

CITY COUNCIL AGENDA ITEM
CITY OF SHORELINE, WASHINGTON

AGENDA TITLE:	Discussion of the Enhanced Operationalized Use of Small Unmanned Aircraft Systems (Drones) by the Shoreline Police Department
DEPARTMENT:	Police
PRESENTED BY:	Kelly Park, Shoreline Police Chief
ACTION:	<input type="checkbox"/> Ordinance <input type="checkbox"/> Resolution <input type="checkbox"/> Motion <input checked="" type="checkbox"/> Discussion <input type="checkbox"/> Public Hearing

PROBLEM/ISSUE STATEMENT:

King County Sheriff's Office (KCSO) and select contract partners (including but not limited to King County Metro, the City of SeaTac, KCSO TAC30 (swat team) and King County Search and Rescue) are realizing how proven and highly effective small Unmanned Aircraft Systems (sUAS or 'drones') can be in enhancing public safety by resolving high-risk incidents while minimizing risk to the public, officers, and suspects of crime. KCSO has used this technology on a limited basis within the City of Shoreline and is now ready to expand its use to search for missing persons on rough or rocky terrain or the railroad tracks, enhance park patrol and special park emphasis, safely investigate commercial and other property crimes, and support patrol and K9 officers with near-immediate aerial support. The region also becomes safer when Shoreline Police can extend mutual sUAS assistance to neighboring jurisdictions.

Tonight, Shoreline Police will provide an overview of sUAS usage by the KCSO and discuss with the City Council the enhanced operationalized usage of this technology.

RESOURCE/FINANCIAL IMPACT:

The total cost to implement an expanded sUAS program would be \$9,618.95 from the General Fund. The DJI Mavic 3T sUAS, which is designed for first responder applications, costs \$8,904. The additional cost would be for staff training and testing. This funding was approved in the 2023-2024 Biennial Budget.

RECOMMENDATION

No action is required tonight. Staff recommends that Council ask questions about the sUAS technology and how it is expected to be used in the City for public safety purposes.

Approved By: City Manager **BE** City Attorney **MK**

BACKGROUND

Since the City of Shoreline incorporated in 1995, Shoreline has contracted for law enforcement services from the King County Sheriff's Office (KCSO). The mission of the Shoreline Police Department is "to be a trusted partner in fighting crime and improving the quality of life for our residents and guests." In addition to day-to-day operations, KCSO provides officer vehicles and equipment, umbrella liability coverage, and access to specialized law enforcement units such as major accident investigation, helicopter air support, and a marine and dive unit.

Since June 2021, the KCSO and select contract partners (including but not limited to King County Metro, the City of SeaTac, KCSO TAC30 and King County Search and Rescue) have been using small Unmanned Aircraft Systems (sUAS or 'drones') to enhance public safety. sUAS usage resolves high-risk incidents while minimizing risk to the public, police officers, and suspects of crime.

The KCSO has used this technology on a limited basis within the City of Shoreline and Shoreline Police would now like to expand the operational use of sUAS in the appropriate circumstances. Tonight, Shoreline Police will provide Council with information about sUAS usage and the proposal and cost to enhance this usage.

DISCUSSION

Deploying sUAS technology has become a best practice in our region and our surrounding cities. The technology is often partnered with a deployed K9 law enforcement team to increase visibility and safety for all involved. It is widely used for criminal investigations, for searches, and for the collection of video and photographic evidence.

To date, sUAS technology has only been used in limited situations in Shoreline by the KCSO. This includes the technology being deployed on March 5, 2023, when a Shoreline deputy was shot in the line of duty. The sUAS technology gave first responders an invaluable safety advantage when searching for the suspect who was known to be armed. On the morning of this incident, an FAA-certified sUAS pilot currently serving King County Metro, our KCSO contract partner, was able to 'look ahead' of our K9 officer to ensure the arrest team did not encounter an armed suspect. His eventual, safe apprehension was recorded from above providing important evidence in a felony assault. The aerial footage will be used by outside investigators as they reconstruct the rapidly evolving events of that morning.

Expanded sUAS Usage in Shoreline

While these incidents have warranted sUAS usage by the KCSO in Shoreline, Shoreline Police feel that there are opportunities to enhance this usage in various circumstances to provide for better operational outcomes and success. These circumstances include:

- Search for missing persons on rough or rocky terrain or the BNSF railroad tracks;
- Enhanced park patrol and special park emphasis;
- Investigation of commercial and other property crimes, and
- Support for patrol and K9 officers with near-immediate aerial support.

Additionally, the region becomes safer when Shoreline Police can extend mutual sUAS assistance to neighboring jurisdictions.

KCSO sUAS Policy, Resident Privacy and Staff Training

Shoreline Police will always be protective of the privacy of those we serve and ensure strict policy compliance when considering sUAS deployment. KCSO's General Order's Manual Chapter 9.08.000 (Attachment A) covers the agency's sUAS policy, which dictates approved deployment scenarios so as to preserve individual privacy and constitutional protections.

As is noted in the KCSO sUAS Policy, "The sUAS shall not be used to conduct random surveillance in situations other than those specified in the 'Deployment' section of this policy." Additionally, with regard to personal privacy and security, the Policy states the following:

- sUAS-recorded data will not be collected, disseminated, or retained solely for the purpose of monitoring activities protected by the U.S. Constitution, such as the First Amendment's protections of religion, speech, press, assembly, and the redress of grievances (e.g., protests, demonstrations);
- The use of sUAS and the collection, use, dissemination, or retention of sUAS-recorded data shall not be solely based on individual characteristics (e.g., race, ethnicity, national origin, sexual orientation, gender identity, religion, age, or gender), which is a violation of the law; and
- The sUAS shall not be equipped with lethal or non-lethal weapons, any device that captures or intercepts personal electronic information or communications transmitted via cell phone or any other electronic means, or facial recognition technology which can be used to identify specific persons.

In other words, sUAS expanded operational use would be for a specific law enforcement purpose, investigation, search, etc., and would not be used on a random basis or used in a way that could be construed as intentionally invading resident privacy, or for random surveillance. Additionally, *Airdata*, a tool employed by KCSO, captures all sUAS flight data to ensure transparency and compliance with the Washington State Public Records Act.

All KCSO sUAS pilots are required to obtain their FAA Part 107 license as well as complete basic flight training. Designated deputies have competency in sUAS operations to include pre-flight and post-flight procedures and maintenance, to include complying with National Air Space regulations. If the City moves forward with sUAS expanded operational use, a Shoreline officer will be identified as a designated pilot for the sUAS. This will not take away from that officer's current role and duties but rather enhance our investigations with the available tool. Their primary duty will still be patrol-related duties.

sUAS Technology Specifications and Cost

For the purposes outlined above, Shoreline Police proposes to purchase the DJI Mavic 3T sUAS, which is intended for first responder applications. The drone is extremely compact and lightweight, it can be quickly unfolded and deployed at a moment's notice, and it is capable of up to 45 minutes of flight time. The Mavic 3 Thermal features wide-

angle, telephoto, and thermal lenses in its 3-axis gimbal camera. The 20 megapixel (MP) wide lens is ideal for taking expansive shots and rapid surveying, while the 12 MP telephoto lens provides close up picture quality with a 56x hybrid zoom. Finally, the thermal lens makes it easier to carry out inspections and search and rescue missions. These abilities are enhanced by long-range O3 transmission and omnidirectional obstacle avoidance, among other features.

The expected costs for one drone and one Shoreline officer to complete their pilot training is as follows:

1 DJI Mavic 3T sUAS + tax	\$8,904.00
Flight Training for 1 Officer	
FAA Test Prep	\$39.95
FAA Test	\$175.00
Frontline UAS Pilot School	\$500.00
Total	\$9,618.95

COUNCIL GOAL(S) ADDRESSED

The enhanced use of drones by the Shoreline Police Department addresses City Council Goal #5 - Promote and enhance community safety, broader community connections, and a coordinated response to homelessness and individuals in behavioral health crisis.

RESOURCE/FINANCIAL IMPACT

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ATTACHMENTS

Attachment A: King County Sheriff’s Office General Orders Manual – Chapter 9.08 sUAS Operations

9.08.000 Small Unmanned Aircraft System (sUAS) Operations

(April 2022)

Purpose

Establishes guidelines and procedures for deployment of small unmanned aircraft systems (sUAS).

Scope

This policy governs all employees who use a department approved sUAS or have a supporting function related to the use of the system, including those who supervise these employees.

Definitions

Flight Crewmember: A pilot, visual observer, payload operator, or other person assigned duties directly related to the operation of a sUAS.

Certificate of Authorization (COA): Authorization issued by the FAA to a public operator (government entity) for a specific sUAS activity. COAs allow public safety sUAS operations outside of the restrictions established for private or commercial sUAS operations.

Digital Multimedia Evidence (DME): Digital recording of images, sounds, and associated data.

Remote Pilot in Command (RPIC): An RPIC is a person who holds a remote pilot certificate with a sUAS rating and has the final authority and responsibility for the operation and safety of a sUAS.

Visual Observer: A person, acting as a flight crew member, who helps the RPIC and the person manipulating the aircraft controls see and avoid other air traffic and objects aloft or on the ground.

Unmanned Aircraft (UA) or Unmanned Aerial Vehicle (UAV): An aircraft operated without the possibility of direct human intervention from within or on the aircraft.

Small Unmanned Aircraft / Small Unmanned Aerial Vehicle: A UAV weighing less than 55 pounds, including everything that is on-board or otherwise attached to the aircraft, and can be flown without the possibility of direct human intervention from within or on the aircraft.

Small Unmanned Aircraft System (sUAS): A small UAV and its associated elements (including communications links and the components that control the small UAV) that are required for the safe and efficient operation of the small UAV in the National Airspace System.

Policy

It is the intent of the King County Sheriff's Office to protect the safety of all community members. To that end, the King County Sheriff's Office may deploy small unmanned aircraft systems to support specific law enforcement operations. Any use of a sUAS will be in strict accordance with the United States Constitution, The Washington State Constitution, federal and state law, and Federal Aviation Administration (FAA) regulations.

Small unmanned aircraft systems can provide law enforcement incident commanders with essential information to help manage and resolve critical incidents while reducing risk to community members and deputies. The King County Sheriff's Office recognizes the public's concern for privacy and other constitutionally protected rights should these systems be misused. This policy has been crafted to guide the KCSO during the use of these systems for legitimate law enforcement purposes while protecting community members' rights to privacy and freedom from unauthorized government intrusion.

Any complaints of misuse regarding sUAS, or sUAS-recorded data, will be investigated in accordance with GOM [3.03.000](#) Investigation of Personnel Misconduct.

Deployment

Only trained and authorized KCSO personnel and King County Search & Rescue volunteers may deploy a sUAS. Systems shall be deployed only when such use is appropriate in the performance of official law enforcement duties, during public safety missions, or for department sanctioned training. Any use, including the collection and use of electronic recordings or other data generated by the sUAS, shall comply with the policy provisions provided herein and with applicable law.

Small unmanned aircraft systems may be deployed during unplanned emergency incidents or during planned operations for the following purposes:

1. Situational Awareness – to assist incident commanders and other decision-makers with understanding the nature, scale, and scope of a public safety incident, and for planning and coordinating an effective response.
2. Search and Rescue – to assist with missing person investigations, AMBER Alerts, Silver Alerts, and other search & rescue operations.
3. Tactical Deployment during Emergencies – to support the deployment of deputies and equipment in emergency situations (e.g., incidents involving hostages, barricaded subjects, active shooters, support for large-scale tactical operations, and temporary perimeter security operations during in-progress crimes).

4. Scene Documentation – to document a crime scene, accident scene, or other major incident scene (e.g., disaster management, post critical incident response, large-scale forensic scene) either in a public area or, after obtaining a search warrant, in non-public areas.
 - Only sUAS pilots assigned to the Criminal Intelligence Unit or the Major Accident Response & Reconstruction Unit may use sUAS for crime scene investigations and documentation.
5. Service of High-Risk Search Warrants – to reduce the risk to deputies, civilians, and suspects by providing information about the location and disposition of suspects, uninvolved occupants, obstacles, and the layout of structures when planning and executing search warrant operations.

All deployments of sUAS not falling under the circumstances outlined above must be specifically authorized by the Chief of CID or his or her designee.

Prohibited Use

The sUAS shall not be used to conduct random surveillance in situations other than those specified in the “Deployment” section of this policy.

sUAS-recorded data will not be collected, disseminated, or retained solely for the purpose of monitoring activities protected by the U.S. Constitution, such as the First Amendment’s protections of religion, speech, press, assembly, and the redress of grievances (e.g., protests, demonstrations).

The use of sUAS and the collection, use, dissemination, or retention of sUAS-recorded data shall not be solely based on individual characteristics (e.g., race, ethnicity, national origin, sexual orientation, gender identity, religion, age, or gender), which is a violation of the law.

The sUAS shall not be equipped with:

- Lethal or non-lethal weapons.
- Any device that captures or intercepts personal electronic information or communications transmitted via cell phone or any other electronic means unless specifically authorized under RCW [9.73](#) (this does not include King County Search & Rescue UAVs equipped with devices to locate cell phones of missing and / or lost persons)

- Facial recognition technology which can be used to identify specific persons. This does not include technology in which the sUAS recognizes the face of the operator as a security measure. This also does not include technology which can be used to identify an image as a non-specific human being vs. another object (i.e. an algorithm that recognizes a human form in a forest).

Qualifications and Training

The sUAS shall be operated only by personnel who have been trained and certified in the operation of the system and are FAA-Certified Remote Pilots. Pilots in training may operate a sUAS while under the direct supervision of a KCSO-certified sUAS pilot.

sUAS operators and flight crewmembers must be certified in the operation of the sUAS by successfully completing a department-approved training course conducted by King County Sheriff's Office sUAS Instructor Pilots (IP). Applicants must meet the requirements for, and successfully pass, FAA certification as well as any department certifications to maintain their sUAS qualification and must keep their aeronautical knowledge up to date. Operators must have an understanding of, and comply with, FAA and military regulations applicable to the airspace where the sUAS will operate. Operators must have completed training in accordance with the individual unit's SOP. Operators must comply with [Title 14 CFR 67.107](#) Code of Federal Regulations and FAA regulation [14 CFR 91.17](#) related to mental health and drug or alcohol use.

The KCSO Air Support Unit Sergeant is responsible for drafting initial and recurring training requirements for all KCSO sUAS operators.

Initial Training

Operators shall complete the following certification and training:

1. The FAA part 107 test for sUAS.
2. The KCSO Remote Pilot-in-Command (RPIC) certification course.
3. 16 hours of flight training with sUAS instructors and demonstrate safe operation of the sUAS during practical flight exercises.

Observers must complete the KCSO observer training course prior to acting as a sUAS observer. This training shall include at a minimum:

1. [14 CFR 91.111](#) *Operating Near Other Aircraft*
2. [14 CFR 91.113](#) *Right-of-Way Rules: Except Water Operations*
3. [14 CFR 91.155](#) *Basic VFR Weather Minimums*

Recurrent Training

KCSO sUAS operators shall maintain proficiency in operator/observer skills. Members who do not have any documented training or flight time within a span of 120 days will have to demonstrate proficiency before acting as an operator/observer during a deployment or exercise. sUAS remote pilots-in-command and observers shall complete annual recertification training. Operators must keep their FAA Part 107 certificate active by passing the FAA recurrent knowledge test once every 24 months.

Safety of Operations

Safety of sUAS operations is the responsibility of the entire team. sUAS team members shall bring to the attention of the other members any condition which they feel is a safety concern.

The piloting area selected by the sUAS team shall be located within a secure perimeter when practicable. The area should be evaluated for adequate space and clearances in order to safely assemble, launch, and recover the sUAS. Attention should be given to overhead obstacles and obstructions that may pose a risk to the sUAS during operation. Access to the piloting area should be controlled and access granted to personnel for operational purposes only.

Except as required by the mission, all sUAS team members shall ensure that no people or aircraft are in the vicinity of the sUAS during operations. Operators should avoid flying over or near people, vehicles, or other aircraft.

Manned law enforcement aircraft and sUAS may be deployed simultaneously during an incident under the following criteria:

1. The sUAS operates between surface and 400 feet above ground level.
2. Any manned LE aircraft operates more than 600 feet above ground level.
3. The sUAS RPIC and the manned LE aircraft crew have direct communications.
4. In the event of a conflict between aircraft operations, the sUAS shall yield to the manned LE aircraft.

The sUAS should not be flown directly over large gatherings of people and shall not be used as a chase vehicle during a motor vehicle pursuit.

sUAS team members will comply with the sUAS manufacturer's operator's manual, warnings, limitations, placards, and/or checklists at all times unless an emergency dictates otherwise.

Remote pilots-in-command are authorized to evaluate and accept or decline any mission or portions thereof. The operator shall not be subject to discipline for declining a mission or any portion thereof due to safety concerns. The remote pilot-in-command is ultimately responsible for the safe deployment and operation of the sUAS.

Retention and Dissemination of sUAS Video

sUAS pilots shall record video during deployments in support of any active public safety operations. Video recording during other sUAS operations (training, demonstration flights, etc.) shall be at the discretion of the sUAS pilot or incident commander. sUAS pilots shall adhere to the KCSO policy for Submission & Storage of Photographic and Video Evidence GOM [16.01.020](#). The following guidelines govern the collection of video and / or pictures during sUAS operations:

1. Prior to flight operations, operators shall insert a newly formatted micro SD card into the sUAS.
2. At the conclusion of routine sUAS operations in which there is no unusual occurrence, the video shall be uploaded to evidence.com and the micro SD card formatted for future use.
3. If the sUAS recorded an unusual event, such as a particularly sensitive crime scene or a significant use of force by an officer and/or against an officer, then the micro SD card shall be turned over to the lead investigator after the sUAS pilot uploads the video to evidence.com.

Any video, audio, or still photos recorded during sUAS operations shall be retained in accordance with GOM [8.00.020](#), all applicable records retention schedules, and state public records retention laws.

All data collected during sUAS operations will be stored, maintained, and disseminated in accordance with the GOM [15.04.000](#).

Personal information collected during the operation of a sUAS that is not directly related to the emergency response and/or criminal investigation or not maintained in a system of records covered by the Privacy Act may not be used, copied, disclosed, or disseminated for any purpose after the conclusion of the operation, unless there is probable cause that the personal information is evidence of criminal activity or otherwise required by law. Personal information not directly related to the emergency response and/or criminal investigation shall be deleted after 30 days unless required to be retained for a longer period by any other applicable law or regulation.

Annual Review

This policy and associated training needs shall be reviewed and documented annually by the ASU Sergeant and the commanders and supervisors of individual units maintaining a sUAS program. The ASU Sergeant shall provide recommendations and feedback to the CID Chief.

Responsibilities

Unit Commanders & Supervisors

With approval from the Undersheriff, KCSO units may operate a sUAS program in accordance with this policy. Individual unit commanders and supervisors are responsible for managing all deployments and uses of a sUAS to ensure that the devices are used in accordance with the policy and procedures established herein. Individual unit commanders and supervisors are further responsible for ensuring proper flight documentation is completed and for conducting periodic audits of sUAS use and operations.

sUAS Program Commander & Program Manager

The Chief of the Criminal Investigations Division shall act as the sUAS program commander and is responsible for the management and oversight of the KCSO sUAS program. The Air Support Unit Sergeant shall act as the sUAS program manager and assist the program commander. The Program Commander and the Program Manager shall oversee the overall direction and performance of KCSO units operating a sUAS program and shall exercise command and control over both. The program commander and manager shall ensure that policies and procedures conform to current law, regulations, and best practices and will have the following additional responsibilities:

1. Coordinate the FAA Certificate of Waiver or Authorization (COA) application process and ensuring that the COA is current.
2. Collect required FAA reporting data from KCSO units operating a sUAS / UAV program.
3. Conduct periodic audits of KCSO sUAS usage to ensure compliance with this department policy.
4. Assist KCSO units operating a sUAS with development of sUAS SOPs.
5. Disseminating updates of FAA regulations to KCSO units operating a sUAS program.

6. Evaluating sUAS equipment proposals for reliability, safety, maintenance, and on-going manufacturer support.
7. Approving equipment requests from KCSO units operating a sUAS programs.
8. Ensure that all operators and observers have completed required FAA and department training.
9. Develop and manage a uniform protocol for submission and evaluation of requests to deploy a sUAS, including urgent requests made during ongoing or emerging incidents.
10. Developing and manage protocol for documenting missions.
11. Developing and managing a system for public notification of planned sUAS deployment to public events or exercises and notification of policy changes that affect privacy. The notification may be via media release, department social media, and / or posting the KCSO sUAS policy on-line.
12. Developing and manage a sUAS inspection, maintenance, and record-keeping protocol to ensure continued airworthiness of the sUAS, including the system's overhaul or life limits.
13. Evaluate, control, and monitor access to personal information and other data collected by sUAS and ensure any dissemination of sUAS-recorded images and data are in accordance with applicable law, policy, and procedures.
14. Recommend program enhancements including safety and information security procedures.
15. Provide periodic reports to the Sheriff and Undersheriff regarding sUAS usage, complaints, successes, maintenance, costs, and other relevant program information.
16. Publish an annual report to the public summarizing KCSO sUAS operations. The report shall include a brief description of the types or categories of missions flown and how sUAS was used to respond to mutual aid requests.

Remote Pilot-in-Command (RPIC)

The RPIC will function as the team leader and operator of the sUAS. The RPIC is ultimately responsible for the operation and solely responsible for piloting the sUAS during flight. The Observer will be appointed by the RPIC at their discretion.

Observer

The observer's primary duty is to operate the sUAS auxiliary equipment such as cameras, FLIR, radio communications with other units and observe for anything that may interfere with, or pose a risk to, the operator or aircraft. The observer is also responsible

for all aviation-related communications required by Federal Aviation Regulations.

Procedures

Call Out Procedures

sUAS are available to support all KCSO units for call-outs. The procedures listed below are for units that do not maintain a sUAS program. Units that maintain a sUAS program may establish their own call-out procedures and criteria.

1. The field supervisor shall determine the need for a call-out.
2. The communications center shall notify the Air Support Unit (ASU) who shall have first opportunity to respond.
3. If ASU is not available to respond, the communications center shall request a call-out to sUAS equipped units. On-duty sUAS pilots shall have priority for responding to call-outs.
4. Responding sUAS personnel shall make the final determination if it is safe to deploy the sUAS for a particular incident. sUAS personnel shall consider:
 - a. Ability of the sUAS team to operate in a secure area.
 - b. Terrain and other features of the operational area.
 - c. Potential obstructions to flight and airspace restrictions.
 - d. Weather.
5. Mutual aid: KCSO sUAS pilots may respond to other local, state, tribal, and federal agencies' requests for assistance provided the scope of the request complies with KCSO policy and the uses outlined in this policy. All mutual aid operations shall be conducted in accordance with this policy and individual unit standard operating procedures.

Reference:

RCW [9.73](#)

Code of Federal Regulations:

[14 CFR 67.107](#)

[14 CFR 91.17](#)

[14 CFR 91.111](#)

[14 CFR 91.113](#)

[14 CFR 91.155](#)

Annual Review Responsibility:

Chief of CID & Air Support Unit Supervisor