# RISK INSIGHTS



# Drones: A New Frontier in Risk Management

While hobbyists have been using unmanned aerial vehicles, better known as drones, for some time, businesses are just starting to adapt the technology for their own uses. Drones are creating new opportunities and new risks for businesses to evaluate, and regulators and insurance carriers are scrambling to keep pace.

Despite the fact that drones are readily available, employing them for commercial use is not as simple as just buying one off the shelf. To reap the full benefits of drones and to protect your investment, it's critical to understand the risks associated with commercial drone operations.

#### Regulation

The federal government, through Transport Canada, has primary jurisdiction over the commercial use of drones in Canada. Although Transport Canada has developed specific regulations and guidelines governing the use of drones, certain aspects of the federal Aeronautics Act and the Canadian Aviation Regulations are also applicable to commercial drone operations.

Under most circumstances, Transport Canada requires businesses to obtain a Special Flight Operations Certificate (SFOC) prior to operating a drone. Since 2014, Transport Canada has offered two categories of exemptions to its SFOC requirement—one for drones weighing less than 2 kilograms and another for drones weighing less than 25 kilograms, provided **all** applicable exemption conditions are met. For drones weighing between 2.1 and 25 kilograms, proper notice of

the proposed operation will have to be provided to Transport Canada.

Additionally, drone operators must also observe all other applicable laws and regulations, including the Criminal Code and provincial and municipal laws related to trespassing and privacy.

#### Physical Loss: Beyond the Aircraft

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One of the most widespread applications to date has been in unmanned aerial photography. Businesses in real estate, agriculture and insurance all have interests in surveying and photographing land, and the cameras used to do so can get expensive. Filmmakers, who have also been pioneering commercial drone use, often employ even more expensive cameras.

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Because of the increasing affordability of drones, the payload often has a higher intrinsic value than the aircraft itself. Additionally, cameras and other payloads are usually slung below the aircraft, meaning that in the event of a hard or emergency landing, damage to the payload is almost certain.

#### Planning for Obsolescence

Technology itself could prove to be especially costly in the event of a drone loss. The manufacture of drones is not regulated or standardized, which means there are a number of manufacturers in the market, each adhering to different standards. Many haven't diversified, and should some technological advancement prove to be too costly for certain smaller companies to adopt, they could potentially go out of business.

Bankrupt or defunct manufacturers, coupled with a lack of industry standards for design, could mean that the loss of a relatively inexpensive motor today would instead be a total financial loss on the aircraft five years from now, when replacement parts are completely unavailable.

#### Casualty and Liability

As with conventional aircraft, a drone crash could mean a hefty casualty claim. While the crash rate is actually relatively low with conventional aircraft, drones are not subject to the tight maintenance requirements or the stringent operator regulations that make conventional commercial aircraft crashes so rare.

Eventually, mechanical failures and operator errors will likely result in crashes. Businesses, especially those that operate drones in populated areas, should make sure they are adequately covered in the event of property damage or injury to a third party.

Under Transport Canada's rules, all commercial drone operators are required to carry at least \$100,000 of third-party liability insurance. When evaluating their insurance needs, businesses should be aware that most commercial general liability policies exclude the operation of aircraft. Accordingly, drone operators must ensure that they have

comprehensive coverage tailored to their specific drone usage.

#### Theft and Fraud

A couple of benefits of drones—their portability and advanced technology—can also prove to be great liabilities. Small drones are easy and attractive targets to thieves, and the industry hasn't developed many internal safeguards for stolen drones. Unlike the traditional aircraft industry, which has a tracking system and serial numbers for aircraft parts, the drone industry hasn't adopted either a tagging or tracking system. In other words, there's almost no chance of recovering a stolen drone.

#### **Broad Use**

Another benefit that could become a potential liability is the flexibility of the technology—that is, a drone's potential as a broad-use aircraft. In theory, the same drone that photographs a parcel of land for a realtor on one day could be used to survey a hazardous chemical spill the following day.

This kind of flexibility offers a broad number of business opportunities, but each new opportunity brings with it attendant exposures that compound upon one another. Businesses will have to think through how they plan on using their drones in order to make sure that their Transport Canada authorization and their insurance covers each arena of commercial use.

#### Cyber Liabilities

Perhaps the greatest potential liability comes from the cyber risks posed by drones. The greatest fear is that a hacker might hijack a drone and fly it into a commercial airliner or some other populated location, resulting in massive property damage and loss of life. However, while that scenario is possible, other scenarios are more likely avenues of loss. Digital information—images, videos, data maps, etc.—is a far more enticing target for hackers, and one that an enterprising thief with a little skill and a wireless transmitter might be able to access from a drone flying overhead.



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#### Putting it All Together

New technology always comes with new risks. Protecting your business means understanding those risks and minimizing your liabilities. To evaluate your business's specific needs, contact Beyond Insurance Brokers Inc. today.

