

**ARTICLE** 

## Not All UAS Operations Will Be Regulated by the FAA ... Indoor Unmanned Aircraft Systems (UAS) Will Need Risk Management Approaches to Make Them Insurable

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Although the timing and scope of Federal Aviation Administration (FAA) regulations for the operation of Unmanned Aircraft Systems (UAS) may be uncertain, there is no doubt that such rules are coming. UAS will be subject to FAA regulation because they meet the statutory definition of "aircraft" and appropriate rules for UAS operations will be needed to enable FAA to carry out its statutory responsibility to mitigate the risks UAS pose to other aircraft operating in the National Airspace System (NAS), as well as persons and property on the ground. But not all "UAS" operations will be subject to FAA regulation. How so?

The statutory definition of an "aircraft" is any contrivance capable of flight through the air. The FAA's enabling legislation considers the "air" to mean the navigable airspace over the United States. While some may argue that UAS operated in city "canyons"—over streets and sidewalks between rows of skyscrapers, and well below the level of their rooftops—are not in navigable airspace, the FAA will likely consider it "navigable" to the extent that UAS can operate there to the potential detriment of persons and property. But once a UAS operation moves indoors, it is no longer in "navigable" airspace and the good, or bad, news is that it is no longer subject to FAA safety regulation. Thus, while a UAS operation over, or even inside, an outdoor sports stadium will likely be regulated by the FAA, once the rain or snow starts to fall and the domed roof is closed, the venue becomes an indoor stadium—no longer navigable airspace and not subject to any federal aviation safety regulations.

## **Practice Areas**

Uncrewed Aircraft Systems (UAS)

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The benign flight characteristics of some of today's UAS—small, lightweight, and quiet electrically powered multi-rotor aircraft—make them viable tools for niche "indoor" uses such as retail shopping mall, public school, and hospital security. For example, as a low-cost adjunct to fixed surveillance cameras and human foot patrols in large shopping malls, a properly equipped small UAS could be used by a central mall security office to enhance human foot/Segway patrols. Indoor UAS could be used in a shopping mall to keep an "eye" out for shoppers or senior citizens experiencing apparent medical emergencies, lost or unattended persons or pets, and potentially disruptive groups of people. When deemed necessary, the UAS could track the indoor movements of suspected shoplifters until mall security or police can respond. Although privacy concerns could arise, they would not likely be materially different from those arising from existing forms of video or foot patrol mall surveillance.

The primary challenge to using small UAS for indoor applications will be to do it safely in the present absence of government regulations or applicable private safety guidelines. Under current law, any mishaps would be addressed applying the tort law (ascribing liability for negligent acts), and people who suffered damage to themselves or their property would have to pursue legal action against the UAS operator. Any indoor-UAS operating policy should prohibit guests from operating their own UAS while in the building. This is already taking place at hotel and resort properties, primarily to protect the privacy and comfort of guests. It would not be far-fetched to envision a time when personal UAS are used routinely to create aerial selfies the way we use smart phones today.

A prudent mall owner interested in supplementing its security operation with a small UAS would need to secure an addendum to its liability insurance policy, and any insurer will likely insist on identifying and mitigating the risks associated with the proposed UAS operation(s). A set of UAS safety guidelines for design, operation, maintenance, and operator qualifications and training will need to be drawn from the collective experience of the UAS community, the model aircraft community, the Association of Unmanned Vehicle Systems International (AUVSI), and the insurance industry. By establishing a voluntary code of best safety practices for indoor UAS operations, risks can be identified and mitigated to make such operations insurable.

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