



## CASE STUDY

# How AkitaBox Cut Roof Inspection Time by 80% Using Drones

AkitaBox is a facility management software that collects building data to automate maintenance and planning. They have collected nearly 200 million square feet of facility data in the US (and are growing rapidly).

By deploying **PrecisionHawk's** drone-based aerial intelligence platform, they:

- ✓ Reduced the time required to inspect a roof by nearly 80%, resulting in significant cost savings
- ✓ Improved the accuracy of roof data
- ✓ Eliminated safety risks to inspectors



## Traditional Roof Inspections Are Time-Intensive And Dangerous

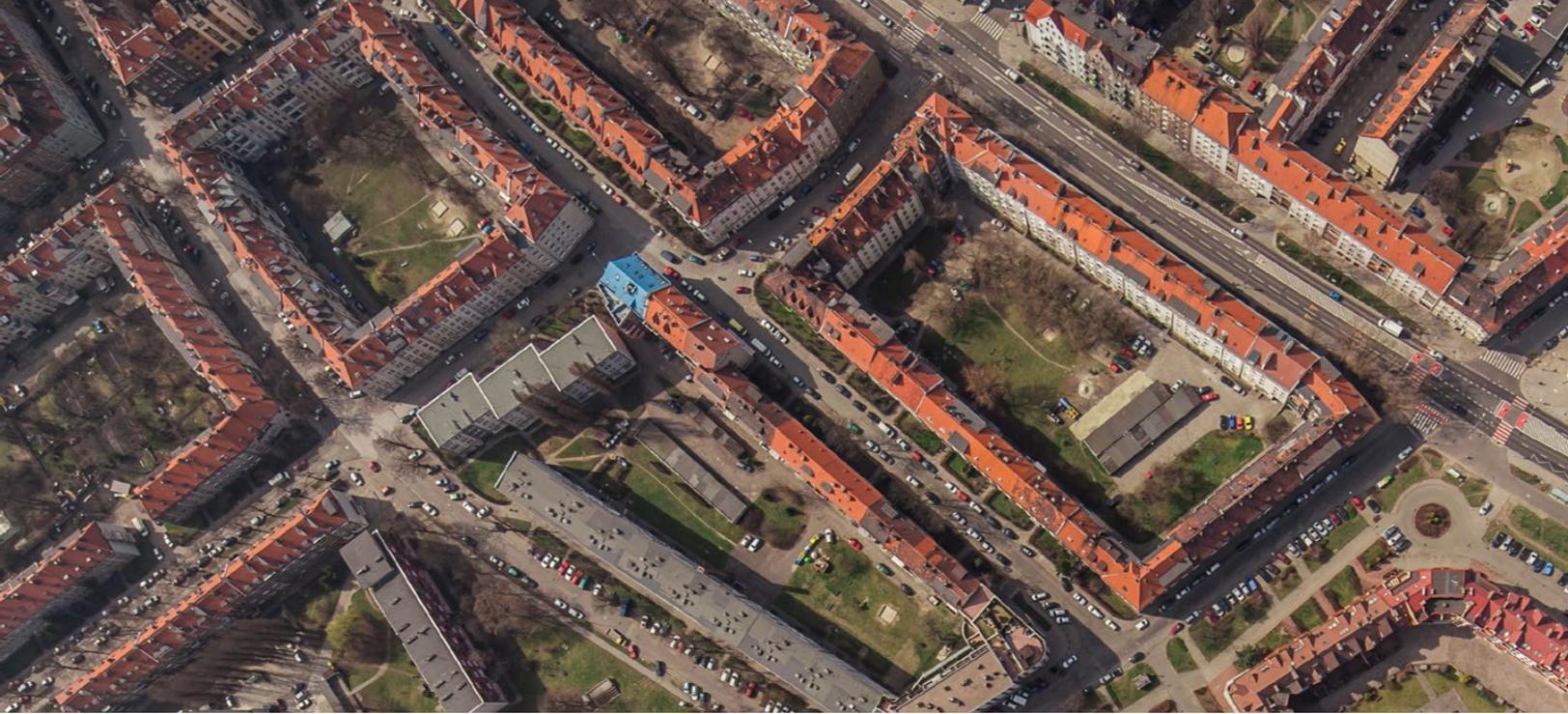
Facility managers reduce the risk of costly and dangerous maintenance issues by proactively inspecting their properties. AkitaBox provides tools that simplify proactive maintenance programs, of which one aspect is roof inspections and data collection.



To identify maintenance issues on a roof, inspectors “walk” its entirety—first with a hand-held thermal sensor and then with a visual sensor. Then, AkitaBox processes the data inspectors collect and deliver reports to their clients in 3-5 days. Facility managers then use this data to identify issues such as leaks and water pooling.

Using handheld cameras, it takes inspectors an average of 4-6 hours to walk a typical 100,000 square foot commercial roof.

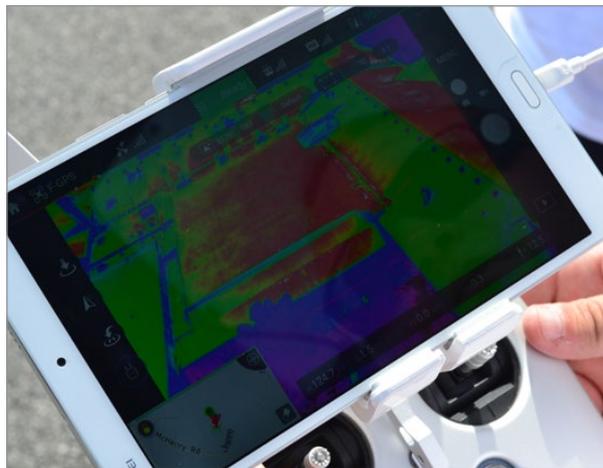
Also, roof inspections come with logistical issues and risks. Accessing a roof with handheld cameras often requires the use of ladders or lift trucks, which can put inspectors in hazardous situations (*the United States Occupational Safety and Health Administration reported that 38.8% of deaths in CY 2015 were related to falls*).



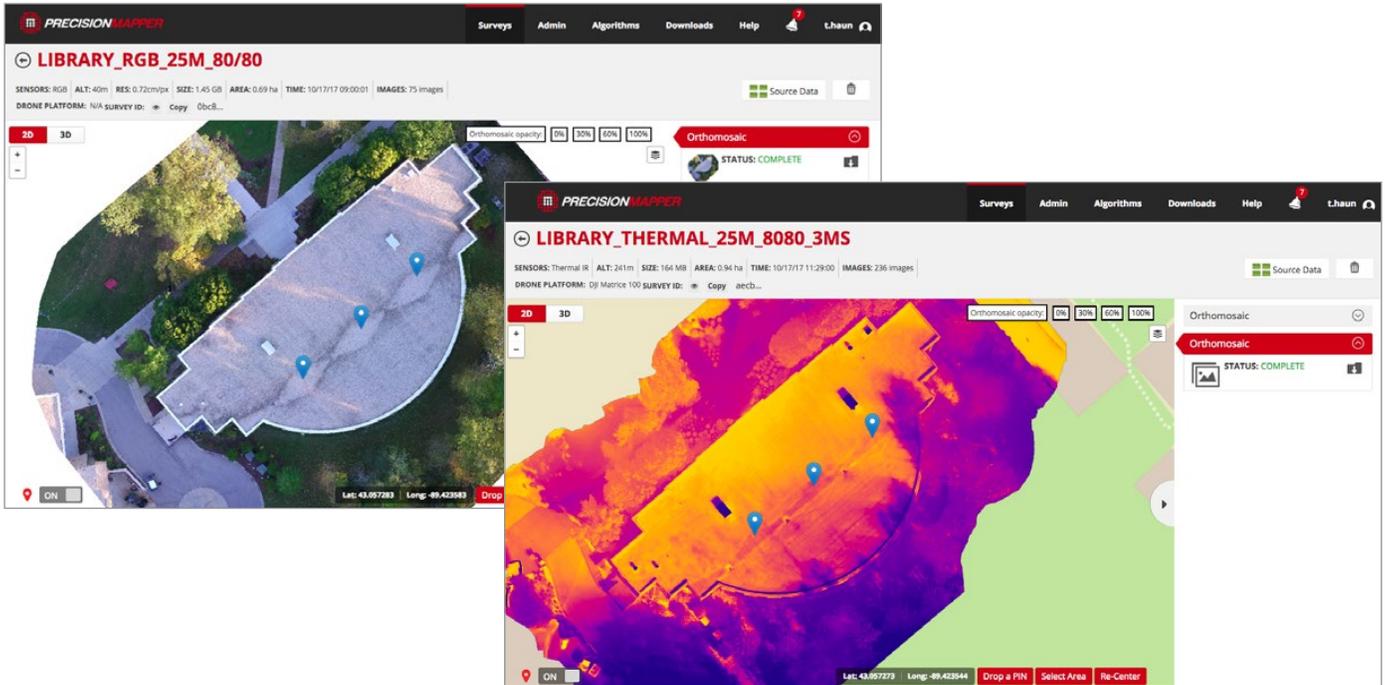
## Using Drones For Roof Inspection

Ever seeking ways to simplify facility management, AkitaBox searched for a solution that would help them accelerate the inspection process, make it more accurate, and reduce the risk to inspectors. They found their solution in **PrecisionHawk's** drone-based aerial intelligence platform.

AkitaBox and **PrecisionHawk** worked together to define the requirements of commercial roof inspections. The drone would need to fly at 25 meters above the roofline. Also, to exceed the quality of data outputs from traditional inspection methods, a drone's thermal and visual sensors would need to capture data in a resolution of at least 6" per pixel.



Using PrecisionHawk technology, AkitaBox reduced the time required to inspect 100,000 square feet of roof (with both thermal and visual sensors) to under one hour. Data was collected at a resolution of 1.2" per pixel and immediately uploaded and processed in PrecisionMapper, PrecisionHawk's data analytics software.



Using drone-based roof inspection, AkitaBox realized several benefits:

- ✓ Given the speed of collection and processing, they can now execute and report on roof inspections in a single day
- ✓ Data with greater resolution and accuracy improves proactive maintenance and financial planning
- ✓ Reduced inspection time and costs make it possible to conduct more frequent surveys, giving facility managers the power to address maintenance issues earlier
- ✓ Using drones, facility managers can forego costly full roof repairs in favor of more frequent spot/precision repairs



## Transforming Facility Management

By simplifying inspection, **PrecisionHawk** and AkitaBox are empowering facility managers with the insight they need to get ahead of maintenance issues, ultimately saving them time, money, and risk to their staff. This combines the powerful tools created by AkitaBox for internal maintenance and management with an external component for facility management. Ultimately, building managers get a holistic view of their facilities within a single platform.

For many companies, a partnership with **PrecisionHawk** ensures the rapid and global deployment and beginning-to-end-data analysis. For others, the potential lies in owning and deploying their own enterprise-wide drone platform, while relying on **PrecisionHawk** to seamlessly integrate data analysis into the company's information infrastructure.

**Thanks to AkitaBox**  
for working with us to pioneer new practices  
in drone-based facility management.

*Speak with us about adding aerial intelligence to your business—email [info@precisionhawk.com](mailto:info@precisionhawk.com).  
Learn more about drones and aerial data in construction at [PrecisionHawk.com/construction](https://PrecisionHawk.com/construction).*