5 steps for starting a public safety drone program

There's no question that drones, or unmanned aerial systems (UAS), have a place in public safety. They provide air support at a fraction of the cost of traditional aviation and have infinitely more uses. Agencies are deploying drones at a breakneck pace. Nearly half (47%) of agencies surveyed in 2018 had purchased at least one drone, according to Police Executive Research Forum's 2020 drone report, and another 34% were planning to do so in the future. But given stringent Federal Aviation Administration (FAA) regulations and the public's understandable concerns surrounding privacy, it's imperative to be strategic and take the proper steps when implementing a drone program.

Step 1: Outline your goals

There are many uses for drones in public safety, so first identify your priorities for your inaugural drone program. Do you want your drone to provide real-time situational awareness, search and rescue support, 3D modeling or something else? The top uses for drones in law enforcement and emergency response include:
- Search and rescue
- Crime and accident scene reconstruction
- De-escalation
- Tactical operations support
- Emergency and natural disaster response
- Large event overwatch

Be sure to consider your jurisdiction and its airspace when identifying goals for your drone program. You'll need to cross-reference desired uses with local and state laws and regulations and consider how factors such as topography, weather and urban landscape will affect how you'll deploy and use your drones.

Step 2: Seek support from the community

Drones give public safety agencies the ability to fly small, quiet and often unnoticeable aircraft equipped with video cameras and other payloads in places previously inaccessible to aircraft and ground vehicles. Citizens will understandably have questions about how your drone program will affect their privacy, namely: What will police do with the data obtained by these aircrafts? Will you use drones to look in backyards? In windows? How will you ensure public privacy and avoid misuse?

Even if you think your community will be supportive of a public safety drone program, you should still consider engaging in community outreach to educate the public and gain support. Transparency is the best policy. In any community, a certain number of people will have privacy concerns that need to be addressed. Follow these best practices when it comes to community relations:

• Begin outreach well before deploying your drone program.
• Communicate the goals for your drone program, focusing on community benefits.
• Solicit feedback from key stakeholders.
• See that you address these concerns in policy and standard operating procedures.
• Use multiple outreach methods such as town halls, local news outlets, print and web content, and social media. When hosting live events, offer multiple dates, times and locations.

Continue to engage the community even after deployment. To be as transparent as possible, Chula Vista Police Department (CA) makes it easy for its citizens to see how the agency's law enforcement drones are being used.

"We set up a dashboard on the department website that shows all of the drone flights every single day, including the exact flight paths on a map, the date and time and why they flew, such as assault with the deadly weapon or a car crash," says Vern Sallee, a retired captain from Chula Vista, now an Axon Air Strategist. "The community can see virtually everything we're doing with our drones with the exception of the actual video obtained since, of course, that's evidence."

Step 3: Draw up a budget

You can start a drone program — including hardware, software, licensing and training — with as little as $10,000. But you'll also need to plan for long-term costs and staffing implications in terms of maintenance and continuing education.

Factor into your budget how many people will be on your drone team. If your agency will be operating a free-flying drone, the FAA requires anyone involved in drone operations to obtain a remote pilot certification, also called an FAA Part 107 license, which requires the completion of a 20-hour online course and in-person FAA test. Agencies may also cover their pilots under Public Agency Certificate of Authorization.

Remember that you may stand to gain from a drone program. Could a drone obtain data you would otherwise need to send an officer for? Could it enhance officer safety as well as the safety of the public and therefore reduce liability? Now's the time to perform a cost-benefit analysis.

Once you work out a drone program budget, you'll need to find funding. This is where your earlier efforts to gain community support will come in handy. Grants and community partnerships can also help offset costs.

Step 4: Select your hardware

Consider your program goals, budget, weather, terrain and personnel as well as the airspace in your jurisdiction when choosing hardware. There are many drones on the market today. Small drones for indoor flight begin at $500, portable units can range from $3,000 to $7,000 and larger high-capacity drones for critical missions can run from $15,000 to $30,000.

If a large portion of your jurisdiction's airspace is restricted, you might consider a tethered drone, which has limited range at any given time but continuous power. There is even a tethered drone solution, The Sigma from Fotokite, which doesn't require a pilot's license to fly. Tethered drones, which are highly portable and can be set up on a rooftop or department vehicle, are often used for monitoring large crowds at special events and for traffic management. They are a great option for departments looking to start a public safety drone program that may not be ready to take on the compliance requirements of free-flying drones.

Step 5: Provide ongoing training

Whether you choose a tethered drone model or a free-flying one, keeping your drone team up to date with federal, state and local regulations as well as department policy and software functionality requires a coordinated effort. Plan for continuing education of five to ten hours of training and flight time per month for each member of your drone team.

To make your drone team even more effective, consider providing public safety drone training on topics such as policies and case law associated with when a drone should/should not be deployed, how to present evidence obtained by drone in court and chain of evidence considerations.

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With comprehensive program management and integrated evidence management, Axon Air Powered by DroneSense provides an end-to-end solution built on integrity and transparency. To find out how your agency can benefit from a drone program and get strategic advice on how to establish a drone in your jurisdiction, schedule a free consultation with Axon Air Strategist Vern Sallee. Learn more about <u>How to Develop a Public Safety Drone Program from the Ground Up</u>.