



Insurance Experts Weigh In on Future of Drone Use

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PwC Global has calculated that the overall emerging global market for business services using unmanned aircraft is over \$127 billion. The impact on the insurance industry is expected to be \$6.8 billion. Seeing this potential, several insurance company giants have already taken their first tentative steps toward drone implementation and have begun the limited use of drones for claims and underwriting purposes. These trial-runs have generally involved exploring relationships with outside vendors as well as the creation of small internal programs.

The initial enthusiasm is understandable. A 2014 [J.D. Power study](#) found that the length of time spent in each stage of processing a homeowner's claim (cycle time) was the single most important metric that drove customers to stay with their existing carrier or seek a new one. Drone use has the potential to reduce the time to inspect a loss and allow more inspections per day after a major event. This directly impacts the speed with which customers are able to receive settlements. Drone inspections also have the potential to reduce workers' compensation insurance premiums by keeping employees off roofs and ladders and to reduce fraud by quickly obtaining and documenting pre- and post-loss conditions.

Having deep experience in the use and management of unmanned aircraft and a member of a law firm with extensive insurance expertise, I am fortunate to have unique vantage point from which to observe and shape the growing integration of unmanned aircraft into the insurance work flow. From my point of view, this integration is in its very early stages and is still very fluid. To find out where the industry is headed, I asked two prominent thought leaders to answer some questions about the future use of drones by insurance carriers. Both were very generous with their time and provided outstanding insight.

[Patti Harman](#) is the editor-in-chief of [Claims magazine](#) and a regular contributor to the well-respected online news source,

[PropertyCasualty360](#). *Claims* magazine has been called “the definitive news and commentary resource for P&C insurance claims professionals and corporate risk managers.” Patti is a frequent speaker at industry events and covers property & casualty, auto and workers’ comp claims.

Steve Anderson has been a licensed independent agent for 30 years and is executive editor of *The Anderson Agency Report* (TAAR), a monthly newsletter dedicated to providing independent agents with the insurance technology information they need to more effectively manage and grow their agencies. He is also president of The Anderson Network, Inc., which was formed to help agents and brokers maximize productivity and profits using practical technology.

James: What insurance industry application for drones do you think holds the most potential?

Patti: *Using drones to assess damage over a large area following a significant event – e.g., earthquake, wildfire, hurricane, tornado. Access is often limited to first responder and insurers may not have access to an area for days or weeks. Being able to use drones to see the extent of the damage allows them to move resources to the area faster and possibly settle claims faster. Think of a farmer whose hundreds or thousands of acres have been decimated by a tornado or wildfire. If the insurer can confirm that everything has been destroyed, it can begin processing the claim much faster.*

Steve: *For insurance companies, the initial use case has been for in the field claims management. There are numerous examples of insurance companies using drones for roof inspections. This prevents the adjuster from needing to climb up on a ladder and expose themselves to a falling hazard. I received this comment from an agent within the last couple of weeks: “This week we acquired our first commercial drone with an application that automatically flies a pattern across a property account and calculates area for replacement cost and a video of the property and automatically lands at the exact same spot of takeoff. Instead of wading through snow drifts to measure property and take photos for underwriting submission, this significantly improves*

efficiency.”

In addition to insurance companies, agents and brokers can have a compelling reason to incorporate drones with in their operations. Many agencies perform property inspections as part of the new business process. Using drones to accomplish the site surveys are beginning to significantly streamline the process and save a significant amount of time.

**James: What makes that application appealing?
Safety improvements, cost savings, faster
service?**

Patti: *Insurers are currently using drones to assess roof damage after a peril. It keeps their adjusters on the ground so they are safer. It saves them time and money – an adjuster can adjust multiple claims in the same area in the same amount of time it would take him to pull out the ladder, set up the safety harness, climb the ladder, survey the roof, etc. With a drone, he can capture images and send them back to a desk adjuster in the office who takes the images, writes up the claim and approves payment almost immediately if the property owner has the proper coverage.*

Steve: *As the above agency comment indicates, drones can help to significantly improve efficiency. I think it’s obvious the safety improvements for certain situations are also a significant benefit. I recently talked with a startup that is creating a platform where they provide licensed and certified drone operators for property inspections on a per call basis. They have created a network of drone pilots throughout the country that respond to the request.*

**James: What is the biggest barrier to widespread
implementation of drones by insurance
companies?**

Patti: *Cost, training and government regulation. Companies can usually mitigate any risks associated with drone usage by implementing a thoughtful program. [Here’s one story](#) that will give*

you some background on the issues for insurers.

James: As an attorney, I see government regulation as a large, but surmountable barrier. I tend to agree that cost and training are currently the biggest hurdles. Many industry insiders have mentioned that they cannot find or train enough **trusted** pilots to scale the operations and, even when they can dispatch larger number of drones, the data transfer and image analysis proves to be very time consuming and cumbersome. This reduces the cost savings and other potential benefits. They seem to be looking for a scalable, integrated work-flow solution before they can fully implement drone use. Have you seen the same?

Patti: *I would agree with your assessment of what insurers want. The economies of scale matter to them.*

Steve: *The biggest obstacle to adoption of this technology is the inherent risk-averse nature of many (most?) insurance companies. They tend to be very slow to adapt and adopt emerging technologies. With that said, there certainly are exceptions where the compelling benefits outweigh the risk-averse nature.*

James: Do you think most carriers will create in-house programs (buy drones and train pilots) or will they outsource to contractors? Why?

Patti: *I think you will see a combination of these. Erie Insurance has an excellent drone program. They trained several operators and they have been using drones on a limited basis for probably two years. Some insurers are still waiting to see if the companies using*

them really benefit. Some will use vendors because they don't see a real benefit or don't have the resources to invest at this point. Insurers have traditionally been behind the curve when it comes to implementing new technology. Millennials are forcing them to change the system because they are so comfortable with technology and it is a primary way to attract them to the insurance field. Kids are so used to playing video games that those skills translate very well to using drones – kind of ironic.

Steve: *How carriers will implement a drone program will depend on their size and resources. I see the larger insurance companies (more national in scope or super regional) being willing to invest the resources necessary to create their own in-house programs. The challenge will be training a wide variety of claims personnel in the proper and legal use of drones. The smaller carriers may elect to outsource this function to contractors.*

I found the conversation to be fascinating. Both Patti and Steve cited claims evaluation as the area in which drones may provide the greatest immediate benefit. Patti focused on large-scale disaster scenarios while Steve placed more emphasis on roof inspections which, of course, may be conducted in response to large scale event or more isolated damage claims. In either case, the drones allow faster claims evaluation. Although it is difficult to quantify, both experts pointed to the safety improvements provided by drones as a key benefit.

Both Patti and Steve cited “risk” as the biggest obstacle to drone implementation. This is not surprising when discussing an industry whose entire business revolves around assessing and managing risk. Patti pointed toward cost, training and government regulation and agreed with me that these issues can be mitigated, in part, through economies of scale. Steve pointed toward the general reluctance of insurance companies to adopt new technology. Both saw insurance companies using a combination of outside providers and in-house employees for their drone operations and pointed out the challenge in training employees in their safe and legal use.

These answers are consistent with what I have been hearing from my clients and from my own observations of the drone industry. Insurance companies universally recognize the potential of

unmanned aircraft and have experienced the benefits on a small scale. While there are an ever-increasing number of entrepreneurs that claim to provide drone services for the insurance industry, it is extremely difficult for insurance companies to properly vet these entities. Being inherently risk-averse, most companies are not willing to damage their reputation or incur potential civil and criminal liability by contracting with an unknown entity. Moreover, many of these outside service providers have been unable to provide consistent results and actionable data on a scale that truly benefit the carriers. Because they typically use an “Uber” model, it is challenging for insurance companies to ensure that the pilots are serving as good ambassadors for their brand. In-house drone programs have similar problems. Insurance companies are not aviation companies. It is an ambitious endeavor to train and manage large number of pilots while ensuring compliance with a patchwork of state, federal and local laws as well as industry regulations.

I urge insurance carriers, whether outsourcing drone services, creating an in-house program, or pursuing a combination thereof, to focus on finding a trusted drone industry advisor to guide them through the transition to a drone-focused claims and underwriting program. Carriers need to understand their legal requirements, current technological capabilities, and available analytical tools to make wise decisions. Every company should have a written drone operations and procedure manual that can be used for internal compliance and to conduct due diligence on contractors. Thought leaders like Steve and Patti can help in this regard by continuing to provide knowledge, education and insight through their publications and social media platforms. My sincere thanks to them both.

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