

Alston Construction's VDC Manager on Saving Time and Sharing Data with Drones

Rickey Molina is the virtual design and construction (VDC) manager at Alston Construction, a general contractor based out of Sacramento, CA. Before Molina joined, Alston didn't have a VDC department and was outsourcing their surveying to third parties.

Now, just over a year later, Molina oversees a three-man team that handles everything from modeling to BIM coordination to 3D laser scanning. And, as of two months ago: [drone surveying](#).

Recently, Molina sat down with Propeller CEO and co-founder, Rory San Miguel, to talk about the evolution of his team, his journey trialing other drone solutions, and how Propeller is already saving him time and manpower.

You can check out their conversation in the video below or read on for a quick summary of what they discussed.

Customer

CUSTOMER STORY

Relay Media



How Relay Connected

Alston Construction's journey to Propeller

Alston Construction's decision to invest in a drone surveying solution was an effort to, among other things, cut down on the time Molina and his team spent out in the field. Alston manages many 50+ acre sites, and walking each site with a laser scanner typically took two men and three to four days to cover.

Before arriving at Propeller, Molina thoroughly vetted the drone surveying landscape, trying out different solutions that failed to meet his standards. Here's how he describes his experience trying out Pix4D:

"It would take us hours just to set out the targets, shoot in the targets, do the actual flight, and bring that information back into the office. A lot of the time, when I would upload all of the photos and information to Pix4D, it would be 12 to 14 hours. My computer would crash and I would have to start back at the beginning.

"We felt like we were kind of fumbling around. It was frustrating."

Eventually, Molina decided to try out Propeller. By [simplifying ground control](#) to the mix and removing the time he spent [self-processing his drone data](#), Molina was able to resolve his workflow problems with Propeller.

"We did a 40-acre site in Nevada recently. I sent a one-man team. He threw down a single ground control point, and I think the whole flight took maybe 20 minutes. Most of the time he was hanging out by the car waiting for the data collection to finish up," says Molina.

"Then he turns off the AeroPoint, uploads all the data on a laptop on his drive back home, and within six to eight hours we had a fully surveyed site already uploaded to your platform."

The only way to trust drone data: check it yourself

When Alston Construction tried alternative solutions, they found they weren't able to reduce their time in the field like they originally had hoped for. On top of that, the data wasn't meeting their accuracy standards.

"I checked a couple sites that we flew, large sites, and you could see that if you took a horizontal plane of existing topography, you could see from one end to the other that the dataset started to drift. At that point it's unusable."

While companies can—and have—promise [survey-grade measurements](#), Molina says the only way to trust the accuracy of the data you're collecting is to check it yourself.

“We actually back-checked [Propeller’s] work with our [Trimble TX8 laser scanner](#), and that thing has less than 1mm of tolerance. We did some existing to existing topos and you guys were well within the accuracy that we needed.

“Being able to back-check it with other tools you know are going to be accurate and see how the two work together—that was really the selling point for us.”

Bringing actionable insights to the field—and beyond

On top of an improved data collection experience, Molina soon unearthed [an entire of suite of tools](#) available to him post-survey:

“We can single out all those individual areas and are able to track our progress. How much dirt do we have to bring into this area? What’s our cut-fill? How big is that stockpile over there? Let’s do a cross-section comparison in this area and figure out how far from subgrade we are.”

Molina is in the beginning stages of fully integrating Propeller into his organization, with the goal of stepping back as information gatekeeper, so others on site can access the data they need and calculate measurements without his help.

“We’re still scraping the surface of this technology. The idea is to get those tools into the hands of the superintendents and the PMs, where they can start pulling a lot of this data and analytics themselves.

“The selling point for us was the user interface. I keep going back to sharing the information with the guys in the field. It’s great being able to invite everyone to the project site so they’re not waiting for me to pull information or data.

“Once you can educate and show someone the value of what can be done through the use of a drone, I think the selling part came fairly easy.”

Interested in starting up your own drone program? [Let’s talk](#).

Related Resources:

[Elder Corp’s GPS Manager on the Benefits of Integrating Drone Surveying Into His Technology Stack](#)

[A Case Study: The Journey From Simple Drone Surveys to Worksite Management \(Part One\)](#)

[How Propeller Works Alongside Survey Managers to Ensure Drone Data Accuracy](#)

**DOWNLOAD YOUR
FREE GUIDE**

Download now

propeller
**THE ULTIMATE
GUIDE TO PPK
DRONE
SURVEYING**