



CASE STUDY:

BRASFIELD & GORRIE, GENERAL CONTRACTORS



“The future of drones is unlimited—we’re going to see more change in the next five or 10 years than we’ve seen in the last 50.”

—Jim Gorrie, CEO

How Skyward Has Helped Brasfield & Gorrie Scale Drone Operations



THE ENTERPRISE

[Brasfield & Gorrie](#) is one of the largest privately held construction firms in the United States. Headquartered in Birmingham, AL, with offices across the country, Brasfield & Gorrie employs more than 2800 people and has annual revenue of more than \$2.3 billion. Notable projects include: large health care facilities, test stands for NASA rockets, the Georgia Aquarium, and the recently completed SunTrust Park, home of the Atlanta Braves.

THE SITUATION

Starting in 2016, Brasfield & Gorrie started ramping up drone operations, which they had been testing since 2014. In order to maximize the value of the technology spread out over multiple distant locations, the company needed to find a way to scale operations while honoring their chief corporate value: [safety](#).

***At Brasfield & Gorrie,
safety is #1***

A STRONG FOUNDATION

Brasfield & Gorrie established a UAS program in 2014, gradually developing systems and protocols to handle the technology. They also experimented with a wide range of applications to see how drones could complement their operations.

With the release of the Part 107 regulations in 2016, which significantly lowered the bar to entry for commercial drone operations in the U.S., Brasfield & Gorrie quickly ramped up the size and scope of their program, building on the strong foundation they had established as early adopters.

Thanks to their foresight, Brasfield & Gorrie now stands as a paradigm of the value drones can provide to a major construction company.

PRO TIP:

Every major enterprise, regardless of industry, will find dozens of ways to use drones to increase efficiency, safety, and access to data. Start by piloting one use case in order to refine processes and prove value.

NEW EFFICIENCIES

Thanks to drones, Brasfield & Gorrie now enjoys reliable access to high-quality aerial data throughout every phase of construction, from design to inspection. Brasfield & Gorrie has used drones for a wide variety of use cases, including:

- aerial progress images and video
- time-lapse videos
- site familiarization
- inspection of hazardous areas
- capturing 3D models of a site
- performing advanced measurements
- daily progress monitoring
- estimating earthwork quantities
- quality control inspections

“To determine whether a site is viable can take months. And now you can literally get that in a matter of hours or days,” CEO Jim Gorrie said in a 2016 article on the company’s website. “We can literally take weeks out of a schedule. Our projects are much higher-quality than before – and they’re safer. Over the last few years, you can see the efficiencies that are being gained by the use of drones and related technology.”

PRO TIP:

Maximize the value of drone technology by leveraging the high-quality aerial data they can provide, with a minimal investment of resources, against the limitations of traditional processes.

“We recently captured a point cloud of an existing structure in a remote location accessible only by boat. It took a four-hour drive and a one-hour boat ride to reach the site. At that point, we were able to give the project team back at headquarters virtual access to the site. So instead of making a long trip to take some quick measurements, we can now do that in the point cloud that was generated from the drone.”

—*Hunter Cole*, Virtual Design + Construction Coordinator at Brasfield & Gorrie

GOAL:

Decentralizing operations, centralizing data

Brasfield & Gorrie is headquartered in Birmingham, but they have offices all over the country, the majority in the Southeast. Their goal is to implement drones across the company without having to dispatch each individual operation from the corporate office. The company already has five locations with a dedicated drone and a pilot who can fly every day if necessary, allowing Brasfield & Gorrie to maximize the value of the technology and personnel.

Decentralizing the day-to-day of drone operations was Brasfield & Gorrie's goal in the long-term, but they needed a better way to manage all the data and assets involved in such an expansion.

"Growth like this brings a lot of credentials you have to manage," Hunter Cole said. "Each pilot has a certificate, hours, training, and flight log. Each drone has purchase information, FAA registration, insurance documentation, extended warranty information, and service record."

Brasfield & Gorrie needed a solution to manage their data and assets that was more navigable and functional than a shared spreadsheet, while allowing them to oversee widespread and growing drone operations across the country.

"How are you going to track all this information, and help the guys in Orlando, and Atlanta, and Nashville, and Dallas, to see the same things you're seeing? We had that frustration most of last year, and then onboarded with Skyward and a lot of that started to get ironed out very quickly," Hunter said.

SOLUTION:

Standardizing processes with Skyward

Skyward's drone operations management platform allows companies to maintain a single system of record for an entire UAS program, ensure processes are carried out consistently, and mitigate risks with standardized workflows.

Brasfield & Gorrie saw Skyward as the solution to the challenge of managing drone operations from across the country. They have found that Skyward helps them manage data concerning their entire drone program as well as ensure that all operations comply with both FAA and internal regulations.

Brasfield & Gorrie now uses Skyward to check airspace and coordinate with airports and heliports, track operation flight time, equipment, and personnel, and get a big-picture overview of historical drone data across their entire organization.

Skyward's customizable checklists allow Brasfield & Gorrie to oversee remote operations, ensure standard operating procedures are being followed, and ultimately establish a system of accountability that allows the company's drone operations to scale up while still maintaining Brasfield & Gorrie's reputation for safety.

Skyward also has tools that help ensure regulatory compliance, including a regularly updated airspace map with complete information about permanent and temporary airspace restrictions. Skyward is an FAA-acknowledged UAS Service Supplier for airspace authorization in U.S. controlled airspace.

Looking to the Future

Brasfield & Gorrie attributes most of the expansion of their drone program to Part 107 regulations, which will likely be revised to better accommodate the needs of commercial operators. As those regulations become more business friendly, expect drone operations to become even more integral to the way that companies like Brasfield & Gorrie do business.

Learn how to run a safe, compliant drone program at your company



Download the eBook