Statement of Oversight Subcommittee Chairman Paul Broun M.D. (R-Ga.)
Hearing on Operating Unmanned Aircraft Systems in the National Airspace System: Assessing Research and Development Efforts to Ensure Safety

Chairman Broun: “Good morning and welcome. This hearing, titled “Operating Unmanned Aircraft Systems in the National Airspace System: Assessing Research and Development Efforts to Ensure Safety,” is the first for the 113th Congress’s Subcommittee on Oversight. During the break, our name changed but our general and special investigatory authority to review and study, on a continuing basis, all laws, programs, and Government activities dealing with or involving non-military research and development remains the same.

I would like to extend a warm welcome to our witnesses. I also want to welcome our returning members and our new members, including the Subcommittee’s Ranking Member, the distinguished gentleman from New York Mr. Maffei. I look forward to working with you all. Today’s hearing focuses on integrating unmanned aircraft systems, or UAS, into the national airspace. Specifically, we hope to gain a better understanding of the safety risks, current technological obstacles and key research and development efforts being undertaken to overcome those obstacles. UAS have garnered a great deal of attention lately. In January, PBS’s NOVA aired a documentary titled "Rise of the Drones," last week’s TIME Magazine cover carried the same title, and of course the Administration’s use of drones for targeting terrorists was central to the confirmation hearing of CIA Director nominee John Brennan. However, privacy issues and military applications of UAS are beyond the scope of this hearing.

I use the term unmanned aircraft systems or UAS, instead of UAV or drone, because it is a more complete and accurate term. As the name suggests, UAS are complex systems made up of the aircraft as well as supporting ground, air, and communications infrastructure. UAS come in a variety of shapes and sizes and can carry out a wide range of missions.

Aviation has come a long way in a relatively short time thanks to American innovation and ingenuity. The list of American pioneers of aviation and aerospace is long. You may not know the details of their achievements, but I am sure you’ll recognize their names: Clyde Cessna, James McDonnell and Donald Douglas, Howard Hughes, William Boeing, Charles Lindberg, Kelly Johnson, just to name a few. Unmanned aircraft are the next step in the evolution of modern aviation which all began with two American brothers in 1903. Just as UAS have sparked a revolution in military affairs, they will likely also transform civilian and commercial sectors.

The Teal Group, an aerospace and defense industry market intelligence firm, predicts America will spend over $49 billion on UAS in the next decade. In 2010 the Association for Unmanned Vehicle Systems International estimated that over the next 15 years more than 23,000 UAS jobs,
totaling $1.6 billion in wages, could be created. This does not include the tens of thousands of secondary jobs in sensor manufacturing, software development and other complementary industries.

That said, the addition of thousands or tens of thousands of additional aircraft into the national airspace poses safety concerns. There is no guarantee that accidents will not occur, but we need to take every precaution to reduce the risks involved with UAS integration.

Last year, Congress directed that federal agencies, including the FAA and NASA, collaborate in accelerating the integration of UAS into the national airspace. The FAA Modernization and Reform Act of 2012 contains provisions designed to promote and facilitate the use of civilian unmanned aircraft. We on this Subcommittee know you have been working hard and have made progress toward meeting the prescribed objectives, but we also know there are many unresolved issues, both technological and regulatory.

Again, our goal here today is to better understand the research underway to overcome these technological issues and mitigate the risks involved with UAS integration into the national airspace system. We are particularly interested in hearing about any advances toward eliminating vulnerabilities in command and control communications, new “sense and avoid” capabilities and agreements on technological standards.

The Washington Post recently reported that at least nine American UAS crashes occurred near civilian airports overseas as a result of pilot error, mechanical failure, software bugs, or poor coordination with air traffic controllers. In August of 2010, the New York Times reported that a Navy UAS violated airspace over Washington, DC when operators lost contact due to a “software issue.” While this may be more acceptable in remote areas overseas, we need to do much better here in our own skies. The threat of command and control link jamming, GPS navigation signal spoofing, and system hacking is a real concern that will have to be addressed before any UAS integration into the NAS. Overcoming these challenges will require significant R&D investments by both the public and private sector. Given our nation’s current financial state, this demands more efficient coordination between all stakeholders.”

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