



Seattle Office of
Inspector General

Surveillance Technology Usage Review Remotely Operated Vehicles (2023)

As Required by Seattle Municipal Code 14.18.060

September, 2024

Office of Inspector General

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Purpose

Surveillance Ordinance Requirement

Per Seattle Municipal Code 14.18.060, OIG is required to annually review the Seattle Police Department’s (SPD) use of surveillance technology and the extent to which SPD is in compliance with the requirements of Chapter 14.18.

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Technology Description

ROVs: unarmed, motorized, remotely operated vehicles.

Remotely Operated Vehicles (**ROVs**) refer to a class of unarmed motorized devices used to surveil subjects and perform basic manual tasks at a safe distance. Three SPD units operate the 14 ROVs SPD owns: Special Weapons And Tactics (SWAT) operates seven ROVs, the Arson/Bomb Squad (ABS) operates five ROVs, and the Harbor Unit (HBU) operates two.¹ While SWAT and ABS deploy wheeled ROVs, HBU owns submersible ROVs. Most ROVs are equipped with cameras, but only the HBU submersibles have the capability to record videos, which capture sonar read-out.

1 Most of the ROVs are different manufacturers and specifications so that they are tailored for specific circumstances. The SIR details each ROV in Section 2.3.

SECTION A

Frequency and Patterns of Use

SMC 14.18.060, § A:

How surveillance technology has been used, how frequently, and whether usage patterns are changing over time.

ROVs Are Tactical Equipment Used in Specialized Circumstances

There were 99 ROV deployments for 64 cases in 2023: SWAT had 91 ROV deployments in 56 cases; ABS deployed ROVs for three cases; and HBU deployed ROVs in five cases. The SIR states that SWAT and ABS use ROVs “to assess potentially dangerous situations from a safe position.” Both SWAT and ABS personnel reported they use ROVs in dangerous situations. The SIR also states that HBU uses ROVs “to perform necessary underwater search and recovery functions that would not be possible with manned diving alone.” A review of 21 cases involving ROVs determined that ROV uses aligned with their respective SIR descriptions.

Example Use Cases

Hazardous Material

Seattle Police Department was contacted by a representative from a local business reporting a hazardous explosive chemical that had been located at one of their laboratories. ABS personnel responded and rendered the material safe.

Deceased Swimmer/ Recovery

Harbor Unit personnel responded to a report of a potentially deceased swimmer beneath the residence of a waterfront private property. HBU personnel used the submersible ROV and determined it appeared to be a deceased swimmer. SPD divers retrieved the body.

Assault/Domestic Violence Arrest Warrant

SWAT personnel participated in serving an arrest warrant at a residence for a suspect. They deployed the Avatar III ROV to search for the suspect in the home; when the suspect encountered the ROV, they threw it out of the second story window, damaging it beyond repair. The suspect surrendered and was taken into custody.

Robbery Arrest Warrant

In conjunction with a federal robbery task force, SWAT personnel participated in serving an arrest warrant for a suspect at a hotel outside of Seattle. Once the suspect and other occupants of the hotel room had surrendered, SWAT personnel breached the room and inserted the ROV to confirm it was clear. Once it appeared safe to enter, they secured the room.

**Assault/Domestic
Violence/Barricaded
Suspect**

SWAT personnel sought to arrest a suspect of domestic violence at a residence. SWAT breached the door and introduced a reconnaissance ROV, which observed the suspect. The suspect then surrendered.

No Evidence ROVs Have Been Outfitted With Weapons

During the community engagement period for the approval of the SIR for this technology, community members noted concerns about whether ROVs could be or have been outfitted with a weapon. Personnel from these units reported that none of their ROVs have been or are capable of being fitted with a weapon. Additionally, a review of 30 report narratives from 21 cases involving ROVs found no evidence of that ROVs had been outfitted with weapons.

SECTION B

**Data Sharing with External Partners and
Other Entities**

SMC 14.18.060, § B:
How often surveillance
technology or its data
are being shared
with other entities,
including other
governments in
particular.

SPD Has Not Retained or Shared ROV Recordings

Section 6.1 of the SIR states that “only images directly related to the specific search and recovery [by HBU] are manually exported from the ROV’s onboard hard drive if requested by SPD detectives for follow up investigation. If such a request would be made, Harbor Unit personnel would save the extracted images in the [digital evidence management] system.” Though the HBU ROV can produce recordings of sonar read-out, HBU personnel report those recordings are not shared externally because the files are saved in a file format that requires proprietary software to open.² ABS and SWAT ROVs – as detailed in Section C – do not record, and therefore no recordings can be shared with external entities. A review of 30 report narratives pertaining to 21 cases found no evidence of audio/video recordings from any ROVs.

2 However, as outlined in Section 6.1 of the SIR, SPD may share data with various external agencies and entities within legal guidelines or as required by law. Such as prosecuting attorney’s offices, insurance companies, courts, federal and state law enforcement agencies, and members of the public can access their own information pursuant to a public records request.

SECTION C

Data Management and Safeguarding of Individual Information

SMC 14.18.060, § C:

How well data management protocols are safeguarding individual information.

No Evidence of Improper Retention

Section 4.2 of the SIR states “no images or data are stored or retained by ROVs used by SWAT or Arson/Bomb units.” Personnel from SWAT and ABS reported that none of their ROVs produce recordings, though some ROVs have the capability. A review of 21 case files found no evidence of video retention from SWAT or ABS ROVs present in the DEMS. As for HBU ROV recordings, Section 6.1 of the SIR states that – if a recording produced from the HBU ROV is requested – HBU personnel may migrate recordings from the ROV’s hard drive to the digital evidence management system (DEMS). Otherwise HBU personnel report that the sonar recordings can only be played or viewed using proprietary software, and only HBU computers have licenses for that software.

SECTION D

Impact on Civil Liberties and Disproportionate Effects on Disadvantaged Populations

SMC 14.18.060, § D:

How deployment of surveillance technologies impacted or could impact civil liberties or have disproportionate effects on disadvantaged populations (...).

This review found no indication that ROVs were used to observe individuals in a manner that impacts civil liberties. There was also no indication that use of ROVs would have a plausible negative effect on any disadvantaged populations.

SECTION E

Complaints, Concerns and Other Assessments

SMC 14.18.060, § E:

A summary of any complaints or concerns received by or known by departments about their surveillance technology and results of any internal audits or other assessments of code compliance.

Office of Police Accountability Complaints

No relevant complaints pertaining to this surveillance technology were cited in OPA complaints filed in 2023.

Customer Service Board Comments

No relevant comments pertaining to this surveillance technology were cited in Customer Service Board comments posted in 2023.

Internal Audits or Assessments

No internal audits or assessments of this surveillance technology were conducted in 2023.

SECTION F

Total Annual Costs

SMC 14.18.060, § F:

Total annual costs for use of surveillance technology, including personnel and other ongoing costs.

All three units reported that their respective inventories of ROVs were acquired prior to 2023; as a result, HBU and SWAT reported no 2023 costs.³ ABS reported \$89.67 in repairs and modifications to their existing ROVs.

³ SWAT did report that in 2024 they replaced their Avatar III after it was permanently damaged in 2023 when a subject threw it through a second-story window. That ROV's estimated cost is \$30,000.

APPENDIX A: Management Response

SPD provided that it has no substantive response to this review as no matters requiring a response are raised, but SPD appreciates the opportunity to review.

Non-Audit Statement This review was not conducted under Generally Accepted Government Auditing Standards (GAGAS); however, OIG has followed GAGAS standards regarding the sufficiency and appropriateness of evidence.