LAW ALERT
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Small Unmanned Aircraft Systems for the Construction Industry

For nearly ten years now, the use of unmanned aircraft systems ("UAS", or "drones") for commercial purposes has been officially regulated by the Department of Transportation ("DOT") and Federal Aviation Administration ("FAA"). In accordance with the federal rules, unmanned aircraft weighing less than 55 pounds can be legally flown in commercial operations within the parameters established by the FAA in Title 14 of the Code of Federal Regulations (14 CFR) part 107, Small Unmanned Aircraft Systems.

With the streamlining of commercial flight requirements, the use of this powerful technology for the construction industry has increased by leaps and bounds. The allure of UAS is their ability to perform tasks and achieve results safer, faster, and cheaper than traditional methods.

Small, rotary-based, camera-mounted UAS provide a unique visual perspective and the ability to inspect and document physical conditions over wide areas and in hard-to-reach places without putting a person in danger, and without incurring more traditional, but cost-prohibitive operational and ancillary costs. These craft can monitor and document progress and site conditions on construction projects, inspect external components of structures, such as buildings, roofs, cranes, bridges, scaffolds, and other out-of-reach places, documenting and/or investigating work site accidents and, of course, marketing and PR, by capturing photographs of completed projects for potential clients and customers.

Despite their many uses and advantages, drones present risks of their own, and as such, must be used responsibly and carefully by experienced drone pilots familiar with the equipment, local airspace and, of course, the Federal, and increasingly, state and local, rules and regulations. Contractors choosing to take advantage of this exciting technology should establish and enforce safety protocols and best practices for drone use to maximize the capabilities that drones afford, while minimizing exposure from potential risks.

Specific Limitations Relevant To Contractors

The rules pertaining to small drones primarily regulate three key areas: (i) the UAS device; (ii) Operator qualifications; and (iii) in-flight operations.

The Federal rules require a remote pilot in command, which stipulates that the person operating the UAS must either hold a remote pilot airman certificate or be under the direct supervision of a person who holds a certificate.

Significantly, FAA rules prohibit drone flight over people not "directly participating" in the flight operation unless they are under shelter or in a stationary vehicle. Only the remote pilot in command, the person operating the controls (if different), the visual observer, and any other person who is necessary for the safety of the operation are considered to be "directly participating" in the operation. The purpose of this requirement is to protect people on the ground who are likely unaware of the drone flying overhead and could be injured if control of the aircraft was lost.

Therefore, flying an unmanned aircraft over an active, open construction site would most likely require the contractor to obtain a waiver from the FAA.

Avoiding Risk And Exposure For Contractor Drone Operations

Unmanned aircraft present most of the same risks as other forms of aircraft, but thankfully on a smaller scale. For most commercial UAS users, the most likely losses include: (i) injury or damage due to collision or interference with another aircraft; (ii) injury or damage to people or property on the ground; (iii) damage to the unmanned aircraft; (iv) violation of another's rights when flying over private property; and (v) unauthorized collection, use, or storage of data.

The insurance industry largely treats drones as "aircraft." As such, UAS are treated just like manned aircraft when determining coverage for the exposures associated with owning and using drones. Standard commercial property and liability policies do not cover most aircraft exposures unless such coverage has been added to the policy. Therefore, companies that own, lease, or rent UAS to conduct operations may have an uninsured liability unless they have taken specific steps to cover this risk.

Avoid Claims By Implementing A Best Practices Policy

The FAA regulations provide only minimum standards, and provide little to no guidance on flight planning, record keeping, and maintenance. As such, contractors interested in minimizing their exposure to loss may do so by implementing best practice guidelines.

The following guidelines may help avoid claims:

- Performance of routine maintenance and a pre-flight inspection before each flight.
- Prepare a mission flight plan. A flight plan has the benefit of identifying: (i) the most ideal spot to launch; (ii) the optimal flight path that will avoid pedestrians, and obstacles; and (iii) the time required to complete the flight from takeoff to landing to ensure it is well within the battery capacity.
- Consider weather conditions, particularly wind, and any condition that may reduce visibility, such as, fog, rain, and snow, which should be assessed before any flight. If weather presents any concern at all, postpone the operation, review the forecast and wait until conditions improve.

- Utilize a spotter, or visual observer to assist with drone operations. A spotter may be helpful in keeping a look out for unexpected hazards (i.e. manned aircraft, birds, power lines). A spotter may also keep an eye on the drone operator, who could be exposed to dangers due to his or her attention being focused on the flight and aircraft.
- Maintain a flight log and record of all UAS operations. This is useful for not only determining when scheduled maintenance should be performed on the UAS, but to also provide a defense against third-party claims.

Conclusion

Remarkable advances in technology, together with the increased availability and affordability of UAS nearly guarantees that these devices will be utilized in ever increasing numbers for commercial operations. Contractors wishing to take advantage of drones are encouraged to do so, but just as any piece of equipment, or tool utilized on the job, precautions must be taken in order to minimize risk and exposure.

ABOUT THE AUTHOR:

Craig H. Handler is an experienced attorney dedicating much of his practice to working with construction industry professionals and property owners in contract drafting and negotiation and in disputes related to defective construction, delay, scope of work, mechanic's lien foreclosure and defense, OSHA violations, ECB violations, and Labor Law claims. Mr. Handler's prior experience working with the insurance industry has afforded him a broad understanding of the complex insurance coverage and indemnity issues that regularly impact the construction industry. Mr. Handler routinely applies this expertise to his practice in order to help his clients cut costs, limit exposure and avoid the many risks associated with this fast-paced industry. Mr. Handler is a licensed drone operator and enjoys piloting his drone recreationally as well.

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