

Three-Part Article Series Considers Safety Implications As FAA Issues Guidance on Model Aircraft

June 25, 2014

The *Washington Post* this week published a three-part series of articles on the safety of Unmanned Aircraft Systems (UAS): "War Zones: When Drones Fall From the Sky," "Domestic Airspace: Crashes Mount as Military Flies More Drones in U.S. Skies," and "Near Misses: Close Encounters on Rise as Small Drones Gain in Popularity." In developing the articles, author Craig Whitlock obtained over 50,000 pages of documents related to UAS accidents or "close calls" via Freedom of Information Act (FOIA) requests to various branches of the military and government agencies. According to Whitlock, the documents indicate that there have been approximately 418 crashes involving military UAS worldwide since 2011. Federal Aviation Administration (FAA) records also indicate that there have been 23 accidents involving civilian UAS operated by law enforcement, universities, and other UAS users authorized by the FAA within the United States since 2009. Additionally, according to the FAA, there have been 15 "close calls" between airplanes and smaller unregistered UAS in the past two years. Whitlock argues that these statistics undercut claims that increased UAS use within U.S. civilian airspace will be safe.

In 2012, Congress imposed a dual mandate on the FAA: expeditiously issue rules allowing commercial use of UAS but, at the same time, ensure that the safety of U.S. civilian airspace is not compromised. The agency plans to issue its first rules for UAS of 55 pounds or less later this year, but it will take longer to determine proper regulations for larger UAS. As it develops both sets of rules, the agency has indicated a willingness to allow some commercial use of small UAS

Practice Areas

Uncrewed Aircraft Systems (UAS)

subject to restrictions. For example, filmmakers, agricultural users, and oil and gas industry users have sought or plan to seek authority to operate small UAS prior to the implementation of the FAA's final rules. UAS advocates are growing increasingly impatient with the FAA's slow progress, warning that foreign competition may threaten the development of a commercial UAS industry in the United States. Based on pent-up demand, the FAA predicts there will be up to 7,500 small commercial UAS in U.S. airspace by 2018.

According to Whitlock, public concern about the expanded use of UAS domestically has focused primarily on privacy issues. Whitlock instead emphasizes the safety issues, offering harrowing stories about military drones disappearing into thin air or airplanes nearly colliding with small, unregistered "rogue drones." These "rogue drones" are operated by hobbyists who, in theory, must fly them over unpopulated areas, away from airports, and under 400 feet. However, according to Whitlock, several airplane pilots have reported "close encounters" with UAS that are too small to show up on radar systems. One of the FAA's main concerns about expanding the use of UAS in civilian airspace is that UAS have difficulty detecting and avoiding other objects such as planes. Whitlock reports that manufacturers are developing UAS sense-and-avoid technology, but it will not be ready for several years.

Whitlock noted that the FAA has repeatedly assured the public that it will not compromise the safety of U.S. airspace as it opens the airspace up to commercial UAS. FAA Administrator Michael P. Huerta said, "As we integrate unmanned aircraft into the national airspace system, I believe the public expect us not only to maintain but to continue to enhance the levels of safety that we've been able to achieve for conventional aircraft."

In the meantime, the FAA has actively enforced its ban on operating UAS for commercial purposes, while opening the door to limited uses via its exemption processes. And with regard to hobbyists, the FAA this week issued a guidance document on the "do's and don'ts" of flying UAS safely (What Can I Do With My Model Aircraft?), as well as a Notice on the FAA's interpretation of the statutory special rules for model aircraft (Interpretation of the Special Rule for Model Aircraft). Comments to the FAA Notice will be due 30 days after publication in the Federal Register.