ALFA International
THE GLOBAL LEGAL NETWORK

2022 Construction Seminar

July 27-29, 2022

DRONE USE, LIABILITY AND COVERAGE

David R. Stechow
Moderator
PLUNKETT COONEY
Detroit, Michigan
dstechow@plunkettcooney.com

Drone Use, Liability and Coverage

Since the Federal Aviation Administration has approved drones for commercial use, they have become the way of the future. Industries such as agriculture, construction, energy, insurance, and real estate, are just a few using drones as the way of the future. Even package delivery by drone will soon be a common part of our everyday lives.

Within the construction industry, drones and the real-time data collected have contributed to improvements across the industry. Although drones are not yet actually building structures or moving materials, they are being used in ways that reduce project completion times and lower cost, thereby increasing efficiency on the project. Drones are being used by contractors to survey a construction site, to record conditions faster and less expensively than traditional inspections, to document construction progress among other things.

Because of these benefits, those within the construction industry – owners, architects/engineers, and contractors – are more and more frequently engaging the use of drones on construction projects. Despite these benefits, drones present an equal number of risks. Therefore, the scope of the use of the drone, as well as legal considerations, including criminal law violations, civil liability issues and insurance coverage must be considered.

Legal Requirements and Regulations

On June 28, 2016, the Federal Aviation Administration ("FAA") introduced regulations applicable to the operation of civil unmanned aircraft systems within the United States. 14 CFR Part 107 ("Part 107"). These regulations apply to drones being used commercially.

All drones must be registered with the FAA and operation must be performed by a person with a remote pilot certificate issued by the FAA. Thus, prior to deploying a drone, those in the construction industry must register the drone and have a person obtain a pilot certificate in order to operate the drone.

Once this person has been issued a remote pilot certificate by the FAA, the flight operation must be headed by this person, now known as a "remote pilot in command." The controls for the drone can only be operated by the remote pilot in command or a person under the remote pilot in command's direct supervision where they can immediately retake the controls if necessary. The regulations also only allow drone flights to take place during the day with limited exceptions for flying during twilight provided the drone is properly equipped with lights. In addition, drones may only be flown when there is at least three miles of visibility from the control station and the person operating the flight can maintain an unaided visual line of sight with the drone at all times. Not surprisingly, the FAA requires the drone operator to avoid prohibited, restricted and control air spaces, it must not interfere with any operations or air traffic at an airport, heliport, or sea plane port, and must yield the right of way to aircraft.

Significantly, Part 107 prohibits drones from being flown over people unless those persons are directly participating in the operation of the drone or are located under a covered structure or inside a vehicle that provides protection. This creates a concern if the intent is to fly the drone over a project under construction while workers or visitors are on site. The FAA may grant a certificate of waiver, however, authorizing a deviation from any of these regulations if it finds the operation can safely be conducted under the terms of that certificate of waiver. Anyone planning to use a drone on a construction project will need to obtain waivers from the FAA should plan ahead as that process may take months to obtain the waiver.

Drone Use in Construction

Once one has selected the drone and has addressed all of the FAA requirements, the next step is determining the uses of the drone in the construction process.

Before the shovel even hits the dirt at the ceremonial groundbreaking, a great deal of planning goes into a construction project. Architects, engineers, and contractors are using drones for planning and overall design and bid calculations. One of the first steps is a site review. A drone can assist with aerial surveying and mapping in order to get a lay of the land. The information gathered can be used to assist a design team in understanding the site orienting structures and even locating utilities. Drones can aerially map the entire construction site including the terrain in a matter of minutes compared to the time and effort the process would take by even the most skilled surveyors. The use of a drone to create topographical images of the actual conditions of the construction site can be accomplished much more accurately and efficiently than conventional methods.

Drones can also have a significant positive impact on the project design team. In addition to locating utilities and orienting structures, the high resolution images produced by drones can be manipulated into 3-D models allowing the project team to pinpoint challenges during pre-construction, reducing the possibility of costly conflicts during construction.

One of the most useful benefits drones offer on a job site are progress monitoring and enhanced communication between contractors on the job. Real-time, up-to-date sharing of videos and progress photographs on a job site is critical. This again can reduce the possibility of costly conflicts during construction and help develop a quick resolution when one arises.

In addition to increasing the communication between contractors on site, drones can provide real-time progress reports to owners and developers. Clients can be apprised that a project is moving on schedule and within budget. Traditionally, these updates are provided either with in-person visits or in-depth reports. However, drones can supplement or entirely replace these with virtual walkthroughs of the construction site without having to travel on-site, saving the client an enormous amount of time and resources. The images and data collected can also be used to compare the as-built conditions to the design, revealing possible discrepancies between the design and reality as construction progresses allowing for corrections to be made in a much more timely and, hopefully, less expensive manner.

Drones are also a useful tool for accident prevention. Safety is one of the top priorities of most construction companies. Images showing an overview of the project can help identify where hazards could pop up and also allows managers to monitor the job site ensuring workers are compliant with all safety requirements. In addition, drones can perform certain tasks such as taking measurements at elevated areas and mitigate the risk to workers manually performing such tasks. Or, if it is an area of crushing depth, or an area of high heat or chemical exposure, drones can reach it more easily and with no risk to an employee. The risk of exposure and injury is circumvented by the use of a drone.

Drones can also be used to perform crucial inspections throughout the project. The drones can be flown around the structure to collect data of fine details with high resolution imagery for analysis. Additionally, drones with thermal sensors can be used to identify problems like water leaks or concrete cracks as well as detecting heat leaks, cold spots and any electrical issues.

Another benefit of the drone is that it allows for the monitoring of the project site to keep track of the location of workers and equipment. With a drone, a contractor can do a quick fly-over and assess whether workers and equipment are where they need to be. Of course, the drone can also be used to determine whether equipment is still needed on site or can be returned preventing additional charges. The use of the drone is also helpful to monitor the delivery of materials and to act a security surveillance. Hundreds of millions of dollars worth of construction equipment and materials are stolen from job sites every year with very little of it ever being recovered. This additional security is, therefore, a very beneficial factor.

Of course, the imagery collected by the drones can lead to advertising and marketing materials of the owners, developers, and contractors. The images collected by a drone can be used to create impressive website content and promotional materials and exhibit the quality of a company's work. Videos from a drone can be used to create a time-lapse reel showing the story of the project.

Additional Considerations for Drone Usage

In addition to companies and drone operators remaining aware of the FAA regulations, they must be cognizant of state and local laws including those regulating drone use as well as those pertaining to tort and criminal law with respect to negligence, privacy, trespass and nuisance and intellectual property rights.

Companies using drones need to understand the scope of potential criminal and civil liability they could face because of drone usage. For example, in 2015 the FAA proposed a $1.9 million civil penalty for a company conducting drone activity in restricted air space. Although this is an extreme case, the fines can be expensive depending on the severity of the violation.

Accidents also expose construction companies to civil liability. A drone crash presents risk to project employees, nearby pedestrians and property. This could lead to workers compensation claims and negligence claims for personal injury and property damage. It should also be noted that any accident resulting in a serious injury, loss of consciousness, or property damage of more than $500 must be reported to the FAA.

A crash is just one example of use of a drone that could lead to a host of potential legal liabilities. Accidents could also expose companies to penalties for violation of Occupational Safety and Health Administration ("OSHA") regulations. Although there are no current drone-specific standards, it remains the general obligation that OSHA imposes on employers to make the workplace safe for employees. The risk of a drone being flown too close to a worker or adjacent property, can create a hazard to those involved.

Because the use of drones on construction projects, and the federal and state regulations, are still developing, it is vital that companies review their insurance policies and obtain sufficient coverage with respect to drone usage. Typically, commercial general liability insurance policies contain an "aircraft" exclusion. The FAA and several courts have held that drones are, in fact, aircraft. Therefore, to prevent any lack of coverage, it is good practice to purchase insurance policies specific to drones. It is imperative to ensure that the policy includes coverage for a company's specific use and for claims of negligence, privacy, trespass and nuisance, and any claims for personal injury or property damage arising from the use of the drone. Along those same lines, an owner or contractor that outsources drone operations should request that the operator have sufficient coverage to insure its obligations. Additionally, indemnification and additional insured status ought to be required.

Conclusion

As with all new technologies, the use of this technology and the laws regulating that use continue to develop. And, although there may be risks with use of drones on a construction site, these risks can be controlled with proper planning and careful compliance with the regulations governing drone usage. Also, drones have the potential to improve efficiency and safety of a construction project to the benefit of all involved.

Open.P0610.P0610.29253008-1