

United States Senate

WASHINGTON, DC 20510

November 16, 2016

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

Dear Administrator Huerta,

We write to urge you to adopt robust regulations to ensure that our aircraft and ground support equipment are not vulnerable to cyberattacks. As new technologies continue to enhance all aspects of the airline industry, airplanes and airline operations have become increasingly interconnected. With these technological advancements come great benefits, including improved flight navigation, additional communications abilities, and greater operational efficiency. However, as we have witnessed recently in the automobile industry, we are concerned that these technologies may also create vulnerabilities that if exploited could threaten our aviation safety and security.

According to information gathered from twelve airlines and two airplane manufacturers, airlines may experience frequent attempted cyberattacks and infiltrations, but cybersecurity testing by airlines is conducted unevenly and by different parties. Further, while there is collaboration – though inconsistent – with government agencies, information sharing about cybersecurity threats, attacks, and protections across the industry may be uneven.¹

In this increasingly interconnected and technologically sophisticated world, cybersecurity cannot be an afterthought. All it takes is for one hacker to access an aircraft's critical avionics, such as the aircraft's navigation and flight control systems, and disaster can ensue. We know that those who mean to do us harm could try to exploit any technological vulnerability in our transportation systems, so we must continually bolster the standards and practices of the airline industry to promote the safety and security of the planes in our skies and our loved ones on the ground. Therefore, we must make sure that our aircraft, ground support equipment, and maintenance equipment are designed, manufactured, and operated to prevent cyberattacks.

As the steward of our nation's aviation safety, it is the FAA's responsibility to ensure that our aviation sector addresses cybersecurity vulnerabilities and threats. Now that the Federal Aviation Administration's (FAA) Aviation Rulemaking Advisory Committee (ARAC) has recently submitted a report and provided cybersecurity recommendations to the FAA, the agency should act without delay. As the Administration comes to a close and completes some remaining key priorities, we urge the FAA to initiate a rulemaking to ensure our aircraft, ground support equipment, and operations and maintenance practices are protected from cyberattacks. Specifically, we encourage you to consider establishing rules that:

¹ As Senate Debates FAA Reauthorization Bill, Markey Introduces New Legislation Calling for Cybersecurity Standards for Aircraft. (2016, April 7). Retrieved October 11, 2016, from <http://www.markey.senate.gov/news/press-releases/as-senate-debates-faa-reauthorization-bill-markey-introduces-new-legislation-calling-for-cybersecurity-standards-for-aircraft>

1. Ensure that aircraft, ground support equipment, and operations and maintenance practices include robust measures to protect against cyberattacks.
2. Mandate periodic evaluation, testing, and updating of cybersecurity protections.
3. Require aircraft to secure critical avionic systems and, to the extent possible, separate critical systems from noncritical software systems, such as inflight entertainment systems.
4. Establish processes for information sharing about cybersecurity threats, attacks, and protections amongst the airlines, aircraft manufacturers, government agencies, and key stakeholders.
5. Address operational threats and vulnerabilities that may arise with expanded communications and technology equipment as it continues to evolve and expand.

We appreciate your attention to this very important matter. We respectfully request that you provide a written response by December 7th about your plans to establish cybersecurity regulations for aircraft, ground support equipment, and operations and maintenance practices.

Sincerely,



Edward J. Markey
United States Senator



Richard Blumenthal
United States Senator