EXECUTIVE OFFICE OF THE PRESIDENT

OFFICE OF SCIENCE AND TECHNOLOGY POLICY

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DRONE WORLD EXPO
KEYNOTE REMARKS
Delivered by Michael Kratsios
1:00PM, Tuesday, October 3, 2017

Good afternoon, San Jose. It's always fantastic to be back in the Bay Area, and I'm particularly excited to be here with you all for Drone World Expo.

I would like to thank Lisa (Ellman), Gretchen (West), and Joelle (Coretti) for inviting me to speak with you today. They are some of the greatest supporters of the drone industry that I've had the privilege to meet.

This event is much more than your typical tech conference – the fact that there are some 3,000 of you here today, each and every one excited about the future of drones, and the incredible way that drones are being used today, and will be in the future, is a testament to the vast potential that this technology has to benefit our society.

I'm here today because my entire team at the Office of Science Technology Policy is equally passionate about UAS and supporting the development of emerging technologies. Our office is committed to implementing smart Federal policies that can not only enhance emerging tech companies' ability to develop, test, and deploy their technologies here in the U.S., but also enhance Americans' ability to access and benefit from those innovations.

As a senior White House technology advisor, I can attest to the fact that President Trump believes in the power of novel technologies to create jobs, generate new sources of economic prosperity, and keep America secure. I can think of no emerging technology more emblematic of these benefits than unmanned aircraft systems.

In June, the Office of Science and Technology Policy hosted a special event called "American Leadership in Emerging Technologies," with the President, where for the first time a drone was brought into the White House. The President had the opportunity to meet many UAS entrepreneurs pioneering the future of the commercial drone industry, some of whom are here today.

Drones have already become instrumental in creating new American jobs, increasing the efficiency and the productivity of American industry, and enhancing the safety of the American worker and the public at large.

And to that last point, over the past few weeks we've seen how drones have served as boots-on-the-ground and eyes-in-the-air responding to

emergency management efforts in Texas, Florida, and beyond. Several of you here in this audience, with your systems, were a big part of that response.

It is apparent that we have entered into a new age of disaster planning, where better, more effective mitigation, rescue, recovery, and post-disaster clean-up is made possible through the employment of UAS technologies.

For the first time the value of wide-scale drone deployment has been demonstrated for disaster response – and it's inspiring to witness how much good this technology can do in such difficult situations.

In the wake of Hurricanes Harvey, Irma, and Maria, and the devastating earthquakes in Mexico, first responders and the Air National Guard are better able to locate victims, survey and assess damage, and scope out hazardous situations without putting more lives at risk.

Utility companies can more quickly assess critical infrastructure and deploy work crews to restore power and put hospitals back online. Media companies are providing better, more accurate reporting from the disaster zones. And insurance companies are inspecting impacts and damage patterns so that people can start rebuilding their lives faster.

Drone deployment following disasters is truly a cross-agency and cross-organization collaborative effort -- private companies and nonprofits like the Red Cross worked side-by-side with local, State, and Federal officials in rapid response and recovery efforts.

Following the recent hurricanes, the FAA did an absolutely tremendous job issuing over 300 emergency UAS flight authorizations in affected areas in a very short amount of time.

I saw firsthand how our national aviation capabilities helped support the hurricane preparation and relief mission. I had the opportunity to fly with the NOAA Commissioned Corps "Hurricane Hunters" above Hurricane Irma before it made landfall in Florida. From the G-IV that we flew on, we dropped sensors down into the hurricane to collect data to inform national hurricane prediction efforts.

Since the early days of manned aviation, American ingenuity and entrepreneurship has fueled U.S. leadership in global aviation technology.

In recent years, we have seen those same American qualities at work in developing impressive unmanned aviation capabilities.

But as of today, the full power of an integrated airspace has yet to be demonstrated. Complete integration of UAS into the national

airspace system will be required to realize the immense benefits of UAS for public and commercial applications.

From a commercial perspective, integrating UAS into the national airspace system is a no-brainer. A 2013 study commissioned by the FAA, forecasted UAS integration to have a positive economic impact of tens of billions of dollars and create tens of thousands of jobs.

The true 'benefits' of drones will only be realized as entities lower service costs, re-design production processes, increase service quality and safety, and introduce new services that do not yet exist.

We are at a truly unique inflection point in American aviation. Never in our country's history have we seen such massive adoption, at such a rapid pace, of new aircraft taking to the skies. Since December 2015, nearly a million UAS owners have registered with the FAA.

And since Part 107 went into effect in August 2016, over 75,000 UAS have been registered for commercial use, a number which is forecasted to grow by a factor of five in just five years. That's 400,000 commercial drones being deployed to deliver life-saving medicines, inspect critical infrastructure, monitor crops, livestock and wildlife, and bring the world vivid, "birds-eye" images of breaking news as it happens.

And despite a lot of progress that we have made to expand the number and complexity of UAS operations across the country – Part 107 was instrumental in permitting demonstrably safe, complex operations not previously allowed – we haven't yet fully integrated our national airspace.

Even after over 8,000 airspace approvals, including both airspace waivers and authorizations, we still need to figure out how to best solve the issues surrounding beyond visual line-of-sight operations, nighttime operations, and flight-over-people operations.

The rapid advancement of technological innovation in UAS and drone operations depends on a regulatory framework that is flexible enough to keep pace. We cannot allow the promise of tomorrow to be hamstrung by the bureaucracies of the past.

And sadly, other countries are not afraid to race ahead when it comes to enabling drone innovation. Some of you here are looking to expand your operations overseas, conducting operational testing abroad where there are fewer restrictions and more flexible regulations.

At the White House, we want to make it possible for you to design, test, and deploy your inventions here in the United States. You shouldn't have to set up shop in the U.K. or Australia, just to make your dream a reality.

President Trump is passionate about finding ways to lower the regulatory barriers that get in the way of innovation. We want to encourage great ideas here at home; and to make the United States of America the leader in this emerging industry.

Since my first day on the job, it has been a highest priority of the White House Office of Science and Technology Policy to support the development of advanced transportation technologies, including complex UAS operations and technologies needed to integrate UAS into our national airspace system.

Just yesterday, President Trump held “Liberating America from Bureaucracy” Day at the White House, to further explore how we can review and revise existing regulations that may not be best serving the purpose they were intended to serve.

We at OSTP have been in near daily contact with our partners at the FAA and DOT, coordinating efforts to refine the regulatory framework governing UAS – to ensure that legitimate safety concerns are recognized, and technological innovations not stifled. I have been impressed by how forward-looking they are on these issues. They share our vision.

The White House has been working at the highest levels – with our Federal partners, aviation officials, security officials, and representatives of States and localities – to not only determine the best way to move forward with the issue of UAS integration, but to act.

But we can’t do this alone. Not at the White House and not at the Federal level. We absolutely need your help.

The FAA has recognized the need to work across these jurisdictional divisions towards our common goal – entering into agreements with universities, States, and localities to establish seven drone test sites across the country to conduct more advanced UAS research and validate operational concepts.

These test sites have been instrumental in pushing the industry forward, applying for and receiving waivers under Part 107, and testing expanded UAS operations. We love that – and would love to see more of it.

We’d also like to see more engagement between industry and State, local, and tribal governments. If we are to integrate UAS into the national airspace system, we are going to need local partnerships and community buy-in.

We need participation from the State and local levels of government to support Federal efforts, participation from our industry partners to

pioneer the software and hardware on these aircraft and supporting systems, participation from academia to push the boundaries on what is technically feasible to achieve, and participation from everyone else gathered here today.

And we're working with FAA and with DOT to do more of that. To test models for State and local involvement and to create testbeds for innovative technologies, including testing of UTM systems and counter-UAS capabilities.

We will need to develop airspace situational awareness and threat discrimination capabilities, and our security partners are right about that. And that underlines the need for us to work together – to work in parallel to lift those technologies off the ground and have them really take off.

Earlier this year, at Drone Focus in Fargo, Secretary Chao said that "the integration of drones into our national airspace will be the biggest technological challenge to aviation since the beginning of the Jet Age. Our job is to prepare the way for this new technology…so it can be deployed safely and usher in a new era aviation service, accessibility and ingenuity."

We understand that integration is a technical challenge – and quite frankly it's a public relations challenge, too. While some jurisdictions embrace the promise that new technologies can bring, others are just as likely to dig in their heels and lay down roadblocks.

The Federal Government can't do it all – we need partners who can stand up and serve as models for this industry, demonstrating to the rest of the world how to deploy this technology correctly, smartly, and safely.

That's why we're here today: to ask for your support, listen to your feedback, hear from you about what's working and what's not, and to tell you that this is a top priority for the Trump Administration and we have some really good things in the pipeline.

I want you to know that you have a partner in the White House, and we will continue to coordinate our efforts, to integrate our efforts, and to integrate drones into our airspace. And we very much look forward to working with all of you.

Thank you very much.