Opening Statement
As prepared for delivery

Mr. Dan Maffei, Ranking Member
Subcommittee on Oversight
Committee on Science, Space & Technology

"Operating Unmanned Aircraft Systems in the National Airspace System: Assessing Research and Development Efforts to Ensure Safety"

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Thank you, Mr. Chairman. I am excited about the opportunity to work with you on this important oversight committee and I appreciate the necessity of this hearing you have called today. Addressing the research and development efforts regarding the integration of Unmanned Aircraft Systems or U-A-S into the national airspace is a serious issue that presents daunting technical challenges, possible economic opportunities and potential threats to individual civil liberties. I know firsthand what a complicated issue this is and the challenges it presents. A detachment of Unmanned Aerial Vehicles operates in my district at the Hancock Field Air National Guard Base.

While commonly referred to as "drones," the future of unmanned vehicles goes far beyond what this word implies.

There are tremendous potential technical risks and public concerns, associated with integrating UAS into the national airspace. My constituents express those concerns on a daily basis. These aircraft represent an emerging technology with broad possible uses among many industries and government agencies. They could potentially provide benefits to many different industries, from farmers to fire-fighters to search and rescue teams, researchers, meteorologists and scientists. However, regardless of their specific use, we need to ensure that Unmanned Aerial Systems operate in our National Airspace safely and securely. But first they must successfully overcome the technical challenges that exist. Indeed, there are many.

A 2012 GAO report detailed several critical areas which must be addressed before unmanned vehicles can fly safely in our skies. Chief among them is the stark reality that the technology to provide unmanned aircraft the ability to "sense and avoid" other aircraft and airborne objects does not currently exist. This is a serious concern. Other technical challenges range from "lost-link" scenarios where communication between the pilot on the ground and aircraft is severed as a result of environmental or technical causes or by human actors – either inadvertently or intentionally. Acquiring dedicated radio-frequency spectrum in order to secure continuous communication for unmanned aircraft operations – particularly as the spectrum needs of on-board sensors expands -- is another challenge. I look forward to our witnesses addressing some of those challenges in-depth today.

There is a very real and critical human element to unmanned flight of any kind. Highly skilled pilots who once sat in cockpits now sit in ground stations, detached from the sensation of flight

while remaining integrally connected to the outcome of every mission. We need to ensure that those human elements – from proper training to medical certifications – are appropriately incorporated into the UAS integration plan as well.

A year ago, the FAA Modernization and Reform Act of 2012 was signed into law. It required the FAA to establish an integration plan permitting unmanned aerial systems to operate in the United States by September 2015. I look forward to hearing from the FAA today on their progress in the last year, as well as a realistic report on what challenges remain and where FAA stands in meeting these deadlines.

Twenty years ago, cell phone technology was in its infancy. Within ten years these devices had transformed from simple mobile phones to pocket accessories used to help small business owners expand. While security and safety concerns about the use and growth of these devices have existed since the beginning, their proliferation and technical advancements have not slowed. Today, there are more than 315 million cell phones in the U.S. alone and most of these devices not only carry digital cameras but Global Positioning Satellite or GPS capabilities as well. While these technical advancements have not been hindered or restricted there are reasonable and legitimate restrictions on the use of cell phones in hospitals, secure facilities, on airplanes and while driving.

Despite all of these recognized challenges, commercial and public sector interests remain and this technology continues to evolve and expand. As a result, we must develop the necessary framework to handle the emergence of unmanned aircraft safely and securely. We must also ensure the protection of individual rights and civil liberties in the air and on the ground. Like any new technology it is impossible to predict the ultimate path unmanned aircraft will take.

In tackling the tremendous task of ensuring the safe and secure operation and integration of UAS into the domestic airspace we are once again presented with the challenge of balancing many interests. There are private sector interests which may help grow the economy. The government's interest is to provide domestic security. And we as Representatives must safeguard the public's interest and protect their civil liberties. Developing an effective regulatory framework is an arduous process, but this hearing is one step towards ensuring that is happening in a timely and effective manner. It is our responsibility to recognize the need for oversight to ensure that proper steps are being taken, proper procedures are being created and federal agencies are meeting critical timelines to address the rapid emergence of Unmanned Aircraft Systems in the National Airspace.

I want to thank Chairman Broun for calling this hearing today and I want to thank the witnesses for appearing before the Subcommittee this morning. I look forward to your testimony.