New Rulemaking Committee Could Expand Drone Uses for Utilities and Other Industries

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On February 24, 2016, the Federal Aviation Administration announced the establishment of a new Aviation Rulemaking Committee (ARC) to develop performance-based recommended standards and requirements for the operation of micro unmanned aircraft systems (UAS) in the National Airspace System. As previously defined in the Notice of Proposed Rulemaking (NPRM) for the Operation and Certification of Small Unmanned Aircraft Systems, a micro UAS is an unmanned aircraft that weighs no more than 4.4 pounds (2 kg) and is constructed of frangible materials “that break, distort, or yield on impact so as to present a minimal hazard to any person or object.” The micro UAS ARC is to include members representing a diverse set of aviation stakeholders with emphasis on individuals with knowledge of small UAS design, manufacturing, and operations, data collection, safety, sensors, and testing. The micro UAS ARC is to develop and submit its recommendations to the FAA by April 1, 2016, which recommendations will then be considered in the possible development of a future NPRM focused on micro UAS classification and operations.

Why is the development of interest to utilities? First, the defining characteristics of micro UAS could include many inexpensive but capable small drones presently available on the retail market. This could enable utilities to more readily deploy UAS technology and begin gaining experience with it in a variety of applications. Second, one of the key issues the ARC will focus on is the development of standards and operating parameters that could allow micro UAS to be operated over people who are not directly involved in the UAS operation. Most utilities currently operating small UAS do so pursuant to Section 333 Exemptions that require operations be conducted at least 500 feet from all nonparticipating persons, vessels, vehicles, and structures unless certain precautions are taken. This restriction can limit utilities’ ability to operate small UAS in some areas, such as over residential neighborhoods for post-storm damage assessments or for routine inspections of utility infrastructure located in densely developed areas. A utility will still need to confine its UAS operations to above private or controlled access property where it has permission from the property owner, another typical Section 333 Exemption requirement; however, the ARC’s recommendations could allow utilities to deploy micro UAS along transmission and distribution line easements and fly within 500 feet of persons not involved in the operation.

These potential improvements resulting from the work of the micro UAS ARC do not address the operation of larger UAS that would be required for long distance utility applications, or the current restriction prohibiting beyond visual line of sight operations. Furthermore, the initial list of invited members of the micro UAS ARC does not include any representatives from the utility or energy sectors, but does include other small UAS users such as Google and various agriculture, real estate, and news media interests which could also benefit from these changes. Nevertheless, while the interests of the utility and energy sectors are not directly represented on the ARC, there is reason for optimism that the micro UAS ARC’s recommendations and potential future rule changes will open the door for an expanded number of beneficial, short range drones uses by utility and energy companies.