



# HOW TO SUCCESSFULLY SCALE A DRONE PROGRAM WITH AXON

Renton Police Department



## CASE STUDY: RENTON POLICE DEPARTMENT

From 2015 to 2021, **Renton Police Department** built a drone program that spanned all their operations. Although initially successful, this success came at a cost, and the platform was not scalable. As their program began to strain under the demands of rapid growth, Renton PD decided it was time to switch to a new system that could scale with their department into the future.

## THE CHALLENGE

Renton first adopted drone tech in 2015 to help officers clear roadways after an accident. Taking anywhere from two and a half to eight hours, their legacy process involved taking hundreds of manual measurements at the crash scene before they could fully reopen. But drones enabled the department to conduct the entire process via aerial photogrammetry, cutting the average clearance time to around 90 minutes.

The success of this initial implementation soon led to the widespread use of drones within the agency.

*“It didn’t take long for us to realize the value of drones”*

**— Chad Karlewicz, Commander of the Special Operations Division at Renton PD.**

A veteran officer with 24 years of SWAT team experience under his belt, Karlewicz spearheaded drone adoption at the agency and still serves as the Chief Pilot. “Now we use them for everything. After the traffic division, detectives started using drones for crime scene documentation. Then SWAT started using them. And now, every patrol crew has a drone and pilot. We tell our people if there’s a situation where you think a drone would be useful, just try it out to see.”

Although the increasing usage of drones continued to deliver value to the agency, their existing system couldn’t keep up. The two most significant issues were administrative overload and limited livestreaming capabilities.

- **Administrative overload:** “All the flight logs, maintenance records, Notice to Air Missions (NOTAMs) filings — essentially every administrative process was manual,” said Karlewicz. “And it all took so much time. For example, filling out just one flight log took at least 30 minutes. It adds up quickly.”
- **Livestreaming limitations:** “At first, we used YouTube for livestreaming, which had a 30-second latency and just sucked,” said Karlewicz. “Then we went to AMV, All Mobile Vision, but that platform would only work with drones that have HDMI outputs on their controller — so that really limited us.”

These challenges led Renton leadership to look for a new drone platform that could scale with them as they continued to develop their program.





## THE SOLUTION

As Renton evaluated solutions, Axon's end-to-end drone platform, **Axon Air**, became the clear front runner. The platform had all the features the agency needed to address its core challenges, particularly its administrative process automation and comprehensive livestreaming capabilities.

- **Administrative automation:** Axon Air automates operational documentation like flight logs and hardware maintenance records — and allows pilots to file NOTAMs with just a few clicks. This feature would reduce the significant administrative overhead created by Renton's rapidly growing drone program.
- **Comprehensive livestreaming:** Axon Air provides livestreaming support for most enterprise drones in public safety. This feature would enable Renton to leverage the aerial perspective of any drone in their fleet at any time.

On top of these and other powerful features, Axon impressed Renton's leadership with its real-world performance and customer service. As Karlewicz notes, "Everything Axon builds just works. And the openness of their team — how they made us feel in every meeting we had — is truly remarkable. In my 32 years of law enforcement, I've never had a vendor that is this easy to work with." With every box ticked, the agency decided to move forward with Axon Air.



## THE RESULTS

After a smooth implementation and training process, Axon Air began delivering on its promise, enhancing nearly every aspect of Renton's drone program.

- **Accelerating operations:** "With Axon Air, all the backend admin work is automated. It's made all our jobs so much easier," said Karlewicz.
- **Elevating situational awareness:**

*"Axon Air took us from only being able to livestream on a few drones to being able to livestream from any drone whenever we wanted. There is no way we are going back"*

**— Chad Karlewicz, Commander of the Special Operations Division at Renton PD.**

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- **Expanding access:** "Axon Air has this incredible \*\* notification system that sends out notifications whenever a drone is sent out on a mission to anyone we want, and all the recipients have to do is click on the link they get in the message to see exactly what that drone is seeing on the mission," said Karlewicz. "This feature was particularly well received by senior leadership."
- **Simplifying pilot training:** "Axon Air is now the default piloting UI for almost our entire fleet. Because we used to have to train our pilots on different software for each drone type, this transition has resulted in huge time savings," said Karlewicz.
- **Multiplying tech ROI:** "The whole ecosystem works together seamlessly. From Axon Evidence, which we use for all our evidence management, to Axon Air, which runs all our drone operations, every individual solution connects — and adds to — the others," said Karlewicz. "It's a big reason I tell everyone I am in love with Axon."

When asked if Renton had done a quantitative cost/benefit analysis of Axon Air, Karlewicz explained that the effort was deemed unnecessary: "There was no need for us to justify the spend with data, because, frankly, the value was obvious to everyone at the agency. The value of each thing — the ability to livestream from every drone, the auto notifications, everything — was clear to us. Like I said, there's no way we would go back."

And, with Renton seeing so much success with their drone program, it's clear they'll continue to invest in the technology.





“Drones are not only helping us protect citizens but perpetrators as well,” said Karlewicz. “We had two recent shootouts where the police on the scene believed they hit a suspect but weren’t sure because the suspect had barricaded themselves in a building. Normally, it would take hours to confirm the hit. But because we had drones, we could immediately fly into the building and see that the suspects were out of commission. This approach allowed us to rush in and quickly take the suspects into custody. It also saved their lives because they would have bled out.”

*“Drones are a huge force multiplier for agencies. 90% of the time, they’ll reach a scene before an officer can. Drones can help us clear a lot of calls and reduce the number of officers needed per call. The future is bright for this technology in law enforcement.”*

**— Chad Karlewicz, Commander of the Special Operations Division at Renton PD.**

Want to see how Air Axon could help get your drone program airborne — or enhance your existing one?

**Click here** to review the solution page, or contact our team today at **[axon.com/contact/air](https://axon.com/contact/air)**

