



April 20, 2015

National Telecommunications and Information Administration  
U.S. Department of Commerce  
1401 Constitution Avenue, NW  
Room 4725, UAS RFC 2015  
Washington, D.C. 20230

Re: Privacy, Transparency, and Accountability Issues Associated with  
Commercial and Private Use of Unmanned Aircraft Systems

We appreciate the opportunity to share our perspective with the Department of Commerce National Telecommunications and Information Administration ("NTIA") on privacy, transparency, and accountability issues associated with the commercial and private use of unmanned aircraft systems ("UAS"). We believe the NTIA should create voluntary guidelines that foster innovation, advance the unmanned aircraft industry, and enable operators to create technology solutions that respect privacy and property rights. The voluntary guidelines NTIA ultimately adopts should focus on empowering people to express their privacy preferences, while providing operators with the information necessary to make appropriate choices that respect privacy.

Our company is excited for and strongly supports the developing UAS industry. Indeed, the potential for UAS to improve Americans' daily lives is limited only by our nation's collective imagination. UAS enhance economic competitiveness, increase efficiencies, and make necessary tasks safer. Benefits of UAS range from more safely monitoring smokestack emissions, to improving the efficiency of farming, to making film and television production safer—and everything in between. Other countries, such as Canada, Australia and Japan, have already developed regulatory and policy frameworks that broadly permit UAS use. It is therefore essential that the federal government move forward expeditiously to develop a policy framework that broadly authorizes the commercial use of UAS in the United States.

We are developing a suite of airspace management tools to help integrate UAS into the national airspace system and American society. The first of those tools is NoFlyZone.org, which we launched on February 10, 2015. We started with NoFlyZone.org because privacy concerns are widespread and growing. We believed that providing a simple way for landowners to communicate their privacy preferences to UAS operators would be a better path toward protecting privacy than the moratoriums and bans that were being adopted by many cities. Most UAS operators want to respect

people's privacy; NoFlyZone.org empowers operators by ensuring they have the information necessary to respect privacy preferences. Our goal is to accelerate widespread adoption of drone-enabled services by giving people choices. We believe that building the public trust paves the way for the success of the UAS industry.

Existing technology-agnostic privacy laws go a long way to protecting the public's privacy. However, the latest UAS technology can be used to further enhance the public trust. For example, UAS operators can be provided with information about where certain individuals are particularly sensitive to UAS operations and operators can set their devices to avoid flying in those areas. Many UAS manufacturers already include a no-fly database of airports and other sensitive areas in their software, and this can be enhanced with locations of privacy-sensitive properties. Empowering people to make the right choices is the best way to foster innovation while protecting privacy.

Soon, we will be releasing our next airspace management tool, which will provide the UAS community with a map of airspace and an easy means of operating safely, legally, and with minimal hassle. By providing operators with information about places where they can fly, where they can only fly with permission, or where they may not fly, we will enable UAS operations that capitalize on innovation while respecting property rights and privacy.

The notion of privacy, particularly in one's home, and in the curtilage of their home, is a quintessential American value, and one that we hold dear as a society. Americans believe that a home is one's castle, a place where we can be free from not only unreasonable searches and seizures by the government, but also unwarranted intrusions by commercial entities. As Justice William O Douglas held nearly 70 years ago, "if the landowner is to have full enjoyment of the land, he must have exclusive control of the immediate reaches of the enveloping atmosphere."<sup>1</sup> While this right is not unlimited --- at some altitude a landowner's rights give way to the public's right to traverse in the airspace above --- we should nevertheless seek a set of policy guidelines that respect the expressed wishes of individuals. The law might require less, in fact it may be the case that what one exposes to the "plain view" of others is entitled to no protection at all.<sup>2</sup> But law is not NTIA's mandate in this process, rather the mandate for this process is to craft a regime of voluntary guidelines that in the President's words amount to "best practices."

In towns and communities across America, individuals and families place substantial value on maintaining control over their personal information. While the vast majority of UAS operators will be operating in a manner that respects privacy and property rights, many members of the public have nevertheless vocally expressed their apprehension about UAS use. While some of the fear may stem from a lack of

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<sup>1</sup> *United States v. Causby*, 328 U.S. 256 (1946).

<sup>2</sup> *Katz. v. U.S.*, 389 U.S. 362 (1967) (Harlan J., concurring)(stating "Thus, a man's home is, for most purposes, a place where he expects privacy, but objects, activities, or statements that he exposes to the 'plain view' of outsiders are not 'protected' ...").

understanding about the technology, individuals are nonetheless worried that others will spy on them in their own backyards. Companies too, worry that their competitors will fly UAS over their projects and steal trade secrets. A recent *Ipsos* poll reflects these fears, finding that 71% of respondents oppose drone operation over their private property and 73% of respondents favor regulation of consumer drones.<sup>3</sup> Privacy is a real concern, but it is not the only concern – we must recognize the need for innovation, and we must craft policy in a way that does not burden lawful uses of innovative new technology based on fear of worst case scenarios.

We believe that innovation will suffer if individuals are not provided with a means to operate in a way that respects privacy. People are less inclined to experiment when they are concerned about the public embarrassment that comes with potential failure. The dynamic UAS industry, built on the American spirit of innovation and entrepreneurship, will only succeed if we can respect Americans' privacy and build consumer trust. States and localities have unfortunately taken their own steps to limit UAS use based on privacy concerns, but sadly many of their ideas—such as overbroad moratoriums on the use of UAS—threaten the viability of this emerging technology. There are more intelligent ways of protecting the public, and we need a national conversation on these issues. Central to that conversation will be a recognition that technology may make unmanned aircraft *more* protective of privacy than manned aircraft.<sup>4</sup>

We commend the White House for directing the NTIA to initiate a multi-stakeholder process to develop and communicate best practices related to privacy, transparency, and accountability associated with the commercial and private use of UAS. This effort is timely and important and we look forward to participating in the NTIA process. We also urge other industry stakeholders to come to the table and engage constructively with the federal government, industry partners, and civil society in order to mitigate the public's privacy concerns related to commercial and private use of UAS. We look forward to participating in future stakeholder discussions aimed at fostering innovation, advancing the unmanned aircraft industry, and crafting voluntary codes of compliance that empower operators to respect privacy and property rights.

Sincerely,



Ben Marcus  
Founder & CEO

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<sup>3</sup> See <http://www.ipsos-na.com/news-polls/pressrelease.aspx?id=6749>.

<sup>4</sup> See <http://www.brookings.edu/research/reports2/2014/11/drones-and-aerial-surveillance>