, Flight Standards Information Management System (FSIMS), Volume 14; and the current edition of FAA Order 2150.3, FAA Compliance and Enforcement Program.

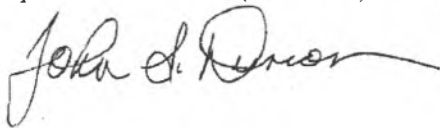
**7. Evidence.** In all cases, the FAA must have acceptable evidence in support of all alleged facts in order to take legal enforcement action. Inspectors are reminded that:

- Electronic media posted on the Internet is only one form of evidence which may be used to support an enforcement action and it must be authenticated;
- Electronic media posted on the Internet is ordinarily not sufficient evidence alone to determine that an operation is not in compliance with 14 CFR; however, electronic media may serve as evidence of possible violations and may be retained for future enforcement action; and
- Inspectors have no authority to direct or suggest that electronic media posted on the Internet must be removed.

**Note:** Electronic media posted on a video Web site does not automatically constitute a commercial operation or commercial purpose, or other non-hobby or non-recreational use.

**8. Action.** Until further notice, the above procedures are in effect for gathering videos or other electronic media on the Internet as evidence and interpreting the status of a Web site that contains electronic media relevant to an investigation.

**9. Disposition.** We will incorporate the information in this notice into Order 8900.1 before this notice expires. Direct any questions concerning this notice to Ronald Forsyth, Commercial Operations Branch (AFS-820) at [ronald.a.forsyth@faa.gov](mailto:ronald.a.forsyth@faa.gov), (717) 774-8271 ext. 253.



John S. Duncan  
Director, Flight Standards Service

**Appendix A. UAS Informational Letter Template for Inspectors**

U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

Flight Standards District Office  
FSDO Address

Date

Name  
Address

Dear :

The purpose of this letter is to provide you with information about the laws and regulations regarding Unmanned Aircraft System (UAS) operations conducted within the National Airspace System (NAS). The NAS is “the common network of U.S. airspace; air navigation facilities, equipment and services, airports or landing areas . . . . Included are system components shared jointly with the military.”<sup>1</sup> The Federal Aviation Administration’s (FAA) safety mandate under Title 49 of the United States Code (49 U.S.C.) § 40103 requires it to regulate aircraft operations conducted in the NAS, which include UAS operations, to protect persons and property on the ground and to prevent collisions between aircraft and other aircraft or objects.

**A UAS is an Aircraft**

A UAS is an “aircraft” as defined in the FAA’s authorizing statutes and is therefore subject to regulation by the FAA. Title 49 U.S.C. § 40102(a)(6) defines an “aircraft” as “any contrivance invented, used, or designed to navigate, or fly in, the air.” The FAA’s regulations (Title 14 of the Code of Federal Regulations (14 CFR) part 1, § 1.1) similarly define an “aircraft” as “a device that is used or intended to be used for flight in the air.” Because an unmanned aircraft is a contrivance/device that is invented, used, and designed to fly in the air, it meets the definition of “aircraft.” The FAA has promulgated regulations that apply to the operation of all aircraft, whether manned or unmanned, and irrespective of the altitude at which the aircraft is operating. For example, 14 CFR part 91, § 91.13 prohibits any person from operating an aircraft in a careless or reckless manner so as to endanger the life or property of another.

An important distinction for UAS operators to be aware of is whether the UAS is being operated for hobby or recreational purposes or for some other purpose. This distinction is important because there are specific requirements in the FAA Modernization and Reform Act of 2012,

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<sup>1</sup> Refer to the FAA Pilot/Controller Glossary (Apr. 3, 2014), available at [http://www.faa.gov/air\\_traffic/publications/media/pcg\\_4-03-14.pdf](http://www.faa.gov/air_traffic/publications/media/pcg_4-03-14.pdf).

Public Law (PL) 112-95 (the Act), that pertain to “Model Aircraft” operations, which are conducted solely for hobby or recreational purposes.

### Model Aircraft Operations

Section 336(c) of the law defines “Model Aircraft” as “. . . an unmanned aircraft that is—

- (1) capable of sustained flight in the atmosphere;
- (2) flown within visual line of sight of the person operating the aircraft; and
- (3) flown for hobby or recreational purposes.”

Each element of this definition must be met for a UAS to be considered a Model Aircraft under the Act. Under Section 336(a) of the Act, the FAA is restricted from conducting further rulemaking specific to Model Aircraft as defined in section 336(c) so long as the Model Aircraft operations are conducted in accordance with the requirement of section 336(a). Section 336(a) requires that—

- “(1) the aircraft is flown strictly for hobby or recreational use;
- (2) the aircraft is operated in accordance with a community-based set of safety guidelines and within the programming of a nationwide community-based organization;
- (3) the aircraft is limited to not more than 55 pounds unless otherwise certified through a design, construction, inspection, flight test, and operational safety program administered by a community-based organization;
- (4) the aircraft is operated in a manner that does not interfere with and gives way to any manned aircraft; and
- (5) when flown within 5 miles of an airport, the operator of the aircraft provides the airport operator and the airport air traffic control tower (when an air traffic facility is located at the airport) with prior notice of the operation (model aircraft operators flying from a permanent location within 5 miles of an airport should establish a mutually-agreed upon operating procedure with the airport operator and the airport air traffic control tower (when an air traffic facility is located at the airport)).”

Section 336(b) of the law, however, makes clear that the FAA has the authority under its existing regulations to pursue legal enforcement action against persons operating Model Aircraft in accordance with section 336(a) and 336(c) when the operations endanger the safety of the NAS. Nothing in section 336 otherwise alters or restricts the FAA’s statutory authority to pursue enforcement action against any UAS operator, even those whose operations are conducted in accordance with sections 336(a) and (c) that endanger the safety of the NAS. For example, a model aircraft operation conducted in accordance with section 336(a) and (c) may be subject to an enforcement action for violation of § 91.13 if the operation is conducted in a careless or reckless manner so as to endanger the life or property of another.

### UAS Operations that are not Model Aircraft Operations

Operations of UASs that are not Model Aircraft operations as defined in section 336(c) of the law and conducted in accordance with section 336(a) of the law, may only be operated with specific authorization from the FAA. The FAA currently authorizes UAS operations that are not for hobby or recreational purposes through one of two avenues: 1) the issuance of Certificates of

Waiver or Authorization (COA); and 2) the issuance of special airworthiness certificates. The FAA also has a third avenue with which to potentially authorize UAS operations through its exemption process when it determines that such operations are in the public interest.

**1. COA.** In accordance with § 91.903, the FAA grants COAs to applicants waiving compliance with certain regulatory requirements listed in § 91.905. The applicants must be able to show that they are able to safely conduct operations in the NAS. The COA contains terms with which the applicant must comply in order to conduct operations. The FAA generally has restricted the issuance of these certificates to government entities that operate UASs as it implements the provisions in its Integration of Civil Unmanned Aircraft Systems (UAS) in the National Airspace System (NAS) Roadmap. The entire Roadmap is available on our Web site at: [http://www.faa.gov/uas/media/UAS\\_Roadmap\\_2013.pdf](http://www.faa.gov/uas/media/UAS_Roadmap_2013.pdf). The FAA also issues COAs on an emergency basis when: 1) a situation exists in which there is distress or urgency and there is an extreme possibility of a loss of life; 2) the proponent has determined that manned flight operations cannot be conducted efficiently; and 3) the proposed UAS is operating under a current approved COA for a different purpose or location. The FAA is also using the COA process to expand the use of civil UASs in the arctic region as required under section 332 of the law.

**2. Airworthiness Certification.** For civil operators, you can apply for a special airworthiness certificate under 14 CFR part 21 (refer to the current edition of FAA Order 8130.34, Airworthiness Certification of Unmanned Aircraft Systems and Optionally Piloted Aircraft). The full civil type certification process allows for production and commercial operation of UAS and is a lengthy process typically undertaken by aircraft manufacturers.

**3. Issuance of Exemptions.** In accordance with 14 CFR part 11, §§ 11.15 and 11.61–11.103 and the FAA's authority in 49 U.S.C. § 44701(f), the FAA may grant exemptions from regulatory requirements. The exemption process allows for the submission of a petition to the FAA outlining why the granting of an exemption would be in the public interest, the need for the exemption, and the reasons why granting the petition would not adversely affect safety or would provide a level of safety equal to the rules from which the exemption is sought. The FAA has indicated its willingness to review petitions for exemption by civil UAS operators that want to operate for other than hobby or recreational purposes. Under section 333 of the Act, operators in appropriate circumstances can be exempted from airworthiness certification and other related regulatory provisions.

Finally, UAS operators must understand that all UAS operations that are not operated as Model Aircraft under section 336 of the Act are subject to current and future FAA regulation. At a minimum, any such flights are currently required under the FAA's regulations to be operated with a certificated aircraft, with a certificated pilot, and with specific FAA authorization.

**For All UAS  
Operators**

More information regarding UAS operations is available at the FAA UAS Integration Office's (AFS-80) Web site: <http://www.faa.gov/uas/>

4/8/15

N 8900.292  
Appendix A

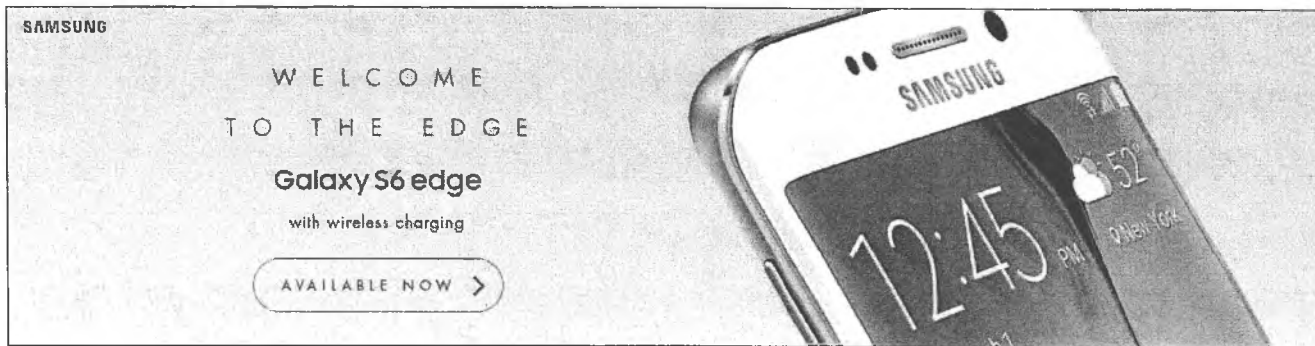
If you require additional information please contact me at [contact information].

In conclusion, we hope the information provided to you in this letter will assist you in conducting safe UAS operations in compliance with the FAA's regulations.

Sincerely,

Aviation Safety Inspector—Operations

Forbes



**Gregory S. McNeal** (<http://www.forbes.com/sites/gregorymcneal/>) Contributor  
*I'm an expert in law & policy focused on security, technology & crime*  
 Opinions expressed by Forbes Contributors are their own.

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# FAA Admits That They Shouldn't Be Ordering People To Delete Drone Videos

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For more than a year, FAA officials have been engaged in a campaign of subtle threats and intimidation tactics that have persuaded many businesses to not use drone videos. This week, officials in Washington D.C. have finally weighed in on the legality of these tactics and in a published [policy document](#)

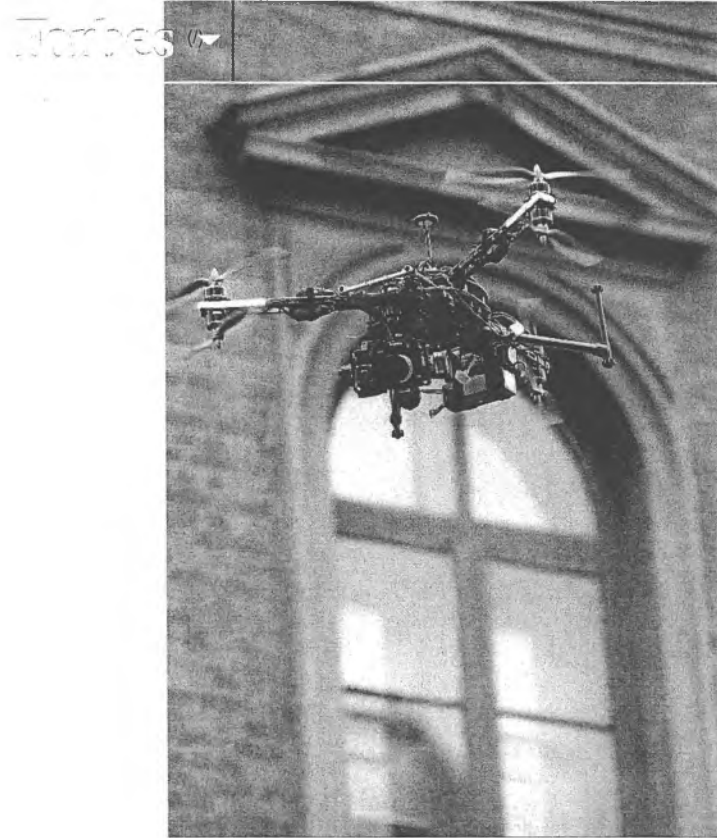
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Forbes



([https://www.faa.gov/documentLibrary/media/Notice/N\\_8900.292.pdf](https://www.faa.gov/documentLibrary/media/Notice/N_8900.292.pdf)) have made clear that the intimidation tactics and take down orders must cease.

Previously, officials in various jurisdictions and across a range of use cases had been telling people that commercial use of drones was prohibited by FAA regulations, therefore, the use of drone videos was similarly prohibited by the FAA. On its face, the guidance amounted to intimidation tactics (undertaken mostly by FAA safety inspectors) and it was a clear violation of the First Amendment. Drone videos are not contraband, and the FAA has no authority to police what is posted to the internet, they only have the authority to enforce aviation regulations.



*The FAA released updated guidance, informing their safety inspectors that they cannot order individuals to delete drone videos from the internet. (Photo by Christopher Furlong/Getty Images)*

Nevertheless, the unsanctioned enforcement campaign succeeded in intimidating Coldwell Banker and other realtors (<http://www.forbes.com/sites/gregorymcneal/2014/07/11/faa-intimidates-coldwell-banker-and-other-realtors-into-shunning-drone-photography/>) to not use drone videos. The campaign raised questions about whether watching YouTube was a good use of safety inspector's time (<https://www.facebook.com/GregorySMcNeal/posts/367542416769890>) and as I noted back in January (<https://www.facebook.com/GregorySMcNeal/posts/365779583612840>), telling a publisher of a video to delete the video is akin to telling a bookstore or Amazon to stop selling a book with drone aerial images — it would be a clear First Amendment violation (see my comments (<https://www.facebook.com/GregorySMcNeal/posts/365779583612840>) to the FAA at CES on this point).

The new policy guidance ([https://www.faa.gov/documentLibrary/media/Notice/N\\_8900.292.pdf](https://www.faa.gov/documentLibrary/media/Notice/N_8900.292.pdf)) from the FAA, is directed primarily at Flight Standards District Office (FSDO) Aviation Safety Instructors (ASIs), regional Flight Standards divisions (RFSD), and International Field Offices (IFO)/International Field Units (IFU). The secondary audience includes Flight Standards (AFS) branches and divisions in the regions and in headquarters (HQ). The letter specifically states (emphasis added):

**“ Inspectors have no authority to direct or suggest that electronic media posted on the Internet must be removed.** Note: Electronic media posted on a video Web site does not automatically constitute a commercial operation or commercial purpose, or other non-hobby or non-recreational use.

Forbes

Importantly, the FAA is telling their inspectors that they can't modify a form letter that is included in the Appendix to the policy guidance, thus minimizing the possibility of intentional or inadvertent threats being communicated by FAA officials.

What this means is that the FAA is likely to only pursue the operators of unmanned aircraft who fly for commercial purposes without authorization.

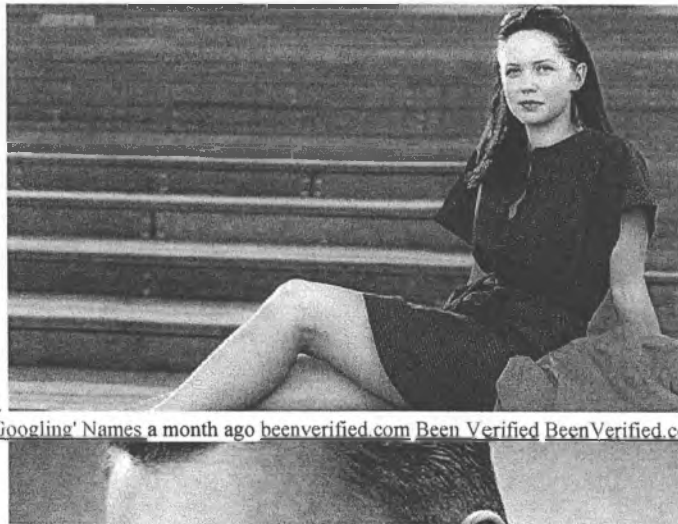
This is good news for individuals like realtors, publishers, journalists, and others who might use commercially derived imagery. It was never lawful for the FAA to go after the end users who were not part of the non-approved operation, it's nice to see them acknowledging that fact.

Gregory S. McNeal is a professor at Pepperdine University. **SIGN UP** (<http://asmcneal.us10.list-manage.com/subscribe?u=2097228f03d779af3abe4d6cb&id=82cab195b7>) for his weekly email update [here](http://eepurl.com/bi_hqn) ([http://eepurl.com/bi\\_hqn](http://eepurl.com/bi_hqn)). You can also follow him on [Twitter](http://twitter.com/gregorumcneal) (<http://twitter.com/gregorumcneal>) or [Facebook](https://www.facebook.com/GregoruSMcNeal) (<https://www.facebook.com/GregoruSMcNeal>).



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## JUSTICE NEWS

### Department of Justice

Office of Public Affairs

FOR IMMEDIATE RELEASE

Friday, May 22, 2015

### **Department of Justice Establishes Policy Guidance on Domestic Use of Unmanned Aircraft Systems**

The Department of Justice issued agency-wide policy guidance today on the use of Unmanned Aircraft Systems (UAS) that sets standards of use and management controls of UAS by the department and its components.

UAS are used at times by law enforcement agencies as cost-effective, efficient and potentially life-saving tools to support public safety efforts. The policy highlights protections of privacy, civil rights and liberties and makes clear that UAS use must be consistent with the protections afforded by the U.S. Constitution. Justice Department components are barred from using UAS solely for the purpose of monitoring activities protected by the First Amendment, and components can only operate UAS on properly authorized investigations and activities. The collection, retention and dissemination of information collected by UAS is also subject to Privacy Act protections.

To ensure accountability, the department will also require that personnel operating UAS are appropriately trained and supervised, including but not limited to a mandatory training on the department's policies. Annual privacy reviews will be conducted to ensure compliance with the department policy, existing laws and regulations and to identify potential privacy risks.

The guidance issued today is a result of various discussions and research – and meetings will continue to be held at least twice a year to ensure that the department strikes the appropriate balance between its law enforcement and national security missions and respect for civil rights and civil liberties.

#### Justice Department UAS Policy

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15-665

Office of Public Affairs

*Updated May 22, 2015*

53

## Department of Justice Policy Guidance<sup>1</sup>

### Domestic Use of Unmanned Aircraft Systems (UAS)

#### *INTRODUCTION*

The law enforcement agencies of the Department of Justice (“the Department”) work diligently to protect the American people from national security threats, enforce our nation’s laws, and ensure public safety. In doing so, these agencies use a wide variety of investigative methods. Some of these methods have been in use for decades; others are relatively new and rely on technological innovation. In all cases, investigations and other activities must be conducted consistent with the Constitution and the laws of the United States—and with our commitment to protecting privacy and civil liberties.

In recent years, Unmanned Aircraft Systems (UAS)<sup>2</sup> have emerged as a viable law enforcement tool. UAS have been used to support kidnapping investigations, search and rescue operations, drug interdictions, and fugitive investigations. While they are, in many ways, similar to the manned aircraft that have been in use for many years, they have the potential to provide law enforcement with additional flexibility and yield life-saving benefits. UAS also have the potential to be cost-effective in a time of shrinking government resources. For these reasons, UAS are likely to come into greater use.

As technology advances and enhances our ability to use these new tools, it is important to continue to assess how we use them. A Departmental working group<sup>3</sup> has studied the Department’s use of UAS over the last several years and has considered how the technology is likely to evolve in the near future. This policy guidance flows from the working group’s discussions and sets forth principles that will apply Department-wide. This policy also applies to

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<sup>1</sup> This policy guidance is intended only to improve the internal management of the Department of Justice. It is not intended to and does not create any right, benefit, trust, or responsibility, whether substantive or procedural, enforceable at law or equity by a party against the United States, its departments, agencies, instrumentalities, entities, officers, employees, or agents, or any person, nor does it create any right of review in an administrative, judicial or any other proceeding.

<sup>2</sup> “Unmanned Aircraft System” means an unmanned aircraft (an aircraft that is operated without the possibility of direct human intervention from within or on the aircraft) and associated elements (including communication links and components that control the unmanned aircraft) that are required for the pilot or system operator in command to operate safely and efficiently in the National Airspace System. For purposes of this policy, reference to “UAS” includes all onboard sensor equipment.

<sup>3</sup> The Department’s working group was led by the Office of Legal Policy and included the Department’s Chief Privacy and Civil Liberties Officer and representatives of the Bureau of Alcohol, Tobacco, Firearms and Explosives, the Criminal Division, the Office of Community Oriented Policing, the Civil Rights Division, the Office of the Deputy Attorney General, the Drug Enforcement Administration, the Federal Bureau of Investigation, the National Security Division, the Executive Office for United States Attorneys, the Office of Justice Programs, the Office of Privacy and Civil Liberties, the United States Marshals Service, and the Office of the Chief Information Officer.

all instances in which Department components use UAS to support Federal agencies and/or State and Local law enforcement agencies.

This guidance will help ensure that the Department continues to carry out its law enforcement and national security missions while respecting individuals' privacy, civil rights, and civil liberties. It will also help ensure an appropriate level of accountability and transparency. This policy guidance does not replace, and is complementary to, the Federal Aviation Administration rules and regulations that control each and every UAS deployment and help ensure the safe operation of all aircraft, including UAS. This policy guidance is also consistent with the Presidential Memorandum, "Promoting Economic Competitiveness While Safeguarding Privacy, Civil Rights, and Civil Liberties in Domestic Use of Unmanned Aircraft Systems," issued by President Barack Obama on February 15, 2015.

### ***RESPECT FOR CIVIL RIGHTS AND CIVIL LIBERTIES***

Respect for civil rights and civil liberties is a core tenet of our democracy. In executing the Department's law enforcement and national security missions, personnel must rigorously support and defend the Constitution and continue to uphold the laws, regulations and policies that govern our activities and operations.

As with all investigative methods, UAS must be operated consistent with the U.S. Constitution. The Fourth Amendment protects individuals from unreasonable searches and seizures and generally requires law enforcement to seek a warrant in circumstances in which a person has a reasonable expectation of privacy. Moreover, Department personnel may never use UAS solely for the purpose of monitoring activities protected by the First Amendment or the lawful exercise of other rights secured by the Constitution and laws of the United States. Department personnel may never use UAS to engage in discrimination that runs counter to the Department's policies on race, ethnicity, gender, national origin, religion, sexual orientation, or gender identity. Department personnel must also be trained to understand and abide by all relevant federal legal standards applicable to the use of UAS, and to seek advice from legal counsel as necessary.

In addition, UAS may only be used in connection with properly authorized investigations and activities. Statutory authorities, the Attorney General's Guidelines, and other relevant agency policies and guidance define the scope of authorized investigations and activities and require regular supervisory review and approval. UAS must continue to be used within the context of these existing safeguards.

Further, even within the context of properly authorized activities, personnel often must choose among different investigative methods that are operationally sound, reasonable, and effective, but may be more or less intrusive relative to individuals' privacy and civil liberties. Prior to using UAS, Department personnel must assess the relative intrusiveness of the

proposed use of UAS, and balance it against the particular investigative need.<sup>4</sup> This is both a logical process and an exercise in judgment, but the overall principle remains: in deciding whether to use UAS, Department personnel must consider and, if reasonable based on the facts and circumstances of the investigation, use the least intrusive means to accomplish an operational need.

### ***PROTECTION OF PRIVACY***

The Department operates under a set of rules, policies, and laws that control the collection, retention, dissemination, and disposition of records that contain personally identifiable information. For example, the Privacy Act contains provisions on unauthorized use and disclosure of information about individuals, and imposes civil penalties on agencies and criminal penalties on agency personnel for violations of applicable requirements. As with personally identifiable information collected in the course of any investigation, these authorities apply to information collected via UAS. Consistent with applicable existing laws and requirements, the Department's use of UAS shall include the practices identified below.

As noted above, the Department shall only collect, use and disseminate information obtained from UAS for an authorized purpose. The Department shall not retain information collected using UAS that may contain personally identifiable information for more than 180 days unless retention of the information is determined to be necessary for an authorized purpose or is maintained in a system of records covered by the Privacy Act.

Data collected by UAS that is retained must be safeguarded in accordance with applicable Federal laws, Executive Orders, directives, policies, regulations, standards, and guidance. These authorities ensure that Department personnel with access to such data follow practices that are consistent with the protection of privacy and civil liberties. Use of all Department information systems may be monitored, recorded, and subject to audit, and unauthorized collection, retention, or dissemination of data is prohibited. Further, the Department has procedures in place to review, investigate, and address privacy and civil liberties complaints.

Senior Component Officials for Privacy in agencies using UAS must conduct annual privacy reviews of their agency's use of UAS to ensure compliance with existing laws, regulations, and Department policy, and to identify potential privacy risks. They must also, where appropriate, make recommendations to ensure that UAS will continue to be used in a manner consistent with the U.S. Constitution and all applicable laws, regulations, and policies, including those protecting privacy and civil liberties.

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<sup>4</sup> In assessing the intrusiveness of UAS and the investigative need, personnel must consider factors such as whether the subject enjoys a reasonable expectation of privacy relative to the proposed use of UAS, the scope of the information sought, the scope of the proposed use of UAS, the risk of disclosure to the subject, the seriousness of the crime or national security threat, the strength and significance of the information to be obtained, the efficiency of the method and alternative means available, the amount of information already known about the subject, and the operational security needs of the investigation.

## ***ACCOUNTABILITY***

The Department promotes accountability by requiring its personnel to accept responsibility for the actions they undertake—and to evaluate the potential consequences of their decisions. The Department imposes codes of conduct to guide employees in the use of all investigative methods, including UAS. As with the use of any technology, there must continue to be mechanisms to hold the Department and its employees accountable.

Part of accountability is ensuring that Department personnel are appropriately trained and supervised. Department personnel whose responsibility it is to manage, supervise, maintain, fly, and/or otherwise use UAS must receive training on this policy and the underlying policies incorporated herein.

Moreover, approval authority for the use of UAS will be set at an appropriate and consistent level across the Department. At a minimum, each time UAS are deployed, approval must be granted (1) at the Assistant Special Agent in Charge-or-equivalent level at the relevant field office, and (2) by an executive level supervisor within the agency's aviation support unit or a designated executive level supervisor at the agency's headquarters. Additionally, since the Department may only operationally deploy UAS in connection with authorized investigations or activities, supervisors must ensure that the underlying investigations themselves have been authorized consistent with applicable guidelines and other Department policies.

Finally, federal records must be captured, managed, and retained in a manner consistent with the Federal Records Act and all other applicable authorities. As with federal records collected by other investigative tools, components are obligated to retain UAS-collected data in accordance with applicable records retention schedules.

## ***ONGOING POLICY MANAGEMENT***

As UAS technology evolves and improves, it is important that the Department continue to have adequate information about its use to ensure strategic alignment and proper evaluation of the Department's policy. To that end, this policy imposes certain new requirements.

Each component that uses UAS must designate a point of contact through which field offices will report the information outlined below to the component's headquarters and Department leadership on the use of UAS on an ongoing basis.

In addition, Department agencies that use UAS must report annually to the Deputy Attorney General on the use of UAS. The report should incorporate privacy reviews, as well as the number of UAS operational deployments (not including training or research and development flights) conducted during the reporting period and a brief description of types or categories of missions flown along with the number of each type of mission. Additionally, to the extent the agency sought assistance from, or provided assistance to, another federal, state, local, or tribal agency during the relevant time period, the number of these operational deployments and a brief

description of types or categories of missions flown along with the number of each type of mission should also be provided.

Components that have not previously disclosed any UAS operations as part of these annual reporting requirements, or that have discontinued UAS use for the duration of an annual reporting period, must notify the Deputy Attorney General prior to initiating or re-introducing UAS operations.

Department leadership will continue to engage in meaningful review of UAS as the technology advances. To facilitate this review, a standing committee comprised of a broad range of Department components will meet twice a year to evaluate any policy or regulatory changes that may be needed as a result of innovations or developments in UAS technology.

### ***TRANSPARENCY***

Rigorous adherence to the requirements set forth in this policy is not enough—to be successful in our law enforcement and national security missions, we must continue to facilitate relationships of trust with the communities we serve. Enhancing our transparency about agency operations, including how we operate UAS, creates an informed citizenry and greater confidence in the Department's decision-making.

Education of the public can enhance the Department's ability to fulfill its missions and serve the American people. As appropriate, while not revealing information that might compromise law enforcement or national security needs, the Department will update its website to reflect its current policy on UAS on an ongoing basis, and will provide a general summary of UAS operations conducted by the Department during the previous year, including a brief description of types or categories of missions flown and the number of times the Department provided assistance to other federal, state, local and tribal agencies or entities.

# Alaska's Citizen Guidelines for Drone Privacy

## Frequently Asked Questions

### When is flying my drone a breach of privacy?

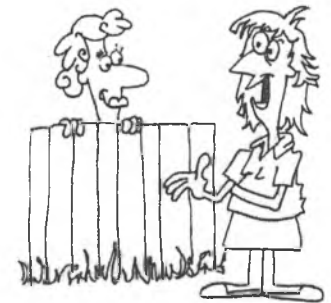
Alaskans are serious when it comes to personal privacy. How do you define privacy when it comes to drones? This question is being contemplated worldwide because with such new technology, new boundaries must be identified and defined. Safety is easier to tackle because a person can see the aircraft, operator and the effects of a flight. Privacy includes thoughts, sentiments and emotion.

Alaska's Constitution guarantees Alaskans the Right to Privacy. Article 1, Section 22 states, "The right of the people to privacy is recognized and shall not be infringed. The legislature shall implement this section." The legislature has a long-standing history of protecting Alaskans' privacy by instituting statutes regarding stalking, harassment, indecent viewing, sending explicit images, and misusing confidential information. The Legislative Task Force continues to review these protections particularly as they relate to unmanned aircraft systems.

For the purpose of Alaska's Drone Privacy Guidelines this document will imply that the definition of privacy includes the more specific individual interest of not permitting others to pry into personal affairs with which they have no legitimate concern, and exposing them against an individual's will. This concept has been recognized as "the right to be let alone."



**Private Citizen:** Please recognize that individuals experience different levels of sensitivity to interruption to privacy. Was the drone flight intentionally directed at you or just passing through? Do you believe the operator of the drone was flying in an inappropriate way? Be as specific as possible so that you can report the incident to local law enforcement.



**Drone Operator:** Might you be perceived as interrupting someone's freedom? Would you complete the same action in person as you are doing with your drone? Be courteous and respectful to others.

### I have a "reasonable expectation of privacy."



Yes, all Alaskans have a reasonable expectation of privacy to live without fear of unwarranted personal invasion. With equal importance, Alaskans enjoy the right to be left alone.

The definition for **Reasonable Expectation of Privacy** directly relates to law enforcement requirements to obtain a warrant before actions of search and seizure.

#### United States Constitution provides:

**First Amendment** guarantees the right to peaceably assemble including the liberty for any group to associate in private.

**Fourth Amendment** forbids the government from performing warrantless and unreasonable searches of any area in which a person maintains a reasonable expectation of privacy.

More sections of the Constitution support other areas of personal privacy.

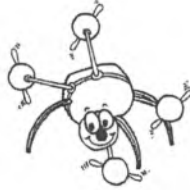
## Who owns the airspace above my house?

**Private Citizen:** The FAA governs the airspace from the ground up without limitations regarding private, public, government or other categories of property owners. While we enjoy the sense of privacy in our backyards for the most part, we do not control what happens in the air above our heads.

**Drone Operator:** Fly with respect. Don't fly your drone where people typically expect privacy. Don't use your drone to harass people. In public areas, don't invade people's personal space and their solitude.

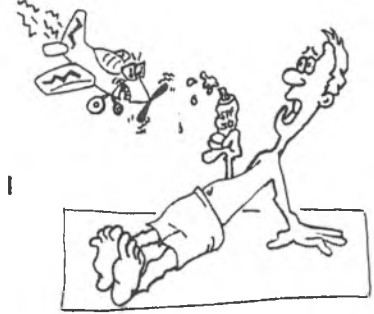
**I'm sunbathing on my deck and my son is flying his drone ...**

The FAA governs the airspace from the ground up. Help your son understand courteous flying so he doesn't disturb the neighbors or fly somewhere he shouldn't.



**Know Before You Fly** provides recreational flying rules for hobby pilots.  
[www.alaskadrones.org](http://www.alaskadrones.org)

**Someone is flying their drone and interrupting my restful afternoon at the beach. They won't stop even when I "shoo" it away...**



Try to identify from where the operator is controlling the drone. Provide as much information as possible to local law enforcement. This might be a situation of harassment. AS 11.16.120(a)(6)

## Can I shoot it down if it's flying over my house?

**Private Citizen:** While news articles have referenced drones as "skeet," this presumption is not appropriate in Alaska. As a practical matter, the value associated with a recreational drone could be \$25 to more than \$1,000. As commercial use is rapidly becoming allowed by the FAA, that small drone you see could carry specialized equipment and cost more than \$100,000. Both the hobby drone and the commercial drone may look very similar as you view it from the ground.

**Drone Operator:** Before you fly over private property, obtain the owner's permission and explain the purpose for your flight path. Generally, you should always fly away from populated areas.

**Looks like a moving target to me!**  
Remember that drone is someone else's personal property.

It's best to know;

"Why is a drone flying over your property?"

"Is it engaged in a violation of law?"

"Who and where is the drone operator?"



**If you shoot it down or damage it:**

(Legislative Legal)

Destruction of property

Discharging a weapon in a restricted area

Cannot take the law into your own hands

## What can I do if the drone's "buzzing" annoys me? Noise Ordinance

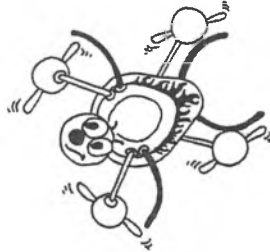
**Private Citizen:** Many annoying noises are allowable in both public and private areas. The decibel limit separating acceptable noise level is generally compared to the noise from a standard lawn mower or small engine.

**Drone Operator:** The drone's "buzzing" may not be the only problem. The proximity of the aircraft to another person may be the primary issue of concern. Be courteous to others and stay away unless invited.

**That buzzing sound is as irritating as a mosquito!**

(Legislative Legal)

A drone typically makes less noise than a standard lawn mower.



**I can't swat it away like a mosquito but I can call local authorities if it is a persistent pest.**

If the drone is flown during locally recognized waking hours, a drone is probably not in violation of a noise ordinance.

Because drones are relatively quiet, any noise you hear might instead be an alert to the bystander that the drone operator is flying too close to people and should be reported to the FAA for unsafe operations. This might be a situation of harassment. AS 11.16.120(a)(6)

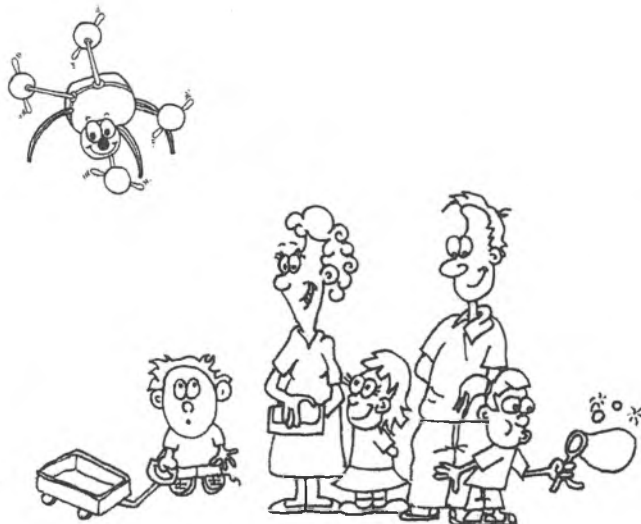
## What do I do if a drone is photographing through my window or hovering around my house?

**Private Citizen:** A drone can be treated in the same way as another camera. If an individual is flying a drone in such a way that you feel violated, the local law enforcement can investigate for breach of privacy laws.

**Drone Operator:** Enjoy your drone with your family and friends who welcome its presence.

### Welcomed Drone:

The family drone hovering and taking a portrait when grandma came to visit.



### Unwelcomed Drone:

You weren't dreaming. And the buzzing sound was not your alarm clock. The drone was spying through the bedroom window. Who knows where the



pilot is and how those pictures might be used.



The drone operator may be violating one or more of the following laws:

- AS 11.41.270 Stalking, nonconsensual conduct prohibits monitoring by technical means
- AS 11.61.120(a)(6) Harassment, publishing or distributing certain images
- AS 11.61.123 indecent viewing or photography

## The neighbor is chasing my dog with his drone!

**Private Citizen:** Know your animal control laws.

**Drone Operator:** Harassing an animal may come with criminal penalties.

Although the pet's owner may have introduced the dog to a flying toy, the noise and unfamiliarity of the neighbor's drone buzzing around could frighten Fido and could be considered harassment.

If the dog swats the drone out of the sky and chews it up, would it be considered damaging another's personal property or self defense by the dog?

Would this be governed by local ordinance or statute?



## How will the photos/video be stored or used?

**Private Citizen:** Many recreational drone operators have posted video and pictures on social media sites. This is a great way to share interesting photography.

**Drone Operator:** If you are photographing something with your drone, in a place where you would not be welcomed if you were taking pictures in person, you shouldn't be there.

**A drone is used to record your PIN over your shoulder while you are at the ATM.**



A drone records images through your office window of a newly signed contract.



A drone peers through the window while your child is napping.



There are many examples of inappropriate use of photography or capturing information using technological devices that Alaskans are concerned about. If you believe someone has obtained unapproved images, contact local law enforcement.

**Does the drone operator record the images for inappropriate purposes?**

Was personal identification stolen?

AS 45 Personal Information Protection Act

Are images being posted in an inappropriate way?

AS 11.61.116 Sending an explicit image of a minor

AS 11.61.120(a)(6) Harassment: publishing or distributing certain images

AS 11.61.123 Indecent viewing or photography

Are the images being used for personal gain?

AS 11.76.113 and AS 11.76.115 Misconduct involving confidential information in the first and second degree



## Can I use a drone for my business?

**Private Citizen:** I see lots of images on commercial web sites and social media where drones are used for business purposes. Can I use mine for business?

**Drone Operator:** Be aware that commercial use of unmanned aircraft systems has not been generally approved by the FAA. The time will come when all safety concerns have been well vetted and business use will become more commonplace. But remember, at this time, if you make money by using your drone, obtain authorization from the FAA.

Today, the FAA prohibits commercial use of unmanned aircraft systems unless the business has been granted a waiver to use the aircraft for specific purposes in the business.



Businesses are beginning to receive authorization to use unmanned aircraft systems for commercial use. Thus far, the most common authorizations have been awarded for specific movie production and specific agriculture tasks.

Recreational aircraft continues to advance technologically and many people are waiting for the opportunity to use drones as part of business.

## I understand the safety concerns for not flying a drone in traffic but what about privacy?

**Private Citizen:** Drones flying over moving traffic is dangerous but I also don't want GPS tracking and photographing me while driving.

**Drone Operator:** Flying over roads can cause distraction and potential automobile accidents on a road system. Electronic parenting is not yet allowed; you cannot follow your teenage driver with a drone without consent.



A drone flying into traffic could distract drivers and create unsafe driving conditions; physical contact with an automobile could cause damage, and the distraction could distract a driver thus creating unsafe driving conditions.

It is unlawful to use a GPS device to surveille an automobile without the driver's consent. AS ...

## What privacy concerns can there be when you're in a crowd?

**Private Citizen:** Typically if you're in a crowd, privacy is limited. Although the safety concerns are paramount when a drone is flying above a crowd, the photography could identify something that a citizen would not want shared; like your secret fishing hole.

**Drone Operator:** Never fly above a crowd. As a drone operator, you know how easy the slightest wind change can cause your aircraft to change direction quickly or drop out of the sky. Although most recreational aircraft are very light weight, when it drops with propellers spinning, injury could occur.

**Even a happy drone flying above a crowd can create quite a stir.**

**Safety:** If the drone were to fall out of the sky it could injure a bystander. The drone could also inhibit the safety of the crowd by interfering with the activity, distracting people rendering them unaware of happenings nearby, and it could have a run-in with a pesky seagull.

**Privacy:** During the popular Kenai River fishing season, this drone inadvertently photographed Clyde's map to grandpa's secret fishing hole. Because the map was visible in a public area, the photo of the map can be shared with others. Clyde's secret fishing hole is no longer secret.

Sometimes photographing a crowd could result in the capture of **inadvertent images**. If the drone image shows Captain Blowhole with a catch beyond his limit, that image could be provided to the authorities for legal review.



## What happens if a drone captures inadvertent images?

**Private Citizen:** What happens if a drone captures inadvertent images and those images are posted on social media or reveal something questionable? Photographing in a public area could result in capturing an image that may not have been planned. The image could be of a person not wanting to be photographed but would not be a breach of privacy since it occurred in a public place.

**Drone Operator:** Be aware of and be sensitive to what you are photographing. Are you capturing proprietary information; is the map to the secret fishing hole copyrighted? If you capture an image of someone appearing to break the law, you may want to surrender images to local authorities. Know your crowd. Some people may not want to be photographed and their sensitivity level to privacy could result in an angry situation.

# LEGAL SERVICES

DIVISION OF LEGAL AND RESEARCH SERVICES  
LEGISLATIVE AFFAIRS AGENCY  
STATE OF ALASKA

(907) 465-3867 or 465-2450  
FAX (907) 465-2029  
Mail Stop 3101

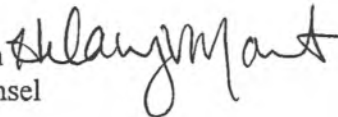
State Capitol  
Juneau, Alaska 99801-1182  
Deliveries to: 129 6th St., Rm. 329

## MEMORANDUM

June 8, 2015

**SUBJECT:** Unmanned Aircraft Systems (Work Order No. 29-LS0823)

**TO:** Representative Shelley Hughes  
Attn: Ginger Blaisdell

**FROM:** Hilary V. Martin   
Legislative Counsel

You have asked a number of questions related to unmanned aircraft systems (UAS) and privacy issues. Please be aware that any situation with a UAS will depend heavily on the specific circumstances of the particular situation. I have answered the questions you asked with the general statutes that might apply. If you have questions about a specific fact scenario, please let me know.

**Can a person issue a no trespass or restraining order against the pilot of a UAS so the aircraft cannot be flown over private property?**

There are a number of options a person can take regarding a UAS flying over the person's property.

If the activities of the UAS operator amount to stalking under AS 11.41.260 or 11.41.270<sup>1</sup>, a person could obtain a protective order under AS 18.65.850 or AS 18.66.100. Using a UAS to follow, record, take pictures of, or otherwise harass someone with a protective order against the operator of a UAS would likely violate the terms of the protective order.

There are some situations where a person operating a UAS could be committing harassment<sup>2</sup> in the second degree under AS 11.61.120(a), which states:

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<sup>1</sup> Under AS 11.41.270, a person commits the crime of second degree stalking when a person knowingly engages in repeated acts of nonconsensual contact that recklessly places another person in fear of death or physical injury. Nonconsensual contact includes "following or monitoring . . . with a global positioning device or similar technological means."

<sup>2</sup> AS 11.61.118, harassment in the first degree, prohibits specific types of offensive conduct that would not apply to a situation involving a UAS.

(a) A person commits the crime of harassment in the second degree if, with intent to harass or annoy another person, that person

(1) insults, taunts, or challenges another person in a manner likely to provoke an immediate violent response;

(2) telephones another and fails to terminate the connection with intent to impair the ability of that person to place or receive telephone calls;

(3) makes repeated telephone calls at extremely inconvenient hours;

(4) makes an anonymous or obscene telephone call, an obscene electronic communication, or a telephone call or electronic communication that threatens physical injury or sexual contact;

(5) subjects another person to offensive physical contact;

(6) except as provided in AS 11.61.116, publishes or distributes electronic or printed photographs, pictures, or films that show the genitals, anus, or female breast of the other person or show that person engaged in a sexual act; or

(7) repeatedly sends or publishes an electronic communication that insults, taunts, challenges, or intimidates a person under 18 years of age in a manner that places the person in reasonable fear of physical injury.

Under AS 09.45.230(a), a person could bring a civil action against a UAS operator to enjoin or abate a private nuisance. A "nuisance" is defined as "a substantial and unreasonable interference with the use or enjoyment of real property, including water."<sup>3</sup> If the person bringing the nuisance action prevails, a court will issue an order to abate the nuisance.<sup>4</sup> The person bringing the actions may also be entitled to damages.<sup>5</sup>

**Is there a noise ordinance that pertains to UAS operation or is there a harassment law that might protect a person from the UAS operator?**

There is no state statute that specifically regulates noise level. However, AS 11.61.110, relating to disorderly conduct, prohibits activity that involves "unreasonably loud noise." AS 11.61.110(a)(1) and (a)(2) state:

(a) A person commits the crime of disorderly conduct if,

(1) with intent to disturb the peace and privacy of another not physically on the same premises or with reckless disregard that the conduct is having that effect after being informed that it is having that

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<sup>3</sup> AS 09.45.255.

<sup>4</sup> AS 09.45.240.

<sup>5</sup> AS 09.45.255.

effect, the person makes unreasonably loud noise;

(2) in a public place or in a private place of another without consent, and with intent to disturb the peace and privacy of another or with reckless disregard that the conduct is having that effect after being informed that it is having that effect, the person makes unreasonably loud noise . . . .

"Unreasonably loud noise" is defined in AS 11.61.110(b):

As used in this section, "noise" is "unreasonably loud" if, considering the nature and purpose of the defendant's conduct and the circumstances known to the defendant, including the nature of the location and the time of day or night, the conduct involves a gross deviation from the standard of conduct that a reasonable person would follow in the same situation. "Noise" does not include speech that is constitutionally protected.

It is unclear if a UAS would be loud enough to be considered "unreasonably loud" under this statute.<sup>6</sup>

If the use of a UAS places a person in fear of death or physical injury, the operation of a UAS could potentially be considered stalking.<sup>7</sup> As mentioned above, using a UAS to follow, take pictures of, or otherwise harass a person could be prohibited by a protective order.

**Should there be restrictions on UAS use to above fifty feet or the tallest roof line over private property without permission from the property owner?**

You asked if the task force should consider a flight restriction to prohibit a UAS from flying below fifty feet or the tallest roof line over private property without permission from the property owner. While the state can pass laws related to UAS and restrictions on their flights, the law could be subject to a challenge on federal preemption grounds.

Under the Supremacy Clause of the U.S. Constitution, federal law may preclude a state from legislating in an area in four ways: (1) Congress may expressly state that state law is preempted; (2) the scheme of federal regulation may be sufficiently comprehensive so that there is a reasonable inference that federal law left no room for state law in that area; (3) if state law actually conflicts with federal law; or (4) state law may "stand[ ] as an

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<sup>6</sup> Note that a number of municipalities regulate noise levels. *See, e.g.*, Juneau Ordinance 42.20.095, which prohibits disturbing the peace. The ordinance broadly prohibits a person from making an "unreasonable noise."

<sup>7</sup> AS 11.41.260 - 11.41.270.

obstacle to the accomplishment and execution of the full purposes and objectives of Congress."<sup>8</sup>

In the FAA Modernization and Reform Act of 2012,<sup>9</sup> the FAA was directed to write regulations to integrate the use of civil UAS into the national airspace. Section 336 of the law also set limits for recreational or hobby use of UAS. These limits include requirements that the UAS weigh less than 55 pounds, that the UAS be in the visual line-of-sight of the operator at all times, and that a UAS not fly within 5 miles of an airport.<sup>10</sup>

It is possible that this comprehensive scheme created by the FAA will preempt any state regulation in the area of UAS. However, this is a rapidly evolving area of the law, and there is very little federal law or regulation on the recreational or hobby use of UAS. Therefore, it is possible that the state could place limits on the recreational or hobby use of UAS, so long as the state law does not conflict with federal law or regulation.

The United States has ruled that a property owner owns only that much airspace above the ground as the owner can occupy or use in connection with the land.<sup>11</sup> Therefore, it is possible that if a UAS is flying at a level that does not interfere with the property owner's use of the land, then the UAS flight would be permissible. This holding, however, does not necessarily place any limits on the ability of the state to set a limit on how low a UAS can fly over private property.

As this is a constantly changing area of law, it is difficult to predict with any degree of certainty whether any state regulation would be preempted by federal law.

**What happens if someone shoots down a UAS? What if a UAS crashes into a backyard and the property owner does not want to return the UAS?**

Shooting a firearm at a UAS or shooting down a UAS would likely be a crime. There are a number of state laws that are implicated if a person shoots down a UAS, depending on the specific circumstances. If, for example, other people are nearby or in the trajectory of the firearm, the activity could potentially be reckless endangerment or assault.<sup>12</sup>

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<sup>8</sup> *Hillsborough County, Fla. v. Automated Medical Laboratories, Inc.*, 471 U.S. 707, 713 (1985).

<sup>9</sup> Public Law 112-95.

<sup>10</sup> You may wish to review the information the FAA has provided regarding UAS on their website: [www.faa.gov/uas](http://www.faa.gov/uas).

<sup>11</sup> *United States v. Causby*, 328 U.S. 256, 265 (1946).

<sup>12</sup> AS 11.41.200 - 11.41.230 (assault statutes), and AS 11.41.250 (reckless endangerment).

Additionally, shooting down a UAS could be criminal mischief in the third, fourth, or fifth degree, depending on the amount and dollar value of damage to the UAS.<sup>13</sup> State and municipal law prohibit discharging a firearm in certain places that would prevent a person from attempting to shoot down a UAS.<sup>14</sup>

Depending on the particular circumstances, a person who shoots at or shoots down a UAS could potentially claim self-defense or defense of property and premises. Under AS 11.81.350(a):

A person may use nondeadly force upon another when and to the extent the person reasonably believes it is necessary to terminate what the person reasonably believes to be the commission or attempted commission by the other of an unlawful taking or damaging of property or services.

A person could potentially also argue self-defense,<sup>15</sup> although again this would be highly fact dependent.

A person is not entitled to keep a UAS that is not theirs, even if the UAS crashes into their backyard. Refusing to return the UAS could be theft<sup>16</sup> or theft of lost or mislaid property.<sup>17</sup>

Any situation involving a UAS that is shot down or crashes into private property will be heavily fact dependent, so it is difficult to determine the consequences of such actions. However, it is very unlikely that a person could keep a UAS that crashed onto the person's property.

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<sup>13</sup> AS 11.46.482 - 11.46.486.

<sup>14</sup> See AS 11.61.190 - 11.61.220 (misconduct involving weapons).

<sup>15</sup> AS 11.81.330(a) states in relevant part: "A person is justified in using nondeadly force upon another when and to the extent the person reasonably believes it is necessary for self-defense against what the person reasonably believes to be the use of unlawful force by the other person . . . ."

<sup>16</sup> AS 11.46.100.

<sup>17</sup> Under AS 11.46.160 a person commits theft of lost or mislaid property if the person obtains "property of another knowing that the property was lost, mislaid, or delivered under a mistake as to the nature or amount of the property or the identity of the recipient and the person fails to take reasonable measures to restore the property to the owner with intent to deprive the owner of the property."

**Is there a reasonable expectation of privacy that could relate to a private person operating a UAS that invades another person's privacy?**

The Constitution of the State of Alaska contains an express right to privacy.<sup>18</sup> However, the Alaska Supreme Court has so far refused to extend this right to apply against private actors.<sup>19</sup> In the same case, however, the Court found that the privacy clause in the Alaska Constitution does evidence a public policy supporting privacy,<sup>20</sup> and that there is a common law right to privacy.<sup>21</sup>

The Court recognized the tort of "intrusion upon seclusion" from the Restatement (Second) of Torts § 652B, which states:

One who intentionally intrudes, physically or otherwise, upon the solitude or seclusion of another or his private affairs or concerns, is subject to liability to the other for invasion of his privacy, if the intrusion would be highly offensive to a reasonable person.<sup>[22]</sup>

Therefore, even though the right to privacy in the Constitution of the State of Alaska would likely not apply against a private UAS operator, a person could bring a civil suit against a UAS operator for the common law tort of intrusion upon seclusion.

**Notes on "Alaska Privacy Guidelines for Drones"**

You had asked for some feedback on the "Alaska Privacy Guidelines for Drones" that you sent. Many of the pictures and headings are blank with no commentary or

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<sup>18</sup> Art. I, sec. 22, Constitution of the State of Alaska, which states in relevant part: "The right of the people to privacy is recognized and shall not be infringed."

<sup>19</sup> *Luedtke v. Nabors Alaska Drilling, Inc.*, 768 P.2d 1123, 1130 (Alaska 1989). The Court did leave open the possibility that the right could be extended against private actors:

The parties in the case at bar have failed to produce evidence that Alaska's constitutional right to privacy was intended to operate as a bar to private action. . . . Absent a history demonstrating that the amendment was intended to proscribe private action, or a proscription of private action in the language of the amendment itself, we decline to extend the constitutional right to privacy to the actions of private parties.

<sup>20</sup> *Id.* at 1132 - 1133.

<sup>21</sup> *Id.* at 1133.

<sup>22</sup> *Id.* quoting The Restatement (Second) of Torts § 652B.

Representative Shelley Hughes  
June 8, 2015  
Page 7

information. I have not addressed any of these "blank" pictures or headings. If you have a specific question about something to be covered by the handout, please let me know.

The first picture refers to AS 11.16.120(a)(6). This is an incorrect citation. If you are referring to the harassment statutes, the correct citation is AS 11.61.120. Additionally, AS 11.61.120(a)(6) only prohibits publishing or distributing "electronic or printed photographs, pictures, or films that show the genitals, anus, or female breast of the other person or show that person engaged in a sexual act." This is not a situation that would apply to every instance of a UAS flying over someone's private property.

If I may be of further assistance, please advise.

HVM:dla  
15-388.dla



# LEGISLATIVE RESEARCH SERVICES

Alaska State Legislature  
Division of Legal and Research Services  
State Capitol, Juneau, AK 99801

(907) 465-3991 phone  
(907) 465-3908 fax  
research@akleg.gov

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## Research Brief

TO: Representative Shelley Hughes  
FROM: Chuck Burnham, Legislative Analyst  
DATE: April 6, 2015  
RE: Legal Decisions on Drones and Privacy  
*LRS Report 15.367*

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***You asked whether any courts have decided cases regarding citizens' expectation of privacy with regard to the use of unmanned aircraft systems.***

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As you know, unmanned aircraft systems (UAS), also variously referred to as unmanned aerial vehicles (UAV) and "drones," have no onboard pilot and are operated remotely. Drones range from palm-size devices with a range of only a few dozen yards that must be flown within sight of the operator, to vehicles with wingspans as great as a Boeing 737 that can fly hundreds of miles at great speeds and at altitudes of greater than 60,000 feet while using sophisticated satellite navigation, video, and detection systems monitored by operators on the other side of the globe. The possible applications of UAS include military and covert missions, law enforcement, search and rescue, weather and other scientific research, border surveillance, and others. The Federal Aviation Administration (FAA) expects the use of drones, particularly by law enforcement agencies, to expand rapidly in coming years as the devices become more readily available and their costs decrease.<sup>1</sup> The specter of the proliferation of drones for domestic surveillance has raised concern for advocates of privacy and civil liberties.

We located no court case that is precedential with regard specifically to the interaction between UAS and privacy rights. The American Civil Liberties Union (ACLU) is among the organizations advocating for stricter regulation of drones to ensure citizens' privacy rights are not infringed upon by the extraordinarily powerful surveillance systems on board certain UAS. In a 2011 report on the topic, the ACLU reviewed U.S. Supreme Court decisions on the use of *manned* aircraft and other methods of surveillance, and the variations from those decisions the Court may make in future cases involving UAS, as follows:

In the 1986 decision *California v. Ciraolo* [476 U.S. 207 (1986)], the Supreme Court focused on whether an individual has a privacy interest in being free from aerial surveillance of his backyard. The police had received a tip that Dante *Ciraolo* was growing marijuana in his backyard, but high fences prevented them from viewing his backyard from the street. The police borrowed a plane, flew it over the backyard and easily spotted marijuana plants growing there. *Ciraolo* argued that his Fourth Amendment rights were violated because the government did not get a warrant. The Court rejected this argument, explaining that there was no intrusion into his privacy because "[a]ny member of the public flying in this airspace who glanced down could have seen everything that these officers observed."

In *Dow Chemical Co. v. United States* [476 U.S. 227 (1986)], also decided in 1986, the Supreme Court addressed whether the Environmental Protection Agency violated Dow's Fourth Amendment rights when it employed a commercial aerial photographer to use a precision aerial mapping camera to take photographs of a chemical plant. The Court found no violation, in part because the camera the EPA used was a "conventional, albeit precise, commercial camera commonly used in mapmaking," and "the photographs here are not so revealing of intimate details as to raise constitutional concerns." However, the Court suggested that the use of more sophisticated, intrusive surveillance might justify a different result. It wrote, "surveillance of private property by using highly sophisticated surveillance equipment not generally available to the public, such as satellite technology, might be constitutionally proscribed absent a warrant."

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<sup>1</sup> The FAA maintains a website on its activities regarding UAS at <http://www.faa.gov/about/initiatives/uas/>.

In *Florida v. Riley* [488 U.S. 445 (1989)], decided in 1989, the police had received a tip that Michael Riley was growing marijuana in a greenhouse on the property surrounding his home. The interior of the greenhouse was not visible from the ground outside the property, and the greenhouse had a ceiling, though two panels in the ceiling were missing. A police officer flew over the greenhouse and spotted marijuana through the openings in the roof. While no reasoning commanded a majority of the Court, four justices concluded that its decision in *Ciraolo* applied because Riley had left part of the greenhouse open to public view, and so the search was constitutional.

Because of their potential for pervasive use in ordinary law enforcement operations and capacity for revealing far more than the naked eye, drones pose a more serious threat to privacy than do manned flights. There are good reasons to believe that they may implicate Fourth Amendment rights in ways that manned flights do not.

Government use of UAVs equipped with technology that dramatically improves on human vision or captures something humans cannot see (such thermal or x-ray images) should be scrutinized especially closely by the courts. This follows from the Supreme Court's statement in *Dow Chemical* that using sophisticated technology not generally available to the public may be considered a search under the Fourth Amendment. It is also suggested by the 2001 case *Kyllo v. United States* [533 U.S. 27 (2001)], in which the court rejected the use of thermal imaging devices to peer into a suspect's home without a warrant.

Further, the Supreme Court has suggested that the pervasive or continuous use of a surveillance technology may heighten Fourth Amendment concerns. In *United States v. Knotts* [460 U.S. 276, 283-84 (1983)], the Supreme Court addressed whether attaching primitive "beeper" tracking technology to a car violated the driver's Fourth Amendment rights. Although it concluded that the use of the beeper in that case did not violate the Fourth Amendment, it held that if "such dragnet type law enforcement practices" as "twenty-four hour surveillance of any citizen of this country" ever arose, it would determine if different constitutional principles would be applicable. Citing to this language in *Knotts*, the federal appeals court in Washington D.C. recently ruled that attaching a GPS device to a person's car and tracking his movements for 28 days fell into this category of dragnet-type surveillance and held that the government's warrantless tracking violated the Fourth Amendment [*United States v. Maynard*, 615 F.3d 544, 556 (2010)].<sup>2</sup>

The 2012 case *United States v. Jones* (132 S. Ct. 945, 949) addressed whether police can use a global position system (GPS) device to track the movement of a suspect without a warrant. The U.S. Supreme Court found the tactic to be an unlawful search and seizure. In separate concurring opinions, Justices Alito and Sotomayor indicated that the persistent surveillance enabled by rapid advances in technology may be constitutionally problematic. In a concurrence joined by three of his colleagues, Justice Alito wrote "in circumstances involving dramatic technological change, the best solution to privacy concerns may be legislative" (*Jones* at 964). As you know, numerous states have enacted or are considering legislation on drones, and several bills to increase federal oversight of UAS have been introduced in Congress in recent years.<sup>3</sup>

The cases discussed above deal with government use of drones. In circumstances involving the use of UAS by private businesses or individuals, FAA regulations on airspace may be implicated in addition to state and local laws on trespassing, stalking, harassment and other property and privacy issues, depending on the specific facts of the case in question. If you have question about the legality of the use of drones by private entities under specific scenarios, we recommend that you consult with Legislative Legal Services.

We hope this is helpful. If you have questions or need additional information, please let us know.

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<sup>2</sup> Jay Stanley and Catherine Crump, "Protecting Privacy from Aerial Surveillance: Recommendations for Government Use of Drone Aircraft," American Civil Liberties Union, December 2011, pp. 13-15, <https://www.aclu.org/files/assets/protectingprivacyfromaerialsurveillance.pdf>.

<sup>3</sup> The Electronic Privacy Information Center advocates for, among other concerns, strict regulation of UAS. The Center tracks state and federal legislation on the issue on its website at <https://epic.org/privacy/drones/#topnews>.

# ALASKA UAS INTEREST GROUP



## Alaska Unmanned Aircraft Systems Interest Group Annual Meeting

September 1-3, 2015, Fairbanks, Alaska

As the lead for the University of Alaska, Alaska Center for Unmanned Aircraft Systems Integration (ACUASI) and the Pan-Pacific UAS Test Range Complex, I cordially invite you to attend the 2015 Alaska Unmanned Aircraft Systems Interest Group annual three-day workshop and meeting from September 1–3, 2015. We are excited to host this year's event in Fairbanks where ACUASI and arctic research are located within the University of Alaska Fairbanks Geophysical Institute.

The meeting is open to interested government, industry, and private participants in all fields of unmanned systems and robotics, as well as potential users from a variety of agencies, associations, institutions, and commercial interests who might benefit from the use of these new and emerging technologies.

Themes will include:

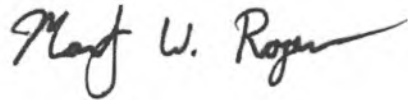
- UAS operations in the Arctic; lessons learned, challenges, and opportunities
- The role of UAS in emergency response, interagency communications, and the path forward
- UAS Test Sites; what they mean to the UAS community, and how to work with them
- UAS outside the U.S.; what is happening in Canada and Europe, and what that means to us
- A requirements-driven future and economical and efficient use of UAS technology
- Understanding government, industry, and private unmanned systems and robotics needs and issues
- Exploration and identification of ways we can work together to safely achieve common goals
- The impact on civil and commercial manned and unmanned aircraft activity in Alaska
- The role of unmanned systems and robotics in education, research, science, natural resource management, natural disasters, emergency response, search and rescue and much more
- Working with educational institutions in transforming and shaping the minds of young people through the National Science Foundation's science, technology, engineering and mathematics (STEM) goals

In addition several special meetings will be occurring that you may want to attend:

- The U.S. Department of the Interior will be demonstrating the benefits of UAS for geophysical measurements and natural resource monitoring in Alaska and the Arctic with a full day of presentations on August 31<sup>st</sup>.
- The Alaska Legislative Task Force on Unmanned Aircraft Systems will convene on the final day of the UAS Interest Group meeting.

We expect the 2015 AUASIG meeting to be a fulfilling and informative event and hope that you will attend. We'll notify you when registration is available at <http://www.uasalaska.org/>. The venue, call for papers, cost and registration, hotel/lodging information, vendor information, and agenda will be announced shortly, as well.

Thank you all for your interest in the Alaska UAS Interest Group. We hope to see you all in Fairbanks this coming September.

A handwritten signature in black ink that reads "Marty W. Rogers". The signature is written in a cursive style with a long, sweeping underline.

Marty W. Rogers, Director  
Alaska Center for Unmanned Aircraft Systems Integration  
Geophysical Institute, University of Alaska Fairbanks

## Ginger Blaisdell

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**From:** Rep. Shelley Hughes <Rep.Shelley.Hughes@akleg.gov>  
**Sent:** Wednesday, June 17, 2015 9:39 AM  
**To:** 'lhschus+unmannedaircraft@akleg.gov'  
**Subject:** Alaska UAS Interest Group meeting announced  
**Attachments:** 2015 Save the Date.pdf

Associates, Colleagues & Friends – Mr. Marty Rogers, Director of the Alaska Center for UAS Integration (ACUASI) and the Pan Pacific UAS Test Range Complex (PPUTRC), has asked me to inform you of, and send you his personal invitation, regarding the 2015 Alaska UAS Interest Group meeting in Fairbanks Alaska this coming 1 thru 3 September.

Please find attached, Mr. Rogers' personal invitation, and please do not hesitate to ask any of us here at the ACUASI and PPUTRC for guidance on any matter regarding the planning of your travel to join us this year.

In addition to the Alaska UASIG Meeting, the Departments of both the Interior and Energy will host a full day event on Monday that same week. These two Federal Government agencies have much information to convey regarding ongoing and planned activities in Alaska and throughout the Arctic, and have asked that we extend to you an invitation to join them on Monday, 31 August.

Finally, be sure to plan your trip so that you can take advantage of your travel to Alaska. If time permits, might I suggest looking into taking the Alaskan Railroad's "Denali Star" either to or from Fairbanks to/from Anchorage. September is Autumn in Alaska, and while beauty abounds at that time of the year, the wildlife is in high gear getting prepared for Winter and can be seen most anywhere you look.

So please, open Mr. Roger's attached invitation, and join us so that we might see you in Fairbanks in September. And if you have any questions at all, feel free to contact myself, Barbara Johnson or Diana Campbell (CC'd), and I promise we'll get you an answer.

**Respectfully, Leonard Ligon**

Airspace Integration & Operations  
Alaska Center for Unmanned Aircraft Systems Integration (ACUASI)  
Pan-Pacific UAS Test Range Complex (PPUTRC)  
University of Alaska Fairbanks (UAF)  
ACUASI (907) 455-2013  
Mobile (505) 417-4488

Provided by:  
Ginger Blaisdell

*Chief of Staff  
Office of Representative Shelley Hughes  
Serving Greater Palmer  
Capital Building Room 13  
Juneau, Alaska 99801*

907-465-5265  
1-800-565-3743

# LEGISLATIVE TELECONFERENCE NETWORK

SPONSOR: \_\_\_\_\_

SUBJECT: UAS LTF

DATE: June 19, 2015

PLEASE PRINT CLEARLY!!!

NAME	CITY OF RESIDENCE	REPRESENTING ("SELF" OR NAME OF ORGANIZATION)	WOULD YOU LIKE TO TESTIFY? INDICATE "YES" OR "NO"	BILL NUMBER
David Palmer	Palmer, AK	Arctic Arc and Aviation Technologies LLC	No	
Beau Bivins	Anchorage - AK	Alaska Aerial Media LLC		
Tyler Currier	"	"		
Ryan Marlow	"	"		
George Kobelnyk	CHUGIATK, AK	70' NORTH LLC + AVIATION SYSTEMS WORLD SERVICES	?	
Elwood Brehmer	Anchorage	Alaska Journal of Commerce	No	
Debra Nagen May	Kasilof, AK	Self -	NO	
Mark Greby	Anchorage AK	AAC	No	
PARKER MARTYN	Anchorage, AK	National Park Service	No	
ELIZABETH PARSONS	PALMER, AK	70 NORTH LLC	NO	
Jay Seagas	Etella River	FAA	NO	

## Ginger Blaisdell

---

**From:** Apache <apache@wwwjnu04.akleg.gov>  
**Sent:** Friday, May 08, 2015 2:09 PM  
**To:** LIO Juneau; Ginger Blaisdell  
**Subject:** Teleconference Order Form

**Meeting:** new

**Sponsor and/or Committee Name:** Unmanned Aircraft Systems Task Force

**Date of Teleconference:** June 19, 2015

**Start Time:** 12:00pm

**End Time:** 5:00pm

**Chairing Site:** Anchorage LIO

**Juneau Room:**

**Bill Information:**

**Agenda:** Privacy considerations for unmanned aircraft systems

**Streamed to akl.tv:** yes

**Executive Session:** no

**Contact Person:** Ginger Blaisdell

**Telephone Number:** 465-5265

**Email Address:** [ginger.blaisdell@akleg.gov](mailto:ginger.blaisdell@akleg.gov)

**LIO Sites:**

**May other LIO's add:** yes

**Offnet Name(s):**

**Other Information:**

originals

All participants should be at the Anc LIO  
we will allow for public testimony where calls will be accepted

## Ginger Blaisdell

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**From:** Rep. Shelley Hughes <Rep.Shelley.Hughes@akleg.gov>  
**Sent:** Wednesday, June 17, 2015 10:02 AM  
**To:** 'lhschus+unmannedaircraft@akleg.gov'  
**Subject:** Alaska UAS Task Force meeting Friday June 19

You are receiving this email because you have expressed interest in Alaska's Unmanned Aircraft Systems Legislative Task Force meetings.

Friday June 19, 2015  
Anchorage Legislative Information Office Building  
716 West 4<sup>th</sup> Ave  
1<sup>st</sup> floor Auditorium

Public meeting from 1:00pm – 5:00pm Alaska Time  
Please watch on [www.akltv.com](http://www.akltv.com) or call in toll free at 844-586-9085 to listen or provide comment during public testimony  
Public testimony will be taken between 4-5pm

The afternoon DRAFT agenda is as follows:

1:00pm welcome and announcements  
1:15pm Drone insurance for commercial and recreational users  
2:00pm Proposed FAA Rule for UAS – invited testimony  
3:00pm Privacy document and legal memo regarding privacy for Alaska citizens  
4:00pm Public testimony  
5:00pm Adjourn

Documents and final agenda will be posted on Thursday June 18 at  
[http://www.akleg.gov/basis/Meeting/Detail?Meeting=HUNM 2015-06-19 12:00:00#tab1\\_4](http://www.akleg.gov/basis/Meeting/Detail?Meeting=HUNM 2015-06-19 12:00:00#tab1_4)

Thank you for your interest in Alaska's UAS Task Force  
Ginger Blaisdell

*Chief of Staff  
Office of Representative Shelley Hughes  
Serving Greater Palmer  
Capital Building Room 13  
Juneau, Alaska 99801*

907-465-5265  
1-800-565-3743



If you would like to subscribe to Representative Hughes' newsletter, please click  
<http://www.housemajority.org/members/hughes/>.

## Ginger Blaisdell

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**From:** Jessica Geary  
**Sent:** Wednesday, June 17, 2015 9:18 AM  
**To:** Ginger Blaisdell  
**Subject:** RE: Unmanned Aircraft

Hi Ginger,  
Yes – it does. \$8,900 again for FY16. Available July 1.

Jessica

Jessica Geary, Finance Manager  
Legislative Affairs Agency  
465-6626  
Please note new email address:  
[Jessica.Geary@akleg.gov](mailto:Jessica.Geary@akleg.gov)

---

**From:** Ginger Blaisdell  
**Sent:** Wednesday, June 17, 2015 9:17 AM  
**To:** Jessica Geary  
**Subject:** FW: Unmanned Aircraft

Does the UAS task force have a budget this year?  
ginger

---

**From:** Rep. Shelley Hughes  
**Sent:** Tuesday, June 16, 2015 4:23 PM  
**To:** Ginger Blaisdell  
**Subject:** RE: Unmanned Aircraft

Can you doublecheck the fy2016 budget and see if perhaps by some miracle it got funded again?

## Representative Shelley Hughes



Serving Greater Palmer, District 11  
Alaska State Legislature  
600 East Railroad Avenue  
Wasilla, Alaska 99654  
(907) 376-3725

Communicating with Alaska via  
[Facebook](#) [Twitter](#) [Instagram](#)

**From:** Ginger Blaisdell  
**Sent:** Tuesday, June 16, 2015 1:48 PM  
**To:** Rep. Shelley Hughes  
**Subject:** FW: Unmanned Aircraft

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**From:** Jessica Geary  
**Sent:** Friday, April 03, 2015 2:04 PM  
**To:** Ginger Blaisdell  
**Subject:** Unmanned Aircraft

Hi Ginger,

I was just running the March authorization balance numbers and I see the Task Force on Unmanned Aircraft Systems is almost out of money for FY15.

There is \$518.13 left. Joanna has paid everything that has come over so far, but if it stays in the budget there will be new money in FY16 for any travel that takes place after July 1. Please let me know if you have questions or concerns.

Jessica

Jessica Geary  
Finance Manager  
Legislative Affairs Agency  
(907) 465-6626 phone  
(907) 465-1772 fax  
Please note new email address:  
[Jessica.Geary@akleg.gov](mailto:Jessica.Geary@akleg.gov)

## Ginger Blaisdell

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**From:** Meyer, Marty A (MVA) <marty.meyer@alaska.gov>  
**Sent:** Thursday, June 18, 2015 2:21 PM  
**To:** Tyler, Ethan A (CED); 'steve@straitmedia.us'; Ginger Blaisdell; 'bob@gallerylodge.com'; 'iris@uav-alaska.com'; Rep. Shelley Hughes; 'scolligan@e-terra.com'; Stuart Krueger  
**Cc:** O'Hare, Michael F (MVA); Gordon, Catherine M (MVA); Jarrell, James R (MVA)  
**Subject:** UAS/UAV Legislative Task Force Meeting Tomorrow, June 19th

Hi Everyone,

Tomorrow's meeting will start at 9:00am and will be held in the Executive Conference Room (Room C-207) in the National Guard Armory on JBER. You will need to enter JBER via the Ft Richardson gate, but first you will need to stop at the visitor's center just prior to entering to give them your picture I.D., vehicle registration, and proof of vehicle insurance. They already have your name on a list which lists me as your sponsor. If you need further directions, or have any other questions, please don't hesitate to call me.

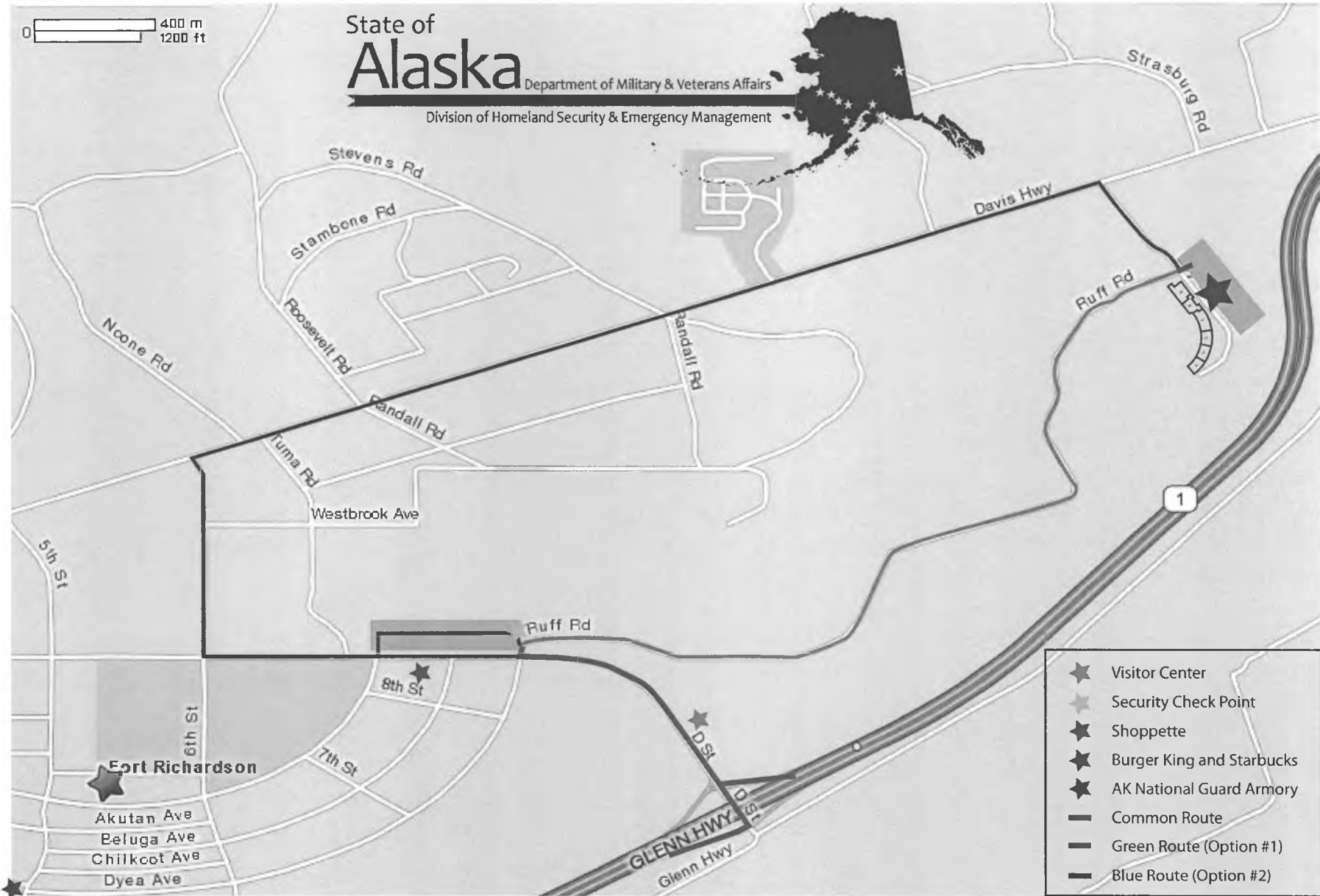
thanks

*Marty Meyer*

**Special Assistant I  
Department of Military & Veterans Affairs  
Office of the Commissioner  
Phone : 907-428-6008  
Fax: 907-428-6019**

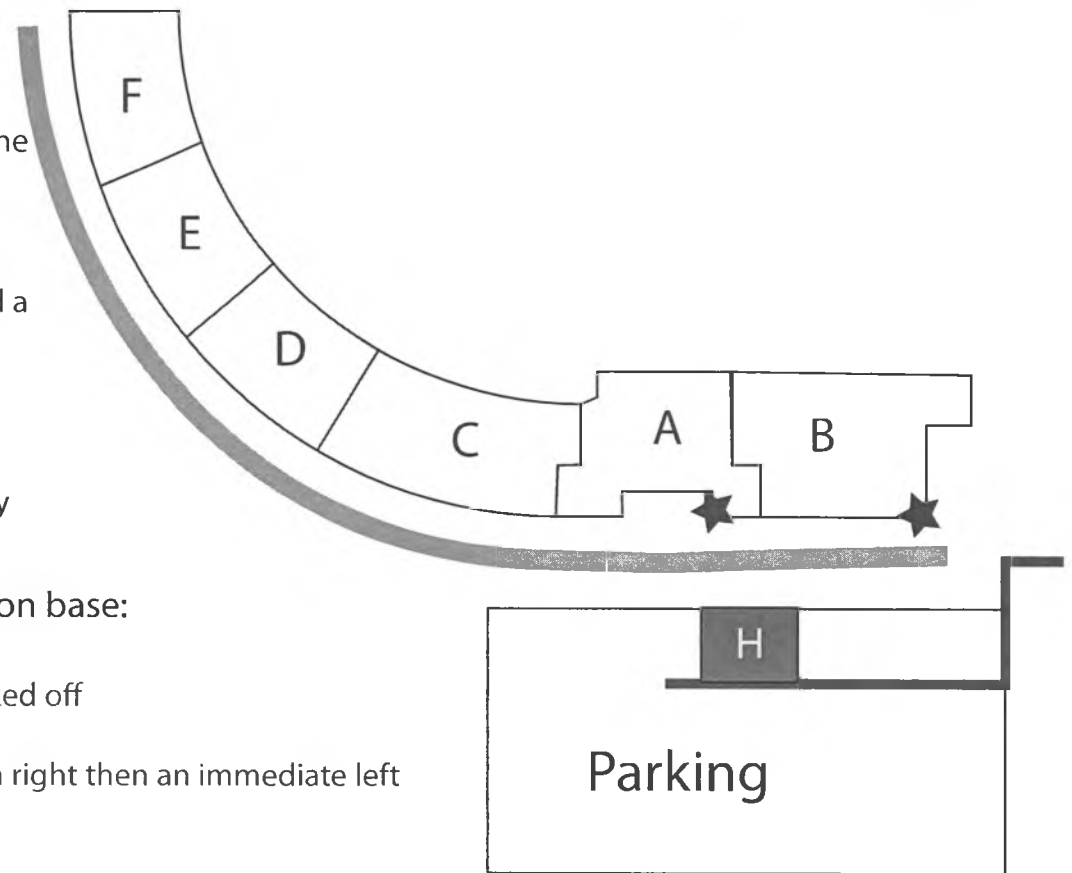
# Directions to the Division of Homeland Security and Emergency Mangement

*Located in the Alaska National Guard Armory - Ft. Richardson, AK*



### Directions to get to the Armory:

1. From the Glenn Highway: Take the Ft Richardson Exit. At the top of the ramp go left from Anchorage - right from the Valley
2. Stop at the Visitor's Center to get a pass.
  - You'll need the car's registration, proof of insurance and a valid ID
  - Your car may be subject to search
3. Get back onto the main road
4. Take the very first right and keep to the right – there are several lanes of k-rails - you may have to stop at a security check point.



### Two options (due to construction or a security issue on base:

#### #1 - Green Route (indicated on map)

- 1.1 - Take a right at the first road you come to if it is not blocked off
- 1.2 - Follow the road for about 2 miles (enjoy the scenery).
- 1.3 - You will come to a T in the road with a Yield sign, make a right then an immediate left into the parking lot.

#### #2 - Blue Route (indicated on map)

- 2.1 - Veer left to exit the security check point then make an immediate right onto D Street.
- 2.2 - Make a right at the light. (6th Street)
- 2.3 - Make a right at the "T" in the road. (Davis Hwy)
- 2.4 - Follow the road about 2 miles.
- 2.5 - There will be a sign on the right directing you to the National Guard Armory (if you go through a gate in the fence you have passed it).
- 2.6 - Follow the road till you come the barrier, make a left into the parking area.

If you need handicap parking it is near the main entrance of the building.

Enter through the farthest door to the right as you look at the building or the right set of doors at the main entrance (marked with blue stars above).

Go upstairs, to room B-201; if you get lost or no one is there - ask to be directed to room B-214. Our wonderful admin staff will help direct you to the classroom.

*If you have questions or get lost, call Admin at 428-7000.*



**DEPUTY SECRETARY OF DEFENSE**  
1010 DEFENSE PENTAGON  
WASHINGTON, DC 20301-1010

February 17, 2015

MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS  
CHAIRMAN OF THE JOINT CHIEFS OF STAFF  
UNDER SECRETARY OF DEFENSE FOR ACQUISITION,  
TECHNOLOGY, AND LOGISTICS  
UNDER SECRETARY OF DEFENSE FOR POLICY  
UNDER SECRETARY OF DEFENSE FOR PERSONNEL AND  
READINESS  
UNDER SECRETARY OF DEFENSE FOR INTELLIGENCE  
COMMANDER, U.S. NORTHERN COMMAND  
COMMANDER, U.S. PACIFIC COMMAND  
CHIEF, NATIONAL GUARD BUREAU  
GENERAL COUNSEL OF THE DEPARTMENT OF DEFENSE  
ASSISTANT SECRETARY OF DEFENSE FOR LEGISLATIVE  
AFFAIRS  
DEPARTMENT OF DEFENSE CHIEF INFORMATION OFFICER  
ASSISTANT TO THE SECRETARY OF DEFENSE FOR PUBLIC  
AFFAIRS  
SENIOR INTELLIGENCE OVERSIGHT OFFICER

SUBJECT: Policy Memorandum 15-002, "Guidance for the Domestic Use of Unmanned Aircraft Systems"

EXPIRATION DATE: February 17, 2018

POINT OF CONTACT: For more information, contact OASD(HD&GS) at (571) 256-8322.

This policy memorandum provides guidance for the domestic use of unmanned aircraft systems (UAS) to ensure that Department of Defense (DoD) UAS are used in accordance with U.S. law and DoD policy, and to ensure the appropriate use of DoD UAS assets in domestic operations, training, exercises, and testing.

DoD domestic aviation operations support Homeland Defense (HD), Defense Support of Civil Authorities (DSCA), and military training and exercises. Unless specifically provided for in this policy, law, or other guidance, the approval of the Secretary of Defense is required for all domestic UAS operations (including HD, DSCA, and National Guard (NG) State support operations, including DoD UAS operated by NG personnel in Title 32 or State Active Duty status). Any domestic use of UAS requires consultation with the Federal Aviation Administration (FAA) and must be consistent with applicable laws, regulations, and memoranda of agreement concerning the operations of UAS in the National Airspace System (NAS). This guidance applies to all DoD UAS use in the United States (hereafter "domestic use" or "domestic

operations”), whether operated by or under contract to Active or Reserve Component military personnel, or by other DoD personnel.

Unless permitted by law and approved by the Secretary of Defense, any DoD personnel using UAS for domestic operations, whether or not the DoD UAS use is related to an intelligence activity, may not conduct surveillance on U.S. persons. This restriction includes using any domestic DoD UAS as part of an authorized DoD response to a lawful request from another Federal department or agency. Consistent with DoD Directive 5200.27<sup>1</sup> and applying the oversight guidance contained in DoD 5240.1-R<sup>2</sup> to intelligence and non-intelligence related domestic UAS use, all UAS acquisition, collection, retention, and dissemination of information during domestic DoD UAS employment will be in accordance with standing DoD and DoD Component intelligence oversight guidance and will require coordination and review of a proper use memorandum (PUM).

The following guidance on the domestic use of UAS is effective immediately.

#### DoD Operations

In appropriate circumstances, UAS may be used in lieu of manned aircraft for domestic missions. Appropriate circumstances may include when:

- sustained endurance efforts are required;
- unmanned aircraft provide superior capabilities; or
- physical infrastructure limitations prohibit the use of manned rotary- or fixed-wing aircraft.

DoD UAS in the United States may only be used for HD, DSCA, and NG State support operations, including operations to support Federal, State, local, and tribal government organizations, if approved by the Secretary of Defense. DoD UAS may not be used for Federal, State, or local immediate response.

Armed DoD UAS may not be used in the United States for other than training, exercises, and testing purposes.

In the event of a request for Federal support, the Chairman of the Joint Chiefs of Staff, in consultation with the appropriate geographic Combatant Commanders, will provide a recommendation to the Secretary of Defense concerning the use of DoD UAS. To seek approval for other missions, DoD Components should use the approval authorities, procedures, and reporting requirements contained in applicable laws and regulations, such as CJCS Instruction 3710.01B, “DoD Counterdrug Support.” Support will be provided on a reimbursable basis unless otherwise required by law, or on a non-reimbursable basis if such support is both authorized by law and approved by the Secretary of Defense.

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<sup>1</sup> DoD Directive 5200.27, Acquisition of Information Concerning Persons and Organizations Not Affiliated with the Department of Defense.

<sup>2</sup> DoD 5240.1-R, Procedures Governing the Activities of DoD Intelligence Components that Affect United States Persons.

State/National Guard Operations

Governors in States where DoD UAS assets are fielded to the State's National Guard may not employ DoD UAS without the approval of the Secretary of Defense; however, these Governors may consider DoD UAS employment in their planning for disaster response activities. Governors who seek to use DoD UAS assets in support of State disaster response should submit a formal request in writing to the Secretary of Defense. Such requests should contain the analysis conducted that determined that other manned air assets were not appropriate. The Chairman of the Joint Chiefs of Staff, in consultation with the appropriate geographic Combatant Commander, the Chief of the National Guard Bureau (NGB), and the appropriate Military Department Secretary, will provide a recommendation to the Secretary of Defense concerning the use of DoD UAS in support of a State request.

Plans should factor in the procedures and time required for FAA consultation for access to the necessary airspace and to obtain Secretary of Defense authorization. In concert with Federal Emergency Management Agency-coordinated regional planning, any State that proposes the use of DoD UAS in its plans should consult with the corresponding geographic Combatant Commander to ensure that State and DoD plans maximize unity of effort and efficiency.

Search and Rescue Exception

The only exception to the requirement for approval by the Secretary of Defense for the use of DoD UAS for domestic operations are search and rescue (SAR) missions involving distress and potential loss of life that are coordinated by the Air Force Rescue Coordination Center (AFRCC), Alaska Rescue Coordination Center (AKRCC), or Joint Rescue Coordination Center (JRCC)-Pacific. Specifically, the following commanders may approve the use of DoD UAS on an AFRCC/AKRCC/JRCC-Pacific coordinated mission with a properly issued SAR mission number after a determination that UAS would be the best platform to assist in the SAR mission and that its use would not interfere with the primary military duties of the unit concerned:

- Commander, U.S. Northern Command, through the Commander, Air Forces Northern, in the delegated role of Inland SAR Operations Coordinator for the continental United States Search and Rescue Region;
- Commander, U.S. Northern Command, through the Commander, Alaskan Command, as SAR Operations Coordinator for the Elmendorf Search and Rescue Region, landmass of Alaska; or
- Commander, U.S. Pacific Command, in the role of SAR Coordinator for the landmass of Hawaii, in close coordination with the U.S. Coast Guard.

Each commander will ensure that all legal, intelligence oversight (including the requirement to obtain a PUM), Privacy Act, and airspace issues are properly addressed. Each commander will promptly inform the Secretary of Defense, through appropriate channels, after the use of DoD UAS has been approved.

The Assistant Secretary of Defense for Homeland Defense and Global Security (ASD(HD&GS)) will include this SAR exception in the next revision of DoD Directive 3025.18, "Defense Support of Civil Authorities."

### DoD-Required Training and Exercises

The primary purpose of domestic UAS training and exercises is for DoD forces to conduct realistic training in their core Federal military mission areas. DoD UAS used in training and exercises will not acquire or collect information (except for incidental collection) about specified U.S. persons or non-DoD controlled property or facilities located outside DoD-controlled installations without consent. All UAS acquisition, collection, retention, and dissemination of information will be in accordance with standing DoD regulations and policy, including DoD Component intelligence oversight guidance, and will require a PUM.

Use of DoD UAS assets in domestic training and exercises requires:

- Prior notification to the Secretary of Defense if the platform is a large DoD UAS<sup>3</sup> and is to be used in training and exercises outside DoD-scheduled special use airspace (SUA);<sup>4</sup>
- Prior approval by the Secretary of Defense if the UAS is armed and will be used in a training, exercise, or testing event outside DoD SUA; and
- Prior approval by the Secretary of Defense for any DoD UAS training and exercises conducted with Federal, State, or local law enforcement agencies (LEAs), including any DoD UAS training and exercises planned in coordination with LEAs to meet LEA information needs in accordance with 10 U.S.C. § 371(b).

The notification to or request for approval by the Secretary of Defense required by this section will be submitted to the Secretary at least 30 days prior to the training, exercise, or testing event through appropriate Military Department/Service, Combatant Command, or NGB channels via the Joint Staff (J-3), and may be submitted either on a case-by-case basis or in batch format for periods not to exceed one calendar year in advance of the proposed exercise or training.

### Exercises, Training, and Activities Not Required by DoD

Although DoD equipment issued to the NG is often available for use by State Governors for non-DoD purposes, Secretary of Defense approval is required for the use of DoD UAS assets for non-DoD purposes, for DSCA training and exercises, or for NG UAS training and exercises that provide incidental support to civil authorities. This includes DoD UAS operated by forces in Title 10 status and National Guard personnel in Title 32 or State Active Duty status.

<sup>3</sup> Group 4/5 UAS, as currently defined in CJCS1 3255.01, *Joint Unmanned Aircraft System Minimum Training Standards, Incorporating Change I*, para. 9(a)(1)-(5) (October 31, 2011) and Joint Publication 3-30, *Command and Control of Joint Air Operations*, Figure III-15, page III-30 (February 10, 2014).

<sup>4</sup> DoD Scheduled Special Use Airspace (SUA): Warning Areas, Restricted Areas, Military Operations Area (MOA), Prohibited Areas, Controlled Firing Areas, and National Security Areas. For purposes of this Guidance, FAA-designated military training routes are also included. It is acknowledged that DoD UAS, in some cases, may have to transit the NAS from their departure/arrival airfield to DoD SUA to conduct their assigned mission. In all cases, appropriate airspace approval is required.

State officials who wish to propose the use of DoD UAS in support of major State disaster response exercises (or training requiring approval by the Secretary of Defense) should factor in the procedures and time required to consult with the FAA for access to the necessary airspace and to obtain Secretary of Defense approval. States in which DoD UAS assets are fielded that have a requirement for their use in these exercises (or training requiring approval by the Secretary of Defense) will submit the Governor's request in writing at least 30 days in advance to the Secretary of Defense through appropriate Military Department/Service, Combatant Command, or NGB channels via the Joint Staff (J-3), and may submit such requests either on a case-by-case basis or in batch format for periods not to exceed one (1) calendar year in advance of the proposed exercise or training.

#### Access to the U.S. National Airspace System

In order to conduct domestic operations, exercises, and training, DoD UAS operations will likely not be confined to segregated airspace; therefore, routine access to the national airspace will likely be required. The Department must continue to make progress in advancing regulatory policy and guidance associated with UAS operations in the NAS, as well as in aggressively developing detect-and-avoid technology to ensure safe operation of UAS in unsegregated airspace.

The Chair of the DoD Policy Board on Federal Aviation (PBFA) will lead the Department's efforts to advocate for the elimination of unnecessary regulatory restrictions that prevent routine access to the NAS for DoD UAS. The PBFA Chair will work through the multi-agency UAS Executive Committee to pursue regulatory changes and/or arrangements and develop reasonable standards of safety that address liability and take into account the excellent safety record of the Department's global UAS operations.

DoD will continue to promote the development of technologies, standardized operating procedures, and policies that ensure that DoD UAS are able to operate safely within the national airspace while also balancing and protecting personal privacy.

#### Other Designated Responsibilities

##### *Under Secretary of Defense for Policy*

The Under Secretary of Defense for Policy (USD(P)) is authorized to establish the appropriate policy for domestic use of UAS for force protection and protection of other DoD assets, whether in DoD Instruction 2000.16, "DoD Antiterrorism Standards," or other appropriate DoD issuance.

##### *Assistant Secretary of Defense for Homeland Defense and Global Security*

The ASD(HD&GS), under the authority, direction, and control of the USD(P), is the principal civilian advisor to the Secretary of Defense for the domestic use of DoD UAS. The ASD(HD&GS) will conduct a comprehensive review of this policy every three years and seek approval of appropriate revisions, if required. All policy development will be coordinated with

the Chairman of the Joint Chiefs of Staff, the DoD General Counsel, the Assistant Secretary of Defense for Special Operations and Low-Intensity Conflict, and the heads of other appropriate DoD organizations.

*Assistant to the Secretary of Defense for Public Affairs*

The Assistant to the Secretary of Defense for Public Affairs (ATSD(PA)) is responsible for coordinating public affairs inquiries with the Military Departments/Services, Joint Staff, Combatant Commands, National Guard Bureau, State departments and agencies, and other Federal departments and agencies as required. The ATSD(PA) is the lead DoD official for establishing public affairs guidance on domestic use of DoD UAS. Additionally, to promote transparency, the ATSD(PA) will work with the PBFA and the ASD(HD&GS) to develop a webpage outlining DoD UAS domestic operations.

This guidance replaces and rescinds the Deputy Secretary of Defense Memorandum, "Interim Guidance for the Domestic Use of Unmanned Aircraft Systems," September 28, 2006.<sup>5</sup>

A handwritten signature in black ink, appearing to read "R. H. O. S. P.", is centered on the page.

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<sup>5</sup> New operational and training requests/notification requirements take effect 60 days after the date that this policy memorandum is signed.