

UAS

EXPANDING TRANSPORTATION AND DRIVING GROWTH



THE CHANGING FACE OF “DRONES”

There continues to be an evolution and maturing of the unmanned aircraft system (UAS) segment of the A&D industry as more commercial applications and technology advances are realized. Initial concepts of flying urgently needed medicine to distant communities have evolved to include everything from conducting dangerous infrastructure inspections to self-flying air taxis. Whether it is referred to as a drone, a UAS, or an autonomous vehicle, the economic and social impacts that this industry is having cannot be overstated. Package delivery companies have added drone delivery to their shipping services and first responders consider drones a piece of standard and necessary equipment. There has also been significant investment and growth in the area of personalized travel on demand as it pertains to the developing area of urban mobility. As the number of roles that drones fill increases so too will the pressure on technology and policy to keep up with its accelerating pace.



REALIZED BENEFITS

With the surge in new applications, the commercial UAS sector is poised to be one of the most dynamic growth sectors of the global aerospace industry. The Association for Unmanned Vehicle Systems International predicts that by 2025 UAS integration in the United States could create more than 100,000 jobs with an economic benefit of \$82 billion. As UAS applications have shifted from primarily military, research, or enthusiast in nature to everyday commercial use, adjacent industry benefits are already being realized. As of October 2019, nearly 1.5 million drones had been registered with the FAA, with more than 400,000 registered for commercial operations, and over 150,000 remote pilots having been certified. Beyond the obvious economic and employment contributions are the societal benefits in terms of safer operations in a variety of agriculture, infrastructure, and first responder roles, as well as improving support and response to less accessible areas in terms of healthcare and disaster management.

AN EVOLVING LANDSCAPE

In October 2019, the United Parcel Service (UPS) received its full Part 135 certificate allowing the company to fly an unlimited number of drones via a dedicated drone delivery service, including night operations. UPS was granted its certification via the FAA's Unmanned Aircraft Systems Integration Pilot Program that was created by an October 2017 Presidential Memorandum. In addition to this memorandum, the implementation of the FAA Reauthorization Act of 2018 has laid the groundwork for potentially significant progress in the area of integration of UAS into the National Airspace System (NAS) both in terms of commercial drone operations as well as the rapidly growing field of Urban Air Mobility.

The FAA's key UAS focus areas under the 2018 authorization will be primarily on Remote Identification (NPRM FAA-2019-1001) of UAS, updating existing regulations on carriage of property (i.e., package delivery), and public safety as it pertains to UAS operations, both by first responders and their response to non-compliant operations by individuals. These areas, along with those highlighted in the FAA Extension, Safety, and Security Act of 2016, are the backbone of developing and implementing a safe and reliable approach to fully integrating UAS into the NAS with technology and policy key to defining that approach.



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