Drones for Deck Builders

by Ron Spillers

Before and after photos of a deck remodel were taken by a camera mounted on a small remote-control quadcopter (top). The DeckTools 3D rendering produced during the project's design phase (above) is almost identical to the photo of the completed deck.

Here in the Pacific Northwest, a large number of our projects are built to take advantage of the stunning views of Puget Sound. That means that we build most of our decks on sloping or elevated ground, making it difficult to properly photograph the finished decks.

I design our projects using DeckTools software (strongtie.com/decktools), which allows me to "rotate" around a design to view it from all different angles, just like being in a helicopter. A couple of years ago, that feature gave me an idea. I'd completed construction on a particularly beautiful deck and wanted to give the owner some photos that would do the project justice. After a bit of research, I found a Seattle-based company that had a camera mounted on a small, remote-control battery-powered helicopter, and I hired it to shoot the project from the air.

Pleased with the results, I tried to rehire my friends with the helicopter the following year, but they were no longer in business. Instead of looking for another company to hire, I shopped for my own RC chopper—only to discover how tricky these things are to fly. After a few expensive "learning experiences," I found a unit that is perfect for my needs: DJI's Phantom 2 Vision quadcopter (dji.com). Not only is this small RC flying platform easier to operate than a conventional RC copter, it also is equipped with a 14MP camera that can take both still photos and video. The camera is WiFi-enabled, so you can stream live, first-person-view (FPV) video to a free Vision app on your smartphone. The app can also remotely control the camera's tilt angle while it's in flight.

This setup allows me to take (and save to a micro SD card) great aerial photos before we start a project, while the project

The DJI Phantom 2 Vision quadcopter (above) is equipped with a 14MP camera. A free app live streams what the camera sees to a smartphone (above right) and allows the user to control the camera's angle while it's in flight.

The quadcopter is easier to fly than a conventional remote-controlled helicopter. Clients love the aerial photographs of their new decks, but before takeoff, you should check local regulations about aerial photography.

is under construction, and after it's completed. One way we use these photos is to create an interesting before-and-after collage for our clients. Another way we use them is to enhance our DeckTools 3D renderings of past projects with actual photos taken from the same perspective, which demonstrates to prospects just how accurate DeckTools renderings are. This combination of 3D renderings and Phantom 2 Vision photos has proven to be a very impressive sales tool that goes a long way toward building customer confidence in our company.

All of my deck clients are thrilled to look at aerial photos and videos of their projects. I always send them high-quality copies of a few of the best shots for their personal library and add the best of those to my portfolio.

The Phantom Vision 2 retails for about $1,300, a modest investment that has helped us close more sales while having fun doing it. As more people are using this hobby to promote their businesses, other small drones are coming onto the market. Now my friends in other trades, such as landscaping, painting, and roofing, want me to photograph their projects from the air as well.

Recent press about drones has caught the attention of local officials and the FAA, and you should check local regulations governing the use of low-altitude camera drones to make sure you aren't breaking any rules. As I currently understand the law here in Washington, if you have the permission of the property owner to fly an unmanned aircraft with a sensing element (such as a camera) over the house, you should be fine. The FAA prohibits all unmanned aircraft from flying more than 400 feet above the ground, and currently requires all non-recreational drone users to seek its approval (a rule that's mostly ignored). The FAA is planning on rolling out new proposals for commercial drone usage in November, but those rules could take years to implement. ❖

Ron Spillers owns West Coast Decks in Seattle, Wash., and has been designing and building decks on single-family homes in the Pacific Northwest for more than 24 years (westcoastdecks.com).

See more aerial photos of the author's decks and watch an aerial video at www.deckmagazine.com/marketing/drones-for-deck-builders_o.aspx