International Collaboration to Ensure Safe UAS Operations

By Brian Wynne, President and CEO, AUVSI ICAO Global Remotely Piloted Aircraft Systems Symposium September 19, 2017

- Thank you for inviting me today. I am pleased to be here in Montreal with so many people
 devoted to keeping the airspace safe as unmanned aircraft systems operations increase and
 become more complex.
- As the president and CEO of the largest trade association for the global unmanned systems and robotics industry, I have witnessed firsthand the massive growth of the UAS industry and the impressive technological advancements of the past few years.
- Thousands of businesses around the world are embracing this technology and integrating UAS into their operations.
- Thanks to years of continued collaboration between industry and government, for example, there now is a flexible, risk-based approach to regulating UAS in the United States one that is now held up as a model for the rest of the world.
- In August 2016, the U.S. Federal Aviation Administration implemented its small UAS rule, which helped reduce many barriers to civil and commercial UAS operations in the U.S.
- As of this month, over 79,000 platforms have been registered for commercial use and nearly 60,000 remote pilots are certified to fly in the United States. The FAA expects more than 400,000 UAS to be flying for commercial purposes over the next five years, which is a five-fold increase from today.
- The small UAS rule also recognized the need to be flexible and established a waiver process for UAS operators to request permission from the FAA to fly outside the permitted standards, if it can be done safely.
- And increasingly, operators are testing the limits of what is possible. Over 1,000 operators in 47 states have used the rule's waiver process to expand the types of UAS operations and, in turn, broaden the commercial services they offer, from oil and gas pipeline inspections to real estate photography to construction site analysis and many more.
- This waiver process was most recently on display in the aftermath of Hurricanes Harvey and Irma, when UAS helped first responders save time, money, and most importantly, lives in Texas and Florida.

- It is more apparent than ever that businesses and civil operators should be able to reap the full benefits of UAS technology without unnecessary hurdles. Industry stakeholders and governments must therefore work together on a global level to identify common solutions to the industry's greatest challenges.
- One such challenge is the creation of a UTM system that can work alongside existing manned aircraft traffic management systems.
- My organization has advocated for the development and implementation of a UAS traffic management system, or UTM, and we have monitored the progress of NASA and other stakeholders that are undertaking a significant public and privately funded effort to develop a UTM model in the United States.
- That's why AUVSI is pleased to see ICAO taking steps to explore solutions that will lead to the
 creation of a global UTM system and allow companies to operate globally under the same
 standards.
- Safe integration into the airspace will allow businesses and innovators across the globe to harness the tremendous potential of UAS and unlock the many economic and societal benefits the technology offers.
- Additionally, a global UTM solution will reduce barriers to innovation and improve safety and security for all aircraft – both manned and unmanned.
- As we discuss small UAS and low altitude traffic management, we should also recognize the
 need to integrate larger platforms at higher altitudes. This is arguably an easier task, as large
 unmanned aircraft flying IFR in controlled airspace would follow the same international
 procedures as manned aircraft in the same airspace.
- In fact, in the United States, larger platforms already safely share controlled airspace with manned aircraft to help U.S. Customs and Border Protection with border security operations and to help NASA and NOAA monitor wildfires. NASA also deploys its large Global Hawks to track hurricanes, often relying on international air traffic control to do so.
- A worldwide framework that streamlines and harmonizes regulations both high and low altitude, for small and large platforms – would allow the entire global market to tap into the benefits that UAS stand to offer.
- Our economic report projects that the expansion of UAS technology will create more than 100,000 jobs and generate more than \$82 billion to the U.S. economy alone in the first decade following UAS integration into the airspace.

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