



# **THERMOGRAPHIC CAMERAS: IMPACT AND USE POLICY**

**APRIL 11, 2021**

**SUMMARY OF CHANGES BETWEEN DRAFT & FINAL POLICY**

<b>Update</b>	<b>Description of Update</b>
Removed statement that thermographic cameras do not use artificial intelligence and machine learning.	Public comment highlighted a lack of industry-standard definitions for artificial intelligence and machine learning.
Expanded upon thermographic cameras rules of use.	Added language clarifying thermographic cameras rules of use.
Expanded upon thermographic cameras safeguards and security measures.	Added language regarding information security. Added language to reflect removal of access to the technology when job duties no longer require access.
Minor grammar changes.	Minor syntax edits were made.

## **ABSTRACT**

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Thermographic cameras are used by law enforcement personnel to create images using thermal light, i.e. heat, as opposed to a traditional camera that use visible light. These specialized cameras enhance visibility during operations such as securing large-scale events, search and rescue, hostage negotiation and/or barricaded individuals and other operations conducted in low-visibility environments. The New York City Police Department (NYPD) uses thermographic cameras to enhance NYPD operations by providing real-time observation of a the live or residual heat signature of a person or object.

The NYPD produced this impact and use policy because thermographic cameras have the ability to process thermal data of both people and objects, and share a heat signature video image with NYPD investigators.

## **CAPABILITIES OF THE TECHNOLOGY**

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The NYPD utilizes two (2) types of thermographic cameras:

1. Thermal Imaging Cameras; and
2. Infrared Cameras.

All objects, both organic and inorganic, omit infrared light. Infrared light is a type of electromagnetic radiation invisible to the human eye, but it can be felt by humans as heat. Both thermal imaging cameras and infrared cameras measure temperature by capturing different wave frequencies of infrared light being omitted from an object. The cameras process the differences in the measured infrared light, and creates a heat signature video image.

Thermographic cameras allow officers to observe obscured or hazardous containing conditions preventing traditional observation such as darkness, smoke or gas. Thermographic cameras allow for rapid detection of people during a search of a large outdoor location, crime scene monitoring and large-scale disasters. Thermographic cameras are also used during large-scale events to detect heat signature anomalies and during hostage scenarios where officers cannot safely gain access to a location.

Some NYPD handheld thermographic cameras transmit heat signature video images to a monitor directly wired to the device. Others are capable of wireless transmission of heat signature video images to a remote monitor. NYPD thermographic cameras do not record, store, or retain any heat signature video images or temperature data.

Thermographic cameras can only process temperature data to create heat signature video images. Thermographic cameras do not use facial recognition technologies and are not capable of conducting facial recognition analysis. Other than the processing of the infrared light emitted by a person or object, the devices do not contain biometric measuring capabilities.

Both the NYPD's manned<sup>1</sup> and unmanned<sup>2</sup> aircraft systems are equipped with thermographic cameras. However, the thermographic cameras equipped to manned and unmanned aircraft systems are integrated into a more intricate system. Those systems are each addressed in individual impact and use policies.

### **RULES, PROCESSES & GUIDELINES RELATING TO USE OF THE TECHNOLOGY**

NYPD thermographic camera policy seeks to balance the public safety benefits of this technology with individual privacy. Thermographic cameras 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.

NYPD thermographic cameras may only be used for legitimate law enforcement purposes, and supervisory personnel responsible oversight must authorize use. The underlying facts of each investigation are considered prior to the utilization of the technology, including the safety risks to NYPD personnel, civilians and suspects that may be involved in the operation, as well as the legitimate law enforcement purpose to utilize the technology in a given circumstance.

The NYPD does not seek court authorization prior to use of thermographic cameras. The devices are strictly used during emergencies where exigent circumstances exist or to conduct surveillance of locations exposed to public observation.

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 thermographic cameras.

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 thermographic cameras will subject employees to administrative and potentially criminal penalties.

### **SAFEGUARDS & SECURITY MEASURES AGAINST UNAUTHORIZED ACCESS**

Thermographic cameras are securely stored in NYPD facilities when not in use, in a location that is inaccessible to the public. A supervisor must periodically inspect and account for the equipment. Access to NYPD thermographic cameras is limited to NYPD personnel with an articulable need to use the technology in furtherance of a lawful duty. Access is removed when the technology is no longer necessary for NYPD personnel to fulfill their duties (e.g., when personnel are transferred to a command that does not use the technology).

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<sup>1</sup> For additional information on the NYPD's manned aircraft systems, please refer to the manned aircraft systems impact and use policy.

<sup>2</sup> For additional information on the NYPD's unmanned aircraft systems, please refer to the unmanned aircraft systems impact and use policy.

NYPD thermographic cameras capable of wireless remote viewing transmit thermal images and associated data to a remote monitor over an encrypted signal. NYPD handheld thermographic cameras transmit processed images to a monitor through a direct wired connection.

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

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

As the NYPD does not record, store, or retain any of the heat signature video images or temperature data processed through the use thermographic cameras, there are no policies or procedures relating to retention, access and use of collected data.

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

Members of the public may request information related to the NYPD's use of thermographic cameras pursuant to the New York State Freedom of Information Law. The NYPD will review and evaluate such requests in accordance with applicable provisions of law and NYPD policy.

### **EXTERNAL ENTITIES**

No entity outside the NYPD has access to the images, video or temperature data processed by thermographic cameras while they are activated. As the NYPD does not record, store, or retain any of the images, video or temperature data captured by the devices, there is no data that can be provided to an outside entity.

### **TRAINING**

NYPD personnel using thermographic cameras receive command level training on the operation of thermographic cameras and associated equipment. Officers must operate thermographic cameras in compliance with NYPD policies and training.

### **INTERNAL AUDIT & OVERSIGHT MECHANISMS**

The NYPD's use of thermographic cameras is determined by supervisory personnel responsible for the conduct of a given operation. Supervisors of personnel utilizing thermographic cameras are responsible for security and proper utilization of the technology and associated equipment.

All members of the NYPD, including those utilizing thermographic cameras, are advised that all NYPD equipment is intended for the purposes of conducting official business. Use of NYPD equipment for personal or non-NYPD business matters is strictly prohibited and individuals who are found in violation of this policy are notified that they will be subject to disciplinary action. Reports of unauthorized use of equipment may be made to the Internal Affairs Bureau.

### **HEALTH & SAFETY REPORTING**

There are no known health and safety issues with thermographic cameras or the associated equipment.

**DISPARATE IMPACTS OF THE IMPACT & USE POLICY**

The safeguards and audit protocols built into this impact and use policy for thermographic cameras mitigate the risk of impartial and biased law enforcement. Thermographic cameras only process the infrared light being omitted by any person or object into heat signature video. The NYPD does not record, store or retain any heat signature video or temperature data created by thermographic cameras. Thermographic cameras do not use facial recognition technologies. Other than the processing of the infrared light emitted by a person or object, the devices do not contain biometric measuring capabilities.

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.