



**REMOTE CONTROLLED ROBOTS:
“SUBMERSIBLE ROVS”
IMPACT AND USE POLICY**

UPDATED: FEBRUARY 4, 2026

REMOTE CONTROLLED ROBOTS: “SUBMERSIBLE ROVS” REVISION

Date of Revision	Description of Revision
February 4, 2026	This impact and use policy was revised to comply with the recently passed amendment to the POST Act, Local Law 56 of 2025. While previously categorized under the situational awareness cameras impact and use policy, due to the differing functionality of the “Submersible ROV”, this separate impact and use policy has been drafted.

ABSTRACT

The New York City Police Department (NYPD) utilizes unmanned ground vehicles for maritime and underwater operations to enable NYPD personnel to safely and remotely access submerged or otherwise hazardous environments, including during search-and-rescue operations, evidence recovery, vessel and hull inspections, underwater infrastructure assessments, and counterterrorism-related activities within the City’s waterways and port facilities.

These underwater operations often face some limitations, including restricted visibility, strong currents, entanglement hazards, confined spaces, environmental debris, and risks associated with deploying divers in potentially dangerous conditions. To address some of these deficiencies, the NYPD has acquired industrial grade, submersible, remote-operated vehicles, manufactured by VideoRay LLC. For ease of reference in this impact and use policy, this technology will be referred to as “submersible ROV.”

The NYPD has produced this impact and use policy because submersible ROVs are capable of collecting, processing, and transmitting live video imagery and related sensor data from underwater environments to a surface-based controller operated by trained NYPD personnel.

CAPABILITIES OF THE TECHNOLOGY

Background Information: Submersible ROVs are designed to enable NYPD personnel to safely and remotely access submerged, confined, or otherwise hazardous underwater environments without requiring direct diver entry. Submersible ROVs are intended to reduce risk to NYPD personnel, preserve human life, protect critical maritime infrastructure, and support informed operational decision-making during maritime, port security, search-and-rescue, evidence recovery, and counterterrorism operations.

Submersible ROVs are particularly suited for vessel and hull inspections, underwater searches for evidence or missing persons, inspection of submerged infrastructure, suspicious object assessments, and other maritime or underwater scenarios where environmental conditions, limited visibility, depth, debris, or safety concerns make diver deployment unsafe, impractical, or operationally inefficient.

Physical Description: Submersible ROVs are compact, industrial grade, tethered underwater robotic systems with a surface-based integrated control box, and an industrial hand controller, that are transported in rugged, watertight cases. The complete system has a total weight of approximately 85lbs and is designed to be portable and deployable within minutes by trained personnel. The submersible ROV weighs approximately 13.5 lbs when configured with ballast and is designed to operate in a near-neutrally buoyant configuration once deployed in water. Buoyancy is adjusted through a tool-free ballast system, allowing the vehicle to be configured for varying water conditions and operational requirements. The submersible ROV is capable of operating in low-visibility conditions and currents commonly encountered in New York City waterways, as well as maneuvering around vessel hulls, submerged structures, and confined underwater spaces.

Operation: Submersible ROVs are piloted through a hard-wired tether connection by an operator using a controller, which provide direct control over its movement, depth, camera orientation,

lighting, and other operational functions. This ensures that all movement, deployment, and use of the system is directly supervised and assessed in real time by trained NYPD personnel. The tether supplies power to the submersible ROV, and transmits video and sensor data directly to the controller. The operational range is limited to the length of tether deployed, which may extend up to approximately 2,000 feet, depending on system configuration and operational conditions. The tether eliminates reliance on wireless communication. Submersible ROVs are capable of operating at depths of up to approximately 1,000 feet and at a rated maximum speed of approximately 4.2 knots in calm water conditions, allowing NYPD personnel to conduct inspections and observations across a wide range of underwater environments, including deep harbor areas and submerged infrastructure.

Technology Capabilities: Submersible ROVs are equipped with a forward-facing, high-resolution camera that transmits real-time video imagery from underwater environments. The camera supports both color and black-and-white operation, includes adjustable focus and tilt, and allows operators to visually inspect underwater environments in real time. The system also includes integrated forward-facing LED lighting, providing illumination in low-light or zero-light underwater conditions without the need for external lighting.

Submersible ROVs also include integrated sensors, such as depth and orientation indicators, which provide situational feedback to the operator during underwater operations. Submersible ROVs may be equipped with an imaging sonar accessory, which uses active acoustic signals to generate visual representations of underwater objects, structures, and terrain in low-visibility conditions. Sonar output is displayed to the operator as visual imaging data and is used to assist with navigation, object detection, and situational awareness in turbid or dark underwater environments. Sonar functionality does not capture or record sound.

Additionally, a small, operator-controlled manipulator arm is attached to the submersible ROVs. It is designed for light-duty interaction with underwater objects, such as grasping or retrieving items during inspection or recovery operations. The manipulator closes with approximately 10 pounds of gripping force.

Submersible ROVs do not operate autonomously, do not initiate actions independently, and do not make decisions without operator input.

Transmittal of Information: Submersible ROVs transmit live video imagery and associated operational sensor data from the submersible vehicle to a surface-based controller operated by trained NYPD personnel at or near the deployment scene. All transmissions occur through a hard-wired tether connection, which provides both power and data communication between the submersible and the controller. The system does not operate over a wireless network. Submersible ROVs do not connect to external databases, cloud-based services, or third-party systems, and cannot be operated remotely from off-site locations. Any external video output or display, if used, requires a direct physical connection to the controller and does not enable remote access or network transmission. The NYPD does not record, store, or retain video or sensor data transmitted by submersible ROVs.

RULES, PROCESSES & GUIDELINES RELATING TO USE OF THE TECHNOLOGY

NYPD’s Submersible ROVs must be used in a manner consistent with the requirements and protection of the Constitution of the United States, the New York State Constitution, and applicable statutory authorities.

Request for Use: NYPD submersible ROVs may only be used by NYPD’s Emergency Service Unit (ESU) for legitimate law enforcement purposes. Submersible ROVs are only used by NYPD personnel who are trained on the technology’s appropriate use and application. The operator is responsible for ensure safety surrounding the use of submersible ROVs. If necessary, NYPD personnel will request assistance from ESU. An ESU supervisor will determine if the use of submersible ROVs is appropriate.

Court Authorization: The NYPD does not seek court authorization before using submersible ROVs because they are only utilized during limited and exigent circumstances in emergency environments.

Restrictions in Use: NYPD policy specifically prohibits the use of submersible ROVs for surveillance, routine patrol with officers, traffic enforcement, crowd control, or immobilizing a vehicle or suspect. Additionally, the NYPD does not use facial recognition or any other biometric measuring technologies with submersible ROVs. Submersible ROVs are not designed for or equipped with any weaponry, nor for offensive or enforcement actions.

Additional Guidelines: Submersible ROVs are not used for investigating political activity. NYPD investigations involving political activity are conducted by the Intelligence Division, which is the sole entity in the NYPD that may conduct investigations involving political activities pursuant to the Revised *Handschu* Guidelines.

As with all NYPD operations, no person will be the subject of police action solely because of actual or perceived race, color, religion or creed, age, national origin, alienage, citizenship status, gender (including gender identity), sexual orientation, disability, marital status, partnership status, military status, or political affiliation or beliefs.

The misuse of submersible ROVs will subject employees to administrative and potentially criminal penalties.

Addendum Obligation: In accordance with the Public Oversight of Surveillance Technology Act, an addendum to this impact and use policy will be prepared as necessary to describe any additional uses of submersible ROVs.

SAFEGUARD & SECURITY MEASURES AGAINST UNAUTHORIZED ACCESS

Physical Safeguard & Security Measures: Submersible ROVs are securely stored within NYPD facilities when not in use, in a location inaccessible to the public. Additionally, a supervisor must periodically inspect and account for the devices. Supervisors of personnel utilizing submersible ROVs are responsible for security and proper utilization of the technology and associated

equipment. Only authorized NYPD personnel have access to submersible ROVs and the remote tablets that receive its transmissions and control its movements.

Access to submersible ROVs is limited to NYPD personnel with an articulable need to use the technology in furtherance of a lawful duty. Access to submersible ROVs is determined by an officer’s assignment and is rescinded when that officer’s assignment no longer requires its use.

Data Safeguard & Security Measures: Submersible ROVs do not store data onboard and do not include internal memory or storage media. Video imagery, sonar imagery, and operational sensor data are displayed in real time on the surface-based controller during operation and are not automatically recorded, stored, or retained. Submersible ROVs do not transmit data to external databases, cloud-based services, or third-party systems, and data is not stored or retained by the manufacturer. Any data generated by the system exists only temporarily during live operation.

Software connected to submersible ROVs is part of a closed network, used solely in connection with operating the devices. Authorized users of submersible ROVs are authenticated by a username and password on the remote tablet. Data at rest and in transit is encrypted to military standards.

Unauthorized access of any system will subject employees to administrative and potentially criminal penalties.

POLICIES & PROCEDURES RELATING TO RETENTION, ACCESS, & USE OF THE DATA

The NYPD does not record, store, or retain video or sensor data transmitted by submersible ROVs.

The NYPD retains and disposes of records pursuant to New York City Charter § 1133(f), (g) and (h). Pursuant to these provisions, the NYPD developed a retention schedule that was approved by the New York City Law Department and Department of Records and Information Services. This retention schedule governs the retention and disposition of NYPD records, and the NYPD retains and disposes of records pursuant to this schedule. The retention period of a “case investigation record” depends on its classification and is based on the final disposition of the case, i.e., what the arrestee is convicted of or pleads to. Further, case investigations are not considered closed unless they result in: prosecution and appeals are exhausted, a settlement, no arrest, or when restitution is no longer sought.

The misuse of any data will subject employees to administrative and potentially criminal penalties.

POLICIES & PROCEDURES RELATING TO PUBLIC ACCESS OR USE OF THE DATA

Members of the public may request information or data related to the NYPD’s use of submersible ROVs pursuant to the New York State Freedom of Information Law. However, the NYPD does not record, store, or retain video or acoustic data processed by submersible ROVs and would be unable to provide same

.EXTERNAL ENTITIES

Entities outside of the NYPD do not have direct access to the video and sensor data transmitted by NYPD’s submersible ROVs. The NYPD does not record, store, or retain video or sensor data transmitted by submersible ROVs.

Vendors & Contractors: The NYPD purchases submersible ROVs and associated equipment or software from approved vendors. The NYPD emphasizes the importance of and engages with vendors and contractors to maintain the confidentiality, availability, and integrity of NYPD technology systems.

Vendors and contractors may have access to submersible ROVs’ associated software in the performance of contractual duties to the NYPD. Such duties are typically technical or proprietary in nature (e.g., maintenance or failure mitigation). In providing vendors and contractors access to equipment and computer systems, the NYPD follows the principle of least privilege. Vendors and contractors are only allowed access on a “need to know basis” to fulfill contractual obligations and/or agreements.

Vendors and contractors providing equipment and services to the NYPD undergo vendor responsibility determination and integrity reviews. Vendors and contractors providing sensitive equipment and services to the NYPD also undergo background checks.

Vendors and contractors are legally obligated by contracts and/or agreements to maintain the confidentiality of NYPD data and information. Vendors and contractors are subject to criminal and civil penalties for unauthorized use or disclosure of NYPD data or information.

TRAINING

Only trained NYPD personnel can operate submersible ROVs. NYPD personnel utilizing submersible ROVs receive command-level training on the proper operation of submersible ROVs and the associated equipment. NYPD personnel must operate submersible ROVs in compliance with NYPD policies and training.

INTERNAL AUDIT & OVERSIGHT MECHANISMS

Only select personnel are specifically trained and authorized to use submersible ROVs in its appropriate application. Supervisors of personnel utilizing submersible ROVs are responsible for security and proper utilization of the technology and associated equipment.

Harbor Unit personnel maintain a log of all equipment deployed at scenes when requested for assistance (including submersible ROVs) by date, time, location, purpose, operator, and authorizing member.

The misuse of submersible ROVs will subject employees to administrative and potentially criminal penalties.

HEALTH & SAFETY REPORTING

There are no known tests or reports regarding the health and safety effects of submersible ROVs. Submersible ROVs has been thoroughly tested for its intended use and purpose. It is designed to be safe and effective when utilized under the criteria explained in the ‘Rules, Processes & Guidelines Relating to Use of the Technology’ section of this impact and use Policy. The NYPD only allows the operation of submersible ROVs by trained professionals.

Best Practices: Operators should ensure that only trained personnel handle, deploy, recover, or operate the submersible ROVs and its associated equipment. Personnel should maintain a safe distance from the submersible vehicle, tether, winch, and propulsion components during deployment and recovery to avoid entanglement or injury. The tether should be managed carefully at all times to prevent entanglement with personnel, vessels, propellers, or underwater structures. Operators should monitor environmental conditions, including current strength, visibility, debris, and vessel traffic, and adjust deployment techniques accordingly. The submersible ROVs should be given the right of way during operations and should not be touched, moved, or powered by anyone other than trained operators.

Prohibitions: The manufacturer explicitly prohibits the use of submersible ROVs outside their intended underwater operational context. Submersible ROVs shall not be used in a manner inconsistent with manufacturer specifications, including operation beyond rated depth, improper tether handling, or unsafe deployment practices.

Operational Safety Risks: Improper operation of ROV may result in injury to personnel, damage to vessels or infrastructure, or loss of equipment. Environmental conditions such as strong currents, limited visibility, submerged debris, or confined spaces may increase operational risk and require additional caution and operator judgment.

Collision and Environmental Safety: Underwater collisions with submerged structures, vessels, or debris may occur during operation. Operators are trained to maneuver the ROV cautiously and to rely on camera imagery, lighting, and sonar to avoid hazards.

Electrical and Power Safety: Submersible ROVs are powered through a hard-wired tether connection from a surface-based integrated control box. Operators must ensure that all surface power equipment is properly grounded, protected from water intrusion, and operated in accordance with manufacturer instructions and applicable safety standards. Power connections should not be handled with wet hands, and damaged cables or connectors must not be used.

DISPARATE IMPACTS OF THE TECHNOLOGY & IMPACT & USE POLICY

The NYPD has implemented significant safeguards to ensure that submersible ROVs are used effectively and responsibly. The NYPD does not believe that this technology is being used in a manner that disparately impacts any protected groups as defined in the New York City Human Rights Law.

The safeguards and audit protocols built into this impact and use policy for submersible ROVs help to mitigate the risk of partial and biased law enforcement. Submersible ROVs are a

reactive technology that are used as tools to support de-escalation efforts without endangering officers, subjects of observation, or the general public. The NYPD explicitly does not use submersible ROVs for routine patrol or general surveillance of the public, nor is it equipped with any weaponry. Instead, submersible ROVs are strictly deployed in emergency situations, where its capabilities can enhance officer safety and operational effectiveness. Additionally, submersible ROVs do not record, store, or retain any video or acoustic data. Based on these safeguards, any theoretical risks of submersible ROVs are effectively mitigated and do not result in disparate impacts.

The NYPD is committed to the impartial enforcement of the law and to the protection of constitutional rights. The NYPD prohibits the use of racial and bias-based profiling in law enforcement actions, which must be based on standards required by the Fourth and Fourteenth Amendments of the U.S. Constitution, Sections 11 and 12 of Article I of the New York State Constitution, Section 14-151 of the New York City Administrative Code, and other applicable laws.

Race, color, ethnicity, or national origin may not be used as a motivating factor for initiating police enforcement action. Should an officer initiate enforcement action against a person, motivated even in part by a person’s actual or perceived race, color, ethnicity, or national origin, that enforcement action violates NYPD policy unless the officer’s decision is based on a specific and reliable suspect description that includes not only race, age, and gender, but other identifying characteristics or information.