



## United States Senate

WASHINGTON, DC 20510-0905

BILL NELSON  
FLORIDA

January 14, 2016

The Honorable Michael Huerta  
Administrator  
Federal Aviation Administration  
800 Independence Avenue, SW  
Washington, D.C. 20591

The Honorable Charles Bolden, Jr.  
Administrator  
NASA Headquarters  
300 E. Street, SW  
Washington, D.C. 20546

The Honorable Ashton Carter  
Secretary  
Department of Defense  
1000 Defense Pentagon  
Washington, D.C. 20301

The Honorable Jeh Johnson  
Secretary  
Department of Homeland Security  
Washington, D.C. 20528

To Administrator Huerta, Administrator Bolden, Secretary Carter and Secretary Johnson:

Technological advancements hold immense potential to improve lives, while also creating new, unintended dangers. Unmanned Aircraft Systems (UAS) are no exception to this. While industries clamor to integrate UAS into their operations to improve safety, increase efficiency, and promote growth, we must be vigilant to mitigate the safety and security risks that this new technology presents.

The characteristics of UAS—small, inexpensive, portable, and anonymous—lend themselves to nefarious uses by a range of actors, from criminals to lone-wolf terrorists. Ground-based fences and other security systems are not a practical deterrent to UAS, unbounded by altitude limitations. Each incident of a UAS sighted near an airport runway, or used to smuggle contraband over a prison wall, reminds us that this technology poses another kind of threat.

Because our national defense and critical infrastructure security systems are now vulnerable to this threat, so we must evolve to meet it. To that end, I ask that your agencies increase collaboration to mitigate the risk posed by UAS to aviation, critical infrastructure, and national security.

Additionally, the safety of the skies relies on your agencies' air traffic control operations to separate and de-conflict tens of thousands of flights per day, transporting millions of passengers and cargo. Rapidly evolving technology, paired with the exponential market penetration of UAS and the ease of use for operators with no aviation experience or knowledge, promise to deliver new challenges.

The Honorable Michael Huerta, The Honorable Charles Bolden, Jr., The Honorable Ashton  
Carter, The Honorable Jeh Johnson  
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What strategies or technologies are you pursuing to prevent UAS from entering airspace above or immediately adjacent to critical infrastructure and sensitive locations? Are you considering additional airspace restrictions to address the flight characteristics and capabilities of UAS that differ from manned aircraft? What is the status of federal collaboration to meet these challenges in a manner that promotes safety without stifling growth in the UAS or traditional aviation industries?

Leveraging the expertise and efforts of your agencies through collaboration and communication will enable our nation to meet the threats and challenges posed by UAS and take advantage of the opportunities too. Congress should be your partner in these endeavors, and as we work to reauthorize aviation programs, I ask that you keep me informed of developments to promote safety and security for UAS.

Sincerely,



Bill Nelson