

# LOS ANGELES POLICE DEPARTMENT



**MICHEL R. MOORE**  
Chief of Police

P.O. Box 30158  
Los Angeles, CA 90030  
Telephone: (213) 486-0150  
TTY: (877) 275-5273  
Ref #: 1.15

**KAREN BASS**  
Mayor

April 13, 2023

The Honorable City Council  
City of Los Angeles  
200 North Main Street, Room 395  
Los Angeles, California 90012

## **RE: FOLLOW-UP INFORMATION REGARDING THE QUADRUPED UNMANNED GROUND VEHICLE**

Dear Honorable Members:

### **I. Background**

On March 7, 2023, representatives from the Los Angeles Police Department (Department) along with a representative from Boston Dynamics appeared before the Los Angeles City Council to discuss a pending donation from the Los Angeles Police Foundation for a Quadruped Unmanned Ground Vehicle (QUGV) or "SPOT." During that lengthy discussion the Department addressed many questions about the QUGV and the policies under which it would be deployed. I want to take the opportunity to highlight some of the issues discussed as well as provide some added insight before this matter is scheduled again in City Council.

The donation of the QUGV was unanimously approved by the Board of Police Commissioners on November 8, 2022. The Board of Police Commissioners simultaneously approved a Chief of Police Administrative Order which establishes deployment guidelines, required approvals, and notification procedures for the use of the QUGV. These reports were transmitted to the City Council and are on record under Council File No. 22-1438. Those guidelines are consistent with the newly established Department Manual Section pertaining to with the Acquisition and Annual Reporting of Certain Information Systems and Technologies to the Board of Police Commissioners.

### **II. Prohibited Uses of the QUGV**

Under no circumstances will the QUGV be equipped with any weapons systems or facial recognition software, nor will it be used during routine patrols or surveillance operations.

### **III. Permissible Uses of the QUGV**

The QUGV will have a strict deployment criteria and only be utilized by the Special Weapons and Tactics (SWAT) unit of Metropolitan Division during incidents involving an active shooter, explosive device, hostage, natural disaster, hazardous material, barricaded suspect, or search and rescue.

### **IV. Approval Process and Notifications for Deployment of the QUGV**

The QUGV will not be deployed prior to approval of the on-scene incident commander and the Commanding Officer, Counter-Terrorism and Special Operations Bureau, or designee. If the deployment is approved, immediate notifications are made to the Director, Office of Special Operations, and the Chief of Police.

### **V. Documentation, Monitoring, and Audit Responsibilities for the QUGV**

All requests, to include the approval or disapproval, of a QUGV deployment will be documented on a SWAT After-Action Report completed post incident. Counter-Terrorism and Special Operations Bureau maintains responsibility, oversight, and evaluation of the QUGV program. Metropolitan Division will be required to provide a quarterly report with detailed information on any QUGV deployment. In addition to the quarterly report, all QUGV deployments will be captured on the Comprehensive Technology Report presented to the Board of Police Commissioners on an annual basis.

*Note: The Comprehensive Technology Report was established on August 17, 2022 via Office of the Chief of Police Special Order No. 11, Acquisition and Annual Reporting of Certain Information Systems and Technologies, and introduces Section 1/140 to the Department Manual.*

The Commanding Officer, Audit Division, shall review the QUGV directive and determine whether an audit or inspection shall be conducted in accordance with Department Manual Section 0/080.30, *Monitoring Compliance with Department Directives*.

### **VI. Process to Change the Policy Governing the QUGV**

Any change to the QUGV policy requires the approval of the Chief of Police and the Board of Police Commissioners. The Board of Police Commissioners' action may be subject to a 245 Motion by the City Council consistent with the Los Angeles City Charter.

*Note: Sec. 245. City Council Veto of Board Actions*

*“Actions of boards of commissioners shall become final at the expiration of the next five meeting days of the Council during which the Council has convened in regular session, unless the Council acts within that time by two-thirds vote to bring the action before it or to waive review of the action, except that as to any action of the Board of Police Commissioners regarding the removal of the Chief of Police, the time period within*

*which the Council may act before the action of the Board shall become final shall be ten meeting days during which the Council has convened in regular session.”*

#### **VII. Warranty and Training for the QUGV**

An unlimited number of additional years of warranty can be purchased for \$24,800.00 per year for as long as the program is active.

Per the contract, Boston Dynamics will conduct a two-day training at the client location (Los Angeles) for six individuals at a cost of \$6,494.00. Any additional personnel, over six, will cost \$999.00 per person. Re-occurring training can be purchased in advance at a discounted rate.

*Note: There may be an option to train new personnel internally.*

#### **VIII. Protection of Privacy and Cyber Security Concerns**

The QUGV uses a mesh network radio system to transmit encrypted video and audio to a single point wireless tablet used by the primary operator to control the robot. It does not transmit to third parties and is encrypted to prevent interception by unauthorized persons.

Digital evidence captured during a deployment shall be safeguarded in accordance with existing Department policy consistent with the protection of privacy and civil liberties.

#### **IX. The Department’s Current Unmanned Ground-based Robotics**

The use and deployment of the current inventory of ground-based robotics is covered in the Special Weapons and Tactics Guidebook Section 118.20.

*118.20 TECHNOLOGY: A SWAT supervisor will be assigned to the technology cadre and tasked with oversight to ensure that all members of the technology cadre are competent in the skills required to operate the various electronic devices in the SWAT equipment inventory (e.g., robots, pole cameras). A SWAT Element Leader will be assigned to directly assist the SWAT supervisor to ensure that the required tasks are satisfactorily performed. Technology cadre personnel will conduct one day of training per deployment period to evaluate current training methodology, individual competency, trends in training throughout the law enforcement community, and to ensure that the technology equipment and training is mission-specific and contemporary. The SWAT technology cadre members are responsible for the proper use of SWAT technology at SWAT deployments and, once the deployment has concluded, they are responsible for the maintenance of SWAT technology to ensure all items are in good repair, batteries are charged, and immediately deployable.*

There has not been any significant change to the procedures and tactics associated with the use of ground-based robotics.

**X. Small Unmanned Aerial Systems (sUAS) versus the QUGV**

The sUAS is useful in many instances; however, the QUGV has capabilities beyond that of the sUAS. The QUGV can open doors and carry payloads such as cellular phones, food, and other items used to further the crisis negotiation process. Furthermore, the sUAS is limited in inclement weather (rain, wind, etc.) in addition to the challenges of maneuvering inside a building. Conversely, the QUGV can operate in adverse weather and can more easily maneuver indoors. The QUGV battery has significantly longer run time than the current sUAS battery. The average run time for the current sUAS fleet is approximately 22 minutes before battery depletion, whereas the QUGV run time is approximately 90 minutes with a stand-by time of 180 minutes.

On March 12, 2023, the Los Angeles County Sheriff's Department (LASD) responded to a barricaded suspect incident that lasted more than two days. During that incident, both LASD and the Department used multiple sUAS inside the residence and although they provided situational awareness, most either ran out of battery, failed because they got wet, or were unable to move through the residence and clear the areas where the suspect was believed to be concealed. The sUAS encountered several closed doors and walls during the incident. Availability of the QUGV would have provided a longer run time in addition to having the ability to circumvent the closed doors and debris.

**XI. Current Ground-based Robotics versus the QUGV**

Current ground-based robotics rely upon wheels or tracks with limitations while trying to maneuver through various environments (debris, clothing, stairs, etc.). The QUGV employs artificial intelligence not available in the current ground-based robotics or sUAS fleet and is able to analyze the terrain and maneuver around obstacles. The QUGV's arm feature allows for weapon retrieval (if appropriate), delivery of food, water, or cellphone.

During the March 8, 2023, Metropolitan Division's officer-involved shooting, the SWAT unit was deployed on a structure and found the suspect unconscious with firearms nearby. The scenario would have allowed the QUGV to enter the area without armed officers to retrieve the firearm and potentially provide faster medical treatment to the suspect.

Los Angeles will be hosting the 2026 World Cup and 2028 Olympics. The expanding miles of Los Angeles rail lines, with elevated platforms and subterranean levels, are anticipated to be a primary source of transportation to those events. This environment could hinder the effectiveness of current technological devices, both sUAS and ground-based robotics, during a hazardous materials incident, terrorist attack, or natural disaster where access would be crucial. The QUGV would allow for quicker sensor placement, suspicious item retrieval/inspection, and possibly minimize disruption of service.

**XII. Deployments of the sUAS and Unmanned Ground-based Robotics in 2022**

<b>Type</b>	<b>Date</b>	<b>Time</b>	<b>Type of Incident</b>	<b>Division</b>	<b>RD</b>
sUAS	01/14/2022	14:00	Barricaded Suspect	Hollywood	0632
sUAS	01/26/2022	07:30	High-risk Warrant Service	77 <sup>th</sup> Street	1243
sUAS	02/09/2022	06:30	High-risk Warrant Service	Central	0182
sUAS	03/16/2022	17:32	High-risk Incident	Topanga	2177
sUAS	04/06/2022	12:00	High-risk Incident	Olympic	2062
sUAS	06/22/2022	00:30	High-risk Incident	Mission	1993
sUAS	06/29/2022	08:30	High-risk Incident	77 <sup>th</sup> Street	1268
sUAS	08/15/2022	09:00	Barricaded Suspect	Rampart	0235
sUAS	09/23/2022	00:01	High-risk Incident	Southeast	1846

**Total sUAS Deployments: 9**

<b>Type</b>	<b>Date</b>	<b>Time</b>	<b>Type of Incident</b>	<b>Division</b>	<b>RD</b>
Robotics	01/06/2022	05:25	High-risk Incident	Long Beach	9999
Robotics	01/14/2022	11:35	High-risk Incident	Hollywood	0632
Robotics	01/21/2022	10:06	High-risk Incident	Newton	1323
Robotics	02/02/2022	05:00	High-risk Incident	Anaheim	9999
Robotics	02/16/2022	08:29	High-risk Incident	Hollywood	0646
Robotics	03/16/2022	11:45	High-risk Incident	Topanga	2177
Robotics	03/16/2022	08:45	High-risk Incident	Olympic	2062
Robotics	04/26/2022	20:12	High-risk Incident	Devonshire	1781
Robotics	05/03/2022	08:09	High-risk Incident	Central	0154
Robotics	05/11/2022	15:15	High-risk Incident	N.Hollywood	1514
Robotics	05/19/2022	22:15	High-risk Incident	Mission	1907
Robotics	06/01/2022	10:00	High-risk Incident	77 <sup>th</sup> Street	1269
Robotics	07/12/2022	09:07	High-risk Incident	Harbor	0557
Robotics	07/13/2022	12:12	High-risk Incident	Southwest	0397
Robotics	07/21/2022	19:08	High-risk Incident	Foothill	1684
Robotics	07/31/2022	07:28	High-risk Incident	Hollywood	0646
Robotics	08/03/2022	13:41	High-risk Incident	N.Hollywood	1555
Robotics	08/14/2022	01:19	High-risk Incident	Mission	1924
Robotics	08/15/2022	03:56	High-risk Incident	Rampart	0235
Robotics	09/01/2022	05:50	High-risk Incident	Southwest	0391
Robotics	09/15/2022	04:54	High-risk Incident	N/Hollywood	1585
Robotics	10/30/2022	04:49	High-risk Incident	Newton	1362
Robotics	11/02/2022	08:20	High-risk Incident	Mission	1989
Robotics	11/04/2022	19:17	High-risk Incident	Southeast	1842
Robotics	11/16/2022	14:40	High-risk Incident	Southwest	0362
Robotics	11/22/2022	07:08	High-risk Incident	West Valley	1021
Robotics	12/04/2022	12:27	High-risk Incident	Mission	1912
Robotics	12/19/2022	12:26	High-risk Incident	Pacific	1413

Robotics	12/28/2022	09:29	Barricaded Suspect	Southwest	0398
Robotics	12/29/2022	11:39	Barricaded Suspect	77 <sup>th</sup> Street	1211

**Total Unmanned Ground-Based Robotic Deployments: 30**

**XIII. Deployments of sUAS and Unmanned Ground-based Robotics Year-to-Date**

Type	Date	Time	Type of Incident	Division	RD
sUAS	01/03/2023	07:35	High-risk Incident	Central	0163
sUAS	01/04/2023	08:45	Barricaded Suspect	N.Hollywood	1591
sUAS	02/08/2023	05:00	High-risk Warrant Service	Devonshire	1799
sUAS	03/12/2023	06:35	Barricaded Suspect	Valinda	9999

**Total sUAS Deployments: 4**

Type	Date	Time	Type of Incident	Division	RD
Robotics	01/03/2023	03:54	High-risk Incident	Central	0163
Robotics	01/03/2023	10:42	High-risk Incident	Olympic	2013
Robotics	01/19/2023	01:24	High-risk Incident	Olympic	2024
Robotics	01/21/2023	03:09	High-risk Incident	Mission	1958
Robotics	01/21/2023	22:35	High-risk Incident	West LA	0859
Robotics	02/14/2023	14:00	High-risk Incident	Pacific	1443
Robotics	3/8/2023	18:30	High-risk Incident	Hollenbeck	0424
Robotics	3/10/2023	22:20	High-risk Incident	77 <sup>th</sup> Street	1283

**Total Unmanned Ground-based Robotic Deployments: 8**

It is therefore recommended that the City Council approve the acquisition of the QUGV. The Department has spent two years researching and analyzing the benefits of adding this technology to its inventory. The strict deployment process, oversight measures and privacy considerations are in place to ensure the QUGV is utilized appropriately and only in situations where public safety is paramount.

If you have any questions, please contact Deputy Chief David J. Kowalski, Commanding Officer, Counter-Terrorism and Special Operations Bureau, at (213) 486-8780.

Respectfully,

MICHEL R. MOORE  
Chief of Police

Enclosures

## OFFICE OF THE CHIEF OF POLICE

### ADMINISTRATIVE ORDER NO.

APPROVED BY THE BOARD OF POLICE COMMISSIONERS ON

**SUBJECT: QUADRUPED UNMANNED GROUND VEHICLE PROGRAM  
DEPLOYMENT GUIDELINES AND PROCEDURES**

**PURPOSE:** This Order establishes deployment guidelines and procedures specific to the Quadraped Unmanned Ground Vehicle (QUGV). As part of the Department's commitment to the Preservation of Life, the QUGV will greatly increase officer safety and minimize risks associated with life-threatening calls for service that meet the Special Weapons and Tactics (SWAT) deployment criteria.

#### **PROCEDURE:**

- I. Definition.** The QUGV refers to a ground vehicle operated on four legs without an onboard human presence.
- II. Responsibilities.** The QUGV will be assigned exclusively to Metropolitan Division's SWAT team and shall be reserved for use in high-risk incidents that meet SWAT deployment criteria. Special Weapons and Tactics personnel will be responsible for the safe operation of the QUGV during approved deployments and for documenting its use during deployment of the vehicle. Counter-Terrorism and Special Operations Bureau (CTSOB) will be responsible for the oversight and evaluation of the QUGV Program.
- III. Documentation and Inspection Procedures.** The request, approval, and/or disapproval of a QUGV deployment shall be documented on the SWAT After Action Report completed post deployment for review, transparency, and tracking. Metropolitan Division will be required to provide a quarterly report to CTSOB documenting QUGV field deployments. In addition, information regarding all QUGV deployments will be included in Innovation Management Division's annual Comprehensive Technology Report to the Honorable Board of Police Commissioners and comply with California Assembly Bill No. 481.
- IV. Approval for Deployment.** Any deployment of a QUGV shall be approved by the on-scene Incident Commander in concurrence with the Commanding Officer or Designee of CTSOB. If deployment is approved by CTSOB, a notification shall be made to the Director, Office of Special Operations, and the Chief of Police. If an incident is such that it requires the response of personnel assigned to Emergency Services Division (i.e., Hazardous Devices and Materials Section), the Commanding Officer, Emergency Services Division or appropriate representative shall also respond to the scene.
- V. Permissible Uses.** The QUGV may be deployed to provide enhanced situational awareness solely during the following circumstances or types of incidents:
  1. Active shooter incidents;
  2. Assessment of explosive devices and explosions;
  3. Hostage situations;
  4. Natural disasters;
  5. Hazardous materials incidents;

6. Search and rescue operations; and
7. Barricaded suspect incidents.

**Note:** A SWAT response for a barricaded suspect requires:

- The suspect is probably armed; and,
- Probable cause exists to believe that the suspect has been involved in a criminal act or is a threat to the lives and safety of the community and/or police; and,
- Is in a position of advantage, affording cover and/or concealment; or is contained in an open area and the presence of approach of police officers could precipitate an adverse reaction by the suspect; and,
- The suspect refuses to submit to a lawful arrest.

**VI. Prohibited Uses.** The QUGV shall not be deployed or used in violation of the City of Los Angeles Municipal laws, California State laws, or the United States Constitution. When required under the Fourth Amendment or other provisions of the law, Department personnel shall obtain a search warrant or valid consent, unless another lawful exception applies.

The QUGV shall not be equipped with any weapon systems including any non-lethal or less-lethal weapon technology, shall not be equipped with or use any facial recognition software or analysis capabilities, and the QUGV shall not be used for routine patrol duties or covert surveillance operations.

**Note:** The QUGV shall not be deployed in a manner exceeding the manufacturer's recommendations.

**VII. Protection of Privacy.** Department Manual Section 1/140.15, Acquisition and Annual Reporting of Certain Information Systems and Technologies, ensures that Department personnel follow practices consistent with the protection of privacy and civil liberties.

The QUGV technology uses secured radio frequencies and/or Wi-Fi to directly transmit images, audio and video from the onboard QUGV camera to the handheld monitor(s). It does not transmit to third parties and is encrypted to prevent interception by unauthorized entities such as news outlets or public groups. Department policy ensures personnel with access to such data follow practices that are consistent with the protection of privacy and civil liberties. Digital evidence (photographs, video, or audio) captured by the QUGV's cameras during deployment shall be safeguarded in accordance with current Department policy.

**VIII. Training.** Personnel approved to utilize or manipulate the QUGV shall be trained in operations of the unit in accordance with the Manufacturer Guidelines. In addition to QUGV functionality, unit operators, and those overseeing unit operations, shall be trained in the policy and legal limitations governing the use of the unit and in strict compliance with privacy laws.

**MONITORING RESPONSIBILITY:** The Commanding Officer, CTSOB, shall have monitoring responsibility for this directive.

**AUDIT RESPONSIBILITY:** The Commanding Officer, Audit Division, shall review this directive and determine whether an audit or inspection shall be conducted in accordance with Department Manual Section 0/080.30.



**MICHEL R. MOORE**  
Chief of Police

Attachments

DISTRIBUTION "D"

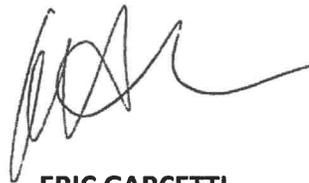
## TRANSMITTAL

To: **THE COUNCIL**

Date: **11/16/22**

From: **THE MAYOR**

**TRANSMITTED FOR YOUR CONSIDERATION. PLEASE SEE ATTACHED.**

A handwritten signature in black ink, appearing to be 'Eric Garcetti', written in a cursive style.

(Andre Herndon) for

**ERIC GARCETTI**  
Mayor

# LOS ANGELES POLICE COMMISSION

## BOARD OF POLICE COMMISSIONERS

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PRESIDENT

EILEEN M. DECKER  
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MARIA LOU CALANCHE  
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INSPECTOR GENERAL

EXECUTIVE OFFICE  
POLICE ADMINISTRATION BUILDING  
100 WEST FIRST STREET, SUITE 134  
LOS ANGELES, CA 90012-4112

(213) 236-1400 PHONE  
(213) 236-1410 FAX  
(213) 236-1440 TDD

November 8, 2022

BPC #22-241

The Honorable Eric Garcetti  
Mayor, City of Los Angeles  
City Hall, Room 303  
Los Angeles, CA 90012

Attention: Heleen Ramirez

Dear Honorable Mayor:

RE: DONATION OF A QUADRUPED UNMANNED GROUND VEHICLE 'SPOT', VALUED AT \$277,917.80, FROM THE LOS ANGELES POLICE FOUNDATION, FOR THE BENEFIT OF METROPOLITAN DIVISION

At the regular meeting of the Board of Police Commissioners held Tuesday, November 8, 2022 the Board APPROVED the Department's report relative to the above matter.

This matter is being forwarded to you for approval.

Respectfully,

BOARD OF POLICE COMMISSIONERS

A handwritten signature in blue ink that reads "Maria Silva".

MARIA SILVA  
Commission Executive Assistant II

Attachment

c: Chief of Police

INTRADEPARTMENTAL CORRESPONDENCE

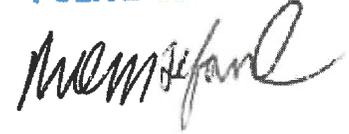
22-241

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POLICE COMMISSION



November 2, 2022  
1.14

**TO:** The Honorable Board of Police Commissioners

**FROM:** Chief of Police

**SUBJECT:** APPROVAL OF NON-MONETARY DONATION

**RECOMMENDED ACTION**

1. That the Board of Police Commissioners APPROVE the Department's Report and TRANSMIT to the Mayor and City Council for ACCEPTANCE of the following non-monetary donation of \$277,917.80 for Metropolitan Division.

**DONOR:**

Los Angeles Police Foundation  
Ms. Dana Katz, Executive Director  
633 West 5<sup>th</sup> Street, Suite 960  
Los Angeles, California 90071  
(213) 489-4636

**PURPOSE:**

Quadruped Unmanned  
Ground Vehicle SPOT  
(#2022-119)

**VALUE:**

\$277,917.80

**DISCUSSION**

This donation will provide a Quadruped Unmanned Ground Vehicle (QUGV) for the Metropolitan Division's Special Weapons and Tactics (SWAT) team. The equipment will enhance officer safety, while also reducing the potential for violent encounters with armed individuals when dealing with high-risk incidents that meet SWAT criteria. The QUGV will also prevent the need to insert SWAT or canine personnel into spaces where an armed individual could be hidden despite the introduction of chemical agents. The infrared camera, arm, and payload capability would also add an additional layer of safety prior to inserting personnel or canines.

Although there are various types of terrestrial robotics currently in use by the SWAT, each relies on wheels or tracks that can easily become entangled in clutter or obstacles such as stairs. The QUGV will fill a critical gap as its design and movement mimics that of a live canine, without the need to have a handler or cover officers positioned in close proximity.

Proposed guidelines and procedures for the deployment of the QUGV is consistent with the newly established Department Manual Section 1/140.15, Acquisition and Annual Reporting of Certain Information Systems and Technologies.

The Honorable Board of Police Commissioners

Page 2

1.14

The Los Angeles Police Foundation is an independent, not-for-profit organization that provides critical resources and vital support to the Los Angeles Police Department (LAPD). From essential equipment and state-of-the-art technology to specialized training and innovative programs that would otherwise be unfunded, the Foundation provides funding that directly improves public safety, impacts officer readiness, and enhances the quality of life of all members of the community. As the largest source of private support for the LAPD, the Foundation is passionately dedicated to ensuring that Los Angeles remains America's safest major city. Since being established in 1998, the Foundation has invested tens of millions of dollars in hundreds of LAPD initiatives that promote excellence, expand capabilities, strengthen neighborhoods and create opportunities for at-risk youth. These actions are grounded in the beliefs that a safe city is a strong city and that together we can make a difference.

The donation has been submitted in accordance with Section 5.467 et seq. of the Los Angeles Administrative Code, which provides for the receipt and acceptance of donations to the Department.

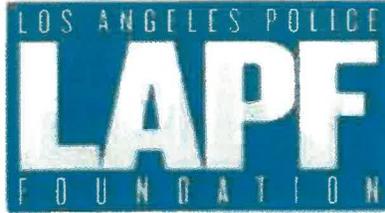
If you have any questions, please contact Captain Mario Mota, Metropolitan Division, at (213) 352-4700.

Respectfully,

A handwritten signature in blue ink, appearing to read "MICHEL R. MOORE". The signature is stylized with a large loop and a long horizontal stroke extending to the right.

MICHEL R. MOORE  
Chief of Police

Attachments



# APPROVED GRANT

633 W. 5th Street, Suite 960, Los Angeles, CA 90017

Phone (213) 489-4636 FAX (213) 489-4697

email: [jacqui@supportlapd.org](mailto:jacqui@supportlapd.org)

11/2/2022

**LAPF Grant #** 2022-119

**Grant Application Received:** October 31, 2022

**Grant received from:** Metropolitan Division- SWAT

**Contact:** Lieutenant Ruben Lopez

**Phone:** (213) 352-4800

**Grant Name:** Unmanned Ground Vehicle SPOT

**Grant Amount:** \$277,917.80

A handwritten signature in blue ink, appearing to read "Jacqui", is located below the grant details.



**2022 GRANT APPLICATION**

Grant Number 2022-119 (office use only)

Date: October 27, 2022

Amount Requested: \$277,917.80

Contact Name(s): Lieutenant Ruben Lopez, Serial No. 25900

Department/Unit: LAPD METROPOLITAN DIVISION -- SPECIAL WEAPONS AND TACTICS

Mailing Address: 2710 w. Temple Street, Los Angeles, CA 90026

Phone Number: (213) 352-4800 Fax Number: N/A

E-mail Address: 25900@lapd.online

Name of Program/Equipment requesting funding for: Quadruped Unmanned Ground Vehicle (QUGV) - SPOT

Provide a brief description and the need for the program/equipment (use additional paper if needed):

The QUGV will be utilized by the Special Weapons and Tactics (SWAT) team and would enhance officer safety, while also reducing the potential for violent encounters with armed individuals when dealing with high-risk incidents that meet SWAT criteria. Securing this remote-controlled QUGV would prevent the need to insert SWAT or canine personnel into spaces where an armed individual could be hidden despite the introduction of chemical agents. The infrared camera and arm, as well as payload capability would add an additional layer of safety prior to inserting personnel or canines.

Although there are various types of terrestrial robotics currently in use by SWAT, each relies on either wheels or tracks that can easily become entangled in clutter or obstacles such as stairs. The requested QUGV would fill a critical gap as its design and movement mimics that of a live canine, but without the need to have a handler or cover officers positioned in close proximity.

Has this program/equipment previously been requested through the city budget?  YES  NO

If yes, please list the most recent date of submission and the result: \_\_\_\_\_

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If no, please explain the reason why it was not submitted:

Although it was not requested via the Department budget, it was requested through a Restricted Grant Donation. Unfortunately, due to changing Departmental policies on the use of technology, the process to acquire the QUGV has been delayed. In addition, there is no Department funding for new SWAT equipment such as this QUGV being requested.

What objectives will be accomplished if the funding is granted?

The primary objective would be officer safety while at the same time, reducing the likelihood of a violent encounter with armed suspects that meet the SWAT deployment criteria.

How many officers will be impacted with this grant?

The SWAT unit has approximately 60 full-time SWAT Officers. All will benefit from the acquisition of this technology and limit their exposure to potentially deadly and violent encounters with armed suspects. The Department as a whole will also benefit as SWAT responds to requests from Patrol and Specialized Units.

How will the community be impacted by this grant?

The use of deadly force by law enforcement officers erodes community trust in a matter of seconds. The use of the QUGV will reduce those likely encounters, thus limiting the number of times SWAT will resort to the use of lethal force. Less instances of lethal force will garner more community trust. The use of the QUGV will also keep the community safe as it will be deployed at barricaded suspect and high-risk warrant situations.

Describe the short term outcome and long term impact you anticipate within the Department and in the community it serves as result of this grant.

The impact of the QUGV short and long term are the same. It will build trust within the community as officers will have a high tech tool to limit the use of lethal force and force in general.

How can the Foundation evaluate success if the funding is granted? (# of people served, objectives reached, surveys, etc.)

After every SWAT deployment to barricaded incidents, an After Action Report is completed. The use of the QUGV will be documented within the After Action and available for review. In addition, new policies will require the reporting of the QUGV deployment.

Please list or attach an itemized list for expenses or a quote from equipment manufacturer on vendor's letterhead.

Attached to this Grant Request is a quote.

It should be noted that in April of 2022, a Grant Request was submitted for the QUGV. The original price / quote was in the amount of \$172,479.00. Since then, the revised quote is in the amount of \$277,917.80.

The increase in price from the original quote is as follows:

The original quote did not include the purchase of the SPOT Arm. Per the COP, he wanted the Arm included.

**+\$64,000.00**

The original price of SPOT increased from \$72,000 to \$99,200.00

**+\$27,200.00**

The original warranty did not include the Arm. With the Arm, the warranty price has increased from \$19800 to \$24,800.

**+\$5,000.00**

Due to the delay in acquisition, there is now required training from the manufacturer to the end-user.

**+\$6494.00**

Taxes have been added due to the LAPF being a non-governmental agency (Not for Profit organization)

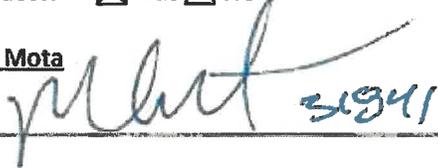
**+\$25,265.25**

The increase in price is primarily due to the desire to purchase SPOT with an Arm which will greatly improve the use of SPOT. The added cost are due to inflation, taxes, required training and increase in warranty.

Has your commanding officer approved this request?  YES  NO

Name of commanding officer: Captain Mario Q. Mota

Signature of commanding officer: \_\_\_\_\_



For questions, comments, or concerns, contact Tracy Szepeinski at (213) 489-4636 or email [tracy@lapolicefoundation.org](mailto:tracy@lapolicefoundation.org).



FLYMOTION  
800-548-5844

4416 Eagle Falls Pl.  
Tampa, Florida  
33619-9611  
United States

Prepared For  
Officer Billy Lee  
Los Angeles Police Department  
Metropolitan Division  
2710 West Temple St.  
Los Angeles, California  
90026  
United States

Estimate Date  
10/18/2022

Estimate Number  
107761

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Description	Rate	Qty	Line Total
<b>SPOT Enterprise Package</b> <ul style="list-style-type: none"><li>• Base platform: Spot with the current software release</li><li>• Spot battery (qty 2)</li><li>• Spot battery charger (power loader) with cables</li><li>• JXD tablet controller with the then current software release</li><li>• Micro-USB charger for JXD tablet</li><li>• Storage and transportation case for Spot and accessories</li></ul>	\$99,200.00	1	\$99,200.00
<b>SPOT Arm</b> <ul style="list-style-type: none"><li>• Equipped to operate through both semi-autonomous actions and telemanipulation, the arm will open doors, pick, place, push, or drag objects, and adapt to new situations at the push of a button or swipe of a screen.</li></ul>	\$64,000.00	1	\$64,000.00
<b>Spot CARE w/ Arm</b> Spot CARE Service Plan Included: <ul style="list-style-type: none"><li>• 100% coverage on your Spot robot for the first 12 months</li><li>• Unlimited repairs*</li><li>• Unlimited replacement*</li><li>• Repair or replacement time: &lt;10 business days</li><li>• Includes Arm</li></ul>	\$24,800.00	1	\$24,800.00
*Subject to our Terms and Conditions of Sale			
<b>Boston Dynamics Spot Cam+ IR</b> Payload: Boston Dynamics Spot CAM+ IR	\$38,950.00	1	\$38,950.00
<b>FLYMOTION Ridgeback System w/Starter Kit</b> 1x FLYMOTION Ridgeback (S-Band)	\$37,979.00	1	\$37,979.00

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1 x Ridgeback Kit for SPOT (Chasis, batteries, antennas, cables)  
 1 x Radio for Operator (Chasis, batteries, antennas, cables)  
 1 x Controller  
 1 x Android Tablet  
 1 x Juggernaut Case & Mount

FM Custom Spot Design - Receive your agencies colors logos or crest on the robot.	\$1,500.00	1	\$1,500.00
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UTAC 2 Day Training (Client Location) Unmanned Tactical Application Course: *UGV Familiarization and Implementation*	\$6,494.00	1	\$6,494.00
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Up to 6 students  
 Each additional student is \$999

This is a custom tailored training for the end-user involving all aircraft, hardware, and software used by the end-user. Trainees will learn to use both aircraft, hardware, and any accompanying software to complete missions necessary to the end-users success.

Shipping Ground Shipping (Insured)	\$3,200.00	1	\$3,200.00
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Subtotal	276,123.00
8.5% Discount	-23,470.46
Tax	0.00

Estimate Total (USD)	\$252,652.54
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<b>Grand Total</b> (With 10% Tax)	<b>\$277,917.80</b>
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**Terms**

- Payment due upon receipt (unless other terms have been agreed upon).
- Pricing valid for 45 days from the date issued.
- 3% Convenience charge on orders more than 2500.00 for credit card processing.
- Send orders to sales@flymotionus.com.
- Lead time will be confirmed upon receipt of a valid PO.
- Please inquire about our Training Classes.

**INTRADEPARTMENTAL CORRESPONDENCE**

October 27, 2022  
16.3

**TO:** Chief of Police

**FROM:** Assistant Commanding Officer, Metropolitan Division

**SUBJECT:** LOS ANGELES POLICE FOUNDATION GRANT REQUEST  
UNRESTRICTED ACCOUNT – SPOT GRANT

It is requested that Metropolitan Division be approved to pursue a grant from the Los Angeles Police Foundation to purchase a cutting-edge, Quadruped Unmanned Ground Vehicle (QUGV) manufactured by Flymotion - Boston Dynamics and known as SPOT. Approval of this grant would greatly benefit the Department as follows.

The QUGV will be utilized by the Special Weapons and Tactics (SWAT) team and would enhance officer safety, while also reducing the potential for violent encounters with armed individuals when dealing with high-risk incidents that meet SWAT criteria. Securing this remote-controlled QUGV would prevent the need to insert SWAT or canine personnel into spaces where an armed individual could be hidden despite the introduction of chemical agents. The infrared camera and arm, as well as payload capability would add an additional layer of safety prior to inserting personnel or canines.

Although there are various types of terrestrial robotics currently in use by SWAT, each relies on either wheels or tracks that can easily become entangled in clutter or obstacles such as stairs. The requested QUGV would fill a critical gap as its design and movement mimics that of a live canine, but without the need to have a handler or cover officers positioned in close proximity.

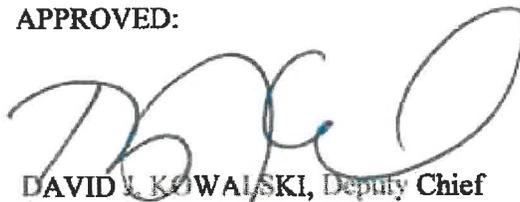
Metropolitan Division is submitting a grant request to the Los Angeles Police Foundation to fund the purchase cost for the QUGV, in the amount of \$277,917.80.

If there are any questions concerning this request, please have a member of your staff contact Lieutenant Ruben Lopez, SWAT Officer in Charge, at [25900@lapd.online](mailto:25900@lapd.online), or (213) 352-4700.



MARIO Q. MOTA, Captain  
Assistant Commanding Officer  
Metropolitan Division

APPROVED:



DAVID J. KOWALSKI, Deputy Chief  
Commanding Officer  
Counter-Terrorism and Special Operations Bureau

Chief of Police  
Page 2  
16.3

APPROVED:



AL LABRADA, Assistant Chief  
Director, Office of Special Operations

APPROVED:



MICHEL. B. MOORE  
Chief of Police

Attachments