PREPARED STATEMENT OF BRIAN WYNNE
PRESIDENT AND CEO, ASSOCIATION FOR UNMANNED VEHICLE SYSTEMS INTERNATIONAL

U.S. House of Representatives
Committee on Oversight and Government Reform
"Drones: The Next Generation of Commerce?"
June 17, 2015

Chairman Chaffetz, Ranking Member Cummings and members of the committee, thank you very much for the opportunity to address the Federal Aviation Administration (FAA) notice of proposed rulemaking (NPRM) on small unmanned aircraft systems (sUAS) and issues that should be considered as the FAA's reauthorization deadline approaches. I am speaking on behalf of the Association for Unmanned Vehicle Systems International (AUVSI), the world's largest non-profit organization devoted exclusively to advancing the unmanned systems and robotics community. AUVSI has been the voice of unmanned systems for more than 40 years, and currently we have more than 7,500 members, including over 600 corporate members.

As you know, UAS increase human potential, allowing us to execute dangerous or difficult tasks safely and efficiently. Whether it is assisting first responders with search and rescue missions, advancing scientific research or helping farmers more efficiently manage their crops, UAS will save time, money, and, most importantly, save lives. However, the benefits of this technology do not stop there; it has incredible potential to create jobs and stimulate the U.S. economy as well.

UAS are poised to be one of the fastest-growing industries in American history. As outlined in our 2013 Economic Impact report, the first 10 years after integration of UAS into the National Airspace System (NAS) will bring more than $82 billion and more than 100,000 new, high-paying jobs to the U.S. economy. Conversely, for every year that UAS integration into the NAS is delayed, the U.S. stands to lose $10 billion in potential economic impact, which translates to a loss of $27.6 million per day.

The benefits I just outlined can be recognized immediately, once the necessary rules are put in place to enable commercial operations. The FAA is currently working on finalizing rules for

commercial and public use of this technology, and we urge the agency to move as quickly as possible in finalizing these rules.

While the proposed rules are a positive step, passing and signing into law an FAA reauthorization measure before the current authorization expires on September 30, 2015, is critical to the future of the UAS industry in the U.S. The *FAA Modernization and Reform Act of 2012* brought the UAS industry to where it is today, and the next reauthorization act needs to build upon this foundation to continue to support this growing industry.

In order to advance this technology and its many economic and societal benefits, the FAA reauthorization bill should focus on two critical areas: accelerating the safe commercial use of UAS and expanding research efforts.

AUVSI has put forward recommendations for the upcoming FAA reauthorization bill that include an essential outline for a risk-based, technology-neutral approach to UAS integration; expanding Section 333 exemption authority from the 2012 act; requiring a comprehensive research plan for UAS integration; better utilizing the FAA-designated UAS test sites; elevating UAS integration leadership; and providing for an operational UAS traffic management system.

1. In order to realize the full benefits—both societal and economic—of this technology, and to keep the U.S. competitive globally, this legislation should take steps to accelerate commercial use of UAS.

    a. **A "Risk-Based, Technology Neutral" Approach**
    For the FAA to continue to keep up with the advancement of UAS technology, it needs to develop a risk-based, technology-neutral framework. By risk-based, technology-neutral, AUVSI means that regulations should be based on the risk profile of a particular UAS operation instead of solely regulating the platform being flown. This philosophy reflects a global trend that has been proven in nations with growing commercial UAS industries, such as the United Kingdom and France.

    For example, low-risk operations, such as aerial surveys above rural farmland and operations with micro UAS that weigh less than 4.4 pounds would be granted access to the airspace with minimal regulatory barriers. In practice, if the computed risk value of a UAS operation is below an acceptable threshold, the operation should be regarded as "safe," regardless of the specific technology used.

By adopting this approach, the FAA can establish a regulatory environment that is able to accommodate any and all UAS technology innovations by using flexible standards rather than continually proposing new rules for different UAS technologies, platforms and operations.

b. **Expanding Section 333 Exemption Authority**
Under the authority granted under Section 333 of the 2012 FAA reauthorization, the FAA has granted permission for limited commercial use of UAS on a case-by-case basis. This process can be used to allow for more uses of this technology in the short term by giving the FAA the clear authority to address Section 333 exemption requests for beyond-visual-line-of-sight operations. Beyond-visual-line-of-sight operations are crucial to many commercial uses of UAS. As written, the underlying provision does not specifically allow for beyond-visual-line-of-sight operations.

2. In order to fully integrate UAS into the National Airspace System, we will need to expand research efforts and lay the groundwork for more transformational uses of UAS technology.

a. **A Holistic Research Plan**
Working in conjunction with industry collaborators, a holistic UAS research and development (R&D) plan that takes into account the work being done at the FAA and other numerous federal entities will enable stakeholders to identify those UAS areas that need additional resources and focus. A comprehensive plan could identify areas where industry could come forward with new solutions.

This plan should also outline government and industry roles, milestones and dates for advancing outstanding research needs. These needs include an operationally deployed UAS traffic management program; resolving UAS spectrum issues; potential barriers to beyond-visual-line-of-sight operations; and defining the roles that specific federal facilities and entities will have in implementation of the plan.

The federal facilities and entities that, at a minimum, should be included in this research plan are the FAA's William J. Hughes Technical Center, the six FAA-designated UAS test sites, and the UAS Center of Excellence, as well as the National Aeronautics and Space Administration's (NASA) Ames and Armstrong Research Centers.

b. **FAA UAS Test Sites**

While the FAA-designated UAS test sites have been active for over a year, they are being underutilized. In order to help them perform the valuable research needed for integration and to encourage industry to use them, we should consider making the test sites eligible for federal funding under current FAA offices and programs that are engaged with UAS activities. This would not specifically add new funding for the test sites; rather it could allow for them to receive existing federal funding and give industry guidance and incentive to better utilize the test sites.

c. **Elevating the UAS Integration Initiative**

Federal efforts for facilitating the integration of UAS into the NAS are at a pivotal moment. Leadership and coordination with industry and government partners is absolutely critical to ensure the United States regains trailblazer status in this international industry.

Knowing that UAS integration must be done in coordination with NextGen, there is an opportunity to consider linking the two efforts and their resources more effectively going forward. These areas are very complementary to each other and UAS technologies will make the entire NAS safer. Appropriate high-level leadership will be key to making this focus successful.

d. **Enabling a UAS Traffic Management System**

It will be important to establish an operational UAS Traffic Management System/Network in order to ensure both the safe and efficient use of the airspace. While some initial commercial UAS operations will occur at low levels, this airspace may become complex with established navigation routes, as well as point-to-point route segments, requiring specific equipage requirements. A traffic management system will integrate UAS into the existing national airspace infrastructure and ensure the continued safety of the airspace.

The next several years will be critical to the expansion of UAS technology in the U.S. If we are to realize the full potential of this technology and its economic benefits, it is important that the FAA reauthorization bill give the FAA the authority and ability to create regulations that keep up with the rapid advancement of this technology.

Some of the provisions we are recommending for the FAA reauthorization legislation also apply to our comments on the FAA's sUAS NPRM, most notably the need for a risk-based, technology-neutral framework and allowing for beyond-visual-line-of-sight operations.

In addition to weighing in on the NPRM and reauthorization act, AUVSI has also formally submitted a response to the National Telecommunications & Information Administration's "Comments on Privacy, Transparency, and Accountability Regarding Commercial and Private Use of Unmanned Aircraft Systems." AUVSI supports a constructive dialogue on this issue of privacy. However, we should keep in mind that the role of the FAA is to keep our skies safe for all users – manned or unmanned. Further, there is already have a robust legal framework in place that protects Americans' right to privacy, and these laws apply to UAS just like cell phones, traffic cameras, and other connected devices. Privacy policies should focus on how data is collected and used, as opposed focusing on the specific platform that is being used.

UAS technology is at an exciting and pivotal stage. The technology is developing rapidly, with new applications being highlighted nearly every day, much faster than our country's capacity to develop the necessary regulations. We need to make sure that the FAA adopts the proper framework to keep up with this technology and is sufficiently resourced to work with industry stakeholders to perform essential research ensuring the safety of our airspace.

Thank you again for the opportunity to speak today. I look forward to answering any questions the committee might have.

Committee on Oversight and Government Reform
Witness Disclosure Requirement – "Truth in Testimony"
Required by House Rule XI, Clause 2(g)(5)

Name: BRIAN WYNNE

1. Please list any federal grants or contracts (including subgrants or subcontracts) you have received since October 1, 2012. Include the source and amount of each grant or contract.

NONE

2. Please list any entity you are testifying on behalf of and briefly describe your relationship with these entities.

THE ASSOCIATION FOR UNMANED SYSTEMS INTERNATIONAL (AUVSI)

I AM THE PRESIDENT & CEO

3. Please list any federal grants or contracts (including subgrants or subcontracts) received since October 1, 2012, by the entity(ies) you listed above. Include the source and amount of each grant or contract.

NONE

I certify that the above information is true and correct.

Signature: Brian P. Wynne Date: 06/15/15

MR. BRIAN WYNNE
PRESIDENT AND CEO
ASSOCIATION FOR UNMANNED VEHICLE SYSTEMS INTERNATIONAL

Brian Wynne is the President and CEO of the Association for Unmanned Vehicle Systems International (AUVSI), the largest association representing the unmanned systems and robotics industries. Brian assumed his position on January 12, 2015 having previously led the Electric Drive Transportation Association (EDTA), a post he held since April 2004. The EDTA promotes battery, hybrid, plug-in hybrid, and fuel cell electric vehicles and infrastructure.

The Association for Unmanned Vehicle Systems International is the world's largest nonprofit organization dedicated to the advancement of unmanned systems. AUVSI represents more than 7,500 members from over 60 allied countries and 2,700 organizations involved in the fields of government, industry and academia.

Mr. Wynne brings in-depth experience in transportation and technology applications gained in leadership roles with trade associations and public-private partnerships. He has previously served as Senior Vice President for business and trade at the Intelligent Transportation Society of America (ITSA). Prior to that role, he led a global technology association as CEO of Association for Automatic Identification and Mobility (AIM). Mr. Wynne started his career as a legislative assistant to U.S. Senator Charles Percy and has served on several not-for-profit boards.

He holds a bachelor's degree from the University of Scranton, a master's degree from the School of Advanced International Studies at Johns Hopkins University, and was a Fulbright Scholar at the University of Cologne in Germany.

Mr. Wynne is an instrument-rated pilot who flies a Socata Trinidad.