



City of Red Wing Police Department

Public Safety Use of Drones FAQs

1. What is a Drone?

What many people refer to as a drone is actually defined by the Federal Aviation Administration (FAA) as an unmanned aerial vehicle (UAV). It's a device capable of controlled flight, and does not have a pilot onboard. These aircraft are very highly regulated by the FAA.

2. How does a UAV work?

UAVs fly using a sophisticated autopilot system that assists the pilot when flying the aircraft manually, or has the ability to fly the aircraft by itself using a pre-loaded flight plan designed by the pilot for that specific mission. The UAV is powered by a battery system and during flight the aircraft sends a constant stream of information to the pilot including altitude, heading, bearing, air speed, position, battery levels, and a live video feed from the aircraft-mounted camera system. If there is a loss of communication or the batteries are getting too low, the aircraft has the ability to automatically return to the point of takeoff or gently land immediately.

3. What kind of training do the pilots receive?

Our pilots are licensed police officers that receive highly specialized training. They must successfully pass the FAA's knowledge exam, specifically the Code of Federal Regulations (CFR), Title 14, Part 107 (UAV Pilot) certification. In addition to the FAA requirements, our pilots receive training on the operation of our UAV and must familiarize themselves with the Department's UAV operations policies.

4. What are the specs of your UAV?

The Red Wing Police Department intends to purchase a single drone which is the DJI Matrice 30T Enterprise Drone. In addition, the same exact drone is intended to be purchased for the Fire Department. They are equipped with thermal camera imaging and can stay airborne for about 40-45 minutes (weather permitting) at a time before needing to land to swap batteries. This will allow the departments to share resources if needed such as batteries.

5. Do other enforcement agencies operate UAV?

Yes, the application of UAV allows law enforcement officers to be safer and more effective in a variety of public safety operations. Approximately 130 law enforcement agencies in Minnesota are currently operating a UAV program.

6. How do you intend to use your UAV?

The most frequent uses for the UAV are searching for missing persons and locating criminals attempting to avoid arrest. Aerial views provide a different vantage point and can be enhanced with the use of the FLIR thermal imaging sensor, which allows us to see anything with a heat signature. The UAV is flown in accordance with federal laws, state laws, and the Department's UAV operational policies.

7. When can you use a UAV without a search warrant?

Minnesota Statute 626.19 restricts the use of a UAV without a search warrant to the following nine circumstances:

- During or in the aftermath of an emergency situation or disaster that involves the risk of death or bodily harm to a person.
- Over a public event where there is a heightened risk to the safety of participants or bystanders.
- To counter the risk of a terrorist attack by a specific individual or organization if the agency determines that credible intelligence indicates a risk.
- To prevent the loss of life and property in natural or man-made disasters and to facilitate operational planning, rescue, and recovery operations in the aftermath of these disasters.
- To conduct a threat assessment in anticipation of a specific event.
- To collect information from a public area if there is reasonable suspicion of criminal activity.
- To collect information for crash reconstruction purposes after a serious or deadly collision occurring on a public road.
- Over a public area for officer training or public relations purposes.
- For purposes unrelated to law enforcement at the request of a government entity, provided the request is in writing and specifies the reason for the request and a proposed period of use.

8. How are you paying for the drones?

The implementation of our UAV program is budgeted in our 2024 Safety Equipment budget. The money was placed in the budget originally for a grant match which was submitted for a trailer camera and a drone. Unfortunately, the Red Wing Police Department did not receive the grant. The money set aside for the drone grant will still be utilized to purchase the drone; but rather a cheaper model than what we would have received from the grant.

9. What restrictions are in place to protect citizen's civil liberties and privacy concerns?

Historically, law enforcement has had the ability to have an aerial view with manned aircraft for many decades. As a result, case law has been established that guides our use of the aircraft. We make no effort to use the UAV to circumvent well established 4th Amendment protections. The technology in the UAV is appropriately limited.

The unmanned systems are mission and incident driven only. It will not be used for arbitrary surveillance. Images collected with the use of this technology are handled and retained within public safety standards, consisting of images collected with any camera by law enforcement and are subject to professional standards, codes of conduct, case law, and with the public's trust in mind.

10. Can you legally fly over my property?

Yes. The Red Wing Police Department UAV can legally fly over your property with the same guidelines that apply to manned aviation. We are bound by federal law and the laws of the State of Minnesota that direct the use of UAV as it relates to the privacy of citizens.

11. Does the UAV carry weapons?

No. Our policy and state statute prohibit our UAV from being equipped with weapons of any sort. The attachable accessories we use include a spotlight, loudspeaker, and lighting. The Fire Department may be looking at a drop attachment in the future to help those in need of an item.

12. Can the UAV be hacked with the controls taken over by someone else?

No. The control data that travels through the air is encrypted. In addition, safeguards are in place so that if the technology fails, the aircraft either automatically returns to the original point of take-off for landing, or slowly descends to the ground to land safely.

13. Can the department be hired by a resident or business to fly the systems for commercial use?

No. This would violate our flight approvals from the Federal Aviation Administration (FAA).

14. Can members of the community buy their own UAV and fly them?

Yes. As long as they follow the appropriate FAA regulations.

15. Will my privacy be impacted?

No, your privacy will not be impacted. Maintaining an individual's privacy and protecting the civil liberties of all persons is of paramount importance to the Red Wing Police Department. We are bound by federal law and the laws of the State of Minnesota that direct the use of UAV as it relates to the privacy of citizens. Again, our UAV will not be used for arbitrary surveillance and must comply with all federal regulations and laws.