

THE LOWDOWN

Sheriff Charles S. Blackwood

Deputies and detention officers have difficult, dangerous jobs. When I became Sheriff, I initially prioritized upgrading equipment and training to help keep them safe, efficient, and effective. However, I wanted to do more than improve how we do things; I wanted to expand the things we can do. Therefore, in my second term, I instituted our drone program, and this investment in emerging technology continues to pay dividends beyond my expectations.

A drone is an aircraft with no pilot on board. The drones we use look like a cross between a helicopter and a bug, and they function like flying remote control cars. They take photos and videos, can see in the dark, and have heat-seeking capabilities known as FLIR. This thermal imaging technique is pronounced “fleeer” and it stands for forward-looking infrared. The night vision and FLIR capabilities are so effective that it is sometimes more helpful to fly after dark!

Although a consumer can purchase a drone weighing under 0.55 pounds and fly it the same day for strictly recreational purposes, that person is classified as a hobbyist. We, on the other hand, are not playing around, and we are not flying that kind of drone! Anyone flying for commercial purposes must obtain certification under the Federal Aviation Administration’s rule governing unmanned aircraft systems, also called Part 107. We have four certified pilots, and they will tell you the training is “eye-opening.” It covers drone operations, weather, aerodynamics, flight regulations, air space classification, and more. They will also tell you the certification exam is one of the most difficult tests they ever took. Once licensed, a drone-pilot must recertify every two years.

Some air space is restricted, such as the area over stadiums, prisons, airports, and wildlife preserves, but we can generally fly drones over any public area where we are otherwise allowed to be. That said, we cannot violate people’s right to privacy. For example, we cannot hover directly over someone’s residence without a search warrant unless emergency circumstances exist that justify such action and we cannot release any photos without a subpoena.

We deploy our drones most often for search and rescue situations, or to assist in tracking and apprehending subjects that flee from a crime scene or traffic crash. With a camera onboard each aircraft, our deputies receive a bird’s eye view of a much larger area than they could see unassisted. This same wide-area capability is useful for monitoring large crowds, such as protests, parades, or festivals. It allows us to scan congested areas for emerging disruptions or incoming threats to the assembly. When

coupled with GPS capabilities, drones are an invaluable complement to a ground-based grid search for a missing child or wandering dementia patient.

Drones help us see more, and they help us see differently. The top-down perspective provides a comprehensive vantage point from which to make tactical decisions. More information leads to better choices. The photos and videos also help us review and improve our performance in the aftermath of a critical incident.

Perhaps most importantly, drones help keep our human assets safer. Imagine, for example, a person calls in a threat, perhaps reporting that he or she placed a bomb in a trash can at a ballfield. One of our pilots can fly over and peer into multiple trash receptacles in a fraction of the time it would take to do this task on foot, all while staying farther away from the risk of injury or death. To state the obvious, we can buy another drone, but people are irreplaceable.

Our profession is continually realizing new applications for the technological capabilities of unmanned aircraft. Perhaps you recall the recent ground-shaking “BOOM” people heard in downtown Hillsborough and surrounding areas. It took almost 24 hours for seismologists to conclude a 2.2 magnitude earthquake caused the sound. In the interim, people were very concerned and uneasy. The drone pilot on duty spent several hours searching for dust or smoke clouds that might help locate the source of the sound. He also flew to a location where people sometimes shoot at Tannerite, an explosive target used for firearm practice. Although he found no answers, it was nonetheless reassuring when he ruled out several imminent safety concerns.

Currently, our pilots must travel to the area of concern and maintain visual contact with the drone, but that will likely change in the not-too-distant future as the capability and reliability of this technology continue to increase. I expect drones will soon deliver an AED or Narcan when ground response time is outside the life-saving window. The possibilities are endless, and we are excited to explore them!