When deputies arrive at a potential crime scene, they are gathering information to determine what actions they should take, and what actions they should not take. As they arrive they may receive information on the radio. At the scene they interview witnesses. They can look up information on their computer in their patrol car.

There may be situations when they need more information to find a suspect and to ensure their safety and the public’s safety. For example, when they actively look for a burglar in a neighborhood.

The Sheriff’s Office as well as many of local law enforcement agencies have started using Unmanned Aerial Systems (drones) to help them find suspects, lost hikers, or to collect evidence during a vehicle crash investigation.

Drones can easily move around allowing the operator to see what is on the ground.

Different sensors can be attached to a drone. A camera can show video which the operator can see on their controller. A thermal camera can show the heat signature of anyone on the ground.

Another attachment can include a speaker to give instructions to anyone on the ground.

In some instances, drones can deliver light items that can be helpful to SAR subjects.

The use of drones gives deputies an extra set of eyes that can extend their view to enhance their understanding of the situation around them. They can provide an aerial view that is less expensive than using a helicopter and, since drones can be carried in a patrol vehicle, can be more timely to use in the field. Over the next few years, the Sheriff’s Office will be developing the use of drones to protect the public.
**DRONES– SOME FACTS**

- Flying a drone takes training and practice to learn the sensitivity of its controls.
- Different drones can have longer or shorter flight times. Lightweight inexpensive drones may have flight times of only a few minutes. Larger drones can have flight times of 30 minutes or more.
- Drones are not surveillance cameras. While a prime function is surveillance, a drone is not stationary like surveillance cameras and are limited in their operation by how long the battery lasts.
- All drones must be registered with the FAA and their registration numbers displayed on the drone.
- Drones run the danger of interfering with aircraft, therefore, their operations are restricted around airports.

**DRONES– POTENTIAL USES**

The Sheriff’s Office has used drones for the following purposes:

- **Search for suspects.** Drones can easily be used to search for suspects for crimes such as burglary or robbery. Even with several deputies searching in the area, they are limited to what they can see on the ground, especially in hilly terrain or terrain with a lot of vegetation. With its aerial view, a drone can quickly and easily give view of activity on the ground.

- **Search and Rescue.** Searching for lost hikers can be slow, time consuming work especially in the more mountainous parts of Snohomish County. A drone can quickly cover a large area to find a lost hiker speeding up their recovery. The location information can help to determine the best method of recovery whether it be by ground teams or with a helicopter.

- **Collision Investigations.** The investigation of serious collisions are frequently time consuming and can be disruptive of traffic in the area of the collision. Drones can reduce the time it takes to complete a thorough investigation while satisfying the information requirements for the investigation.

The uses for drones will no doubt develop over the years. They not only can become a central tool in collecting information, but they also can provide an “overwatch” function that is a key to ensuring officer and public safety. Understanding the terrain can help deputies know where a suspect could be hiding. Also, knowing where innocent citizens are, helps deputies to make better decisions to protect the public.

Other potential uses can include, checking out the inside in a building during a standoff situation, crime scene mapping, surveying an area during a disaster such as the Oso landslide. More uses may develop, but the best uses will be with the goal of ensuring public safety.
**DRONES—REGULATIONS AND OPERATIONS**

The Sheriff’s Office currently has 18 deputies throughout the organization certified to fly drones in the course of their duties.

The deputies receive FAA commercial drone training to qualify them for a FAA Part 107 Remote Pilot Certificate.

Also, Sheriff’s Office drones are registered with the FAA and each drone is clearly marked with its registration number, similar to a tail number that aircraft are required to display.

Operation of drones have certain limitations including:

- Drones must weigh less than 55lbs.
- Drones must remain within sight of the operator.
- Drones must operate under 400ft altitude.
- Drones cannot operate in minimum weather visibility of under 3 miles.
- Drones cannot travel over 100mph ground speed.

- Drones must yield right of way to other aircraft.

The Sheriff’s Office coordinates closely with local airports to ensure that its drones do not interfere with airport operations. Paine Field has the biggest affect on drone operations. Near smaller airports, such as the Arlington Airport, deputies deploying drones also must consider airport operations.

Weather also affects drone operations. Heavy rain, snow, or fog can affect good visibility. High winds can affect controllability of the drone potentially causing it to crash and damage property or do harm to a person.

**DRAONES—REGULATED BY THE FAA**

The FAA regulates commercial and recreational drone operations in the U.S. its regulations are contained in Part 107 of the United States Code: [https://www.ecfr.gov/current/title-14/chapter-I/subchapter-F/part-107](https://www.ecfr.gov/current/title-14/chapter-I/subchapter-F/part-107)
DRONES – IN ACTION HELPING DEPUTIES

Here ae some examples of how drones assist deputies.

End of Pursuit Assist. Last year, deputies were in pursuit of a male with outstanding warrants in East County. At the end of the pursuit, the male refused to get out of his vehicle. Instead of rushing the vehicle, a Master Patrol Deputy (MPD) deployed his drone. Through the drone, the MPD watched the male manipulate a handgun along with other actions. At one point, the MPD advised that the male was smoking something out of a glass pipe. The MPD suspected the substance to be methamphetamine.

After several hours of negotiations, the suspect peacefully surrendered. He was booked into the Snohomish County Jail for Attempt to Elude, DV Assault 4th Degree, Unlawful Possession of a Firearm 2nd Degree, Obstructing a Law Enforcement Officer, and DV Violation of a No Contact Order.

In late June 2021 drones were used to search for a body on the south Slough of the Stillaguamish River. The dive team and the Marine Unit were unable to find the drowning victim due to strong currents. However, the drone was able to locate the person down river stuck on a log underwater the following day. The Marine Unit drove by the body several times during the day but could not see it, the drone, due to its higher altitude, could see under the water from its different perspective.

While the SAR Unit could only recover the deceased’s body, the family did at least have the comfort of custody of their loved one’s body.

Drones represent a technology that can improve deputies’ ability to operate more effectively and safely.

The drones ability to use different sensors to view the area make them versatile for light or dark situations. Their maneuverability allows them to cover large areas quickly and completely.

Drones can be adapted to help with different situations such as being fitted with a speaker for crowd control or to communicate with people on the ground. They can also be fitted with light items that might be useful in search and rescue situations.

Drones have the potential to become a valuable tool that deputies can use on a day to day basis.