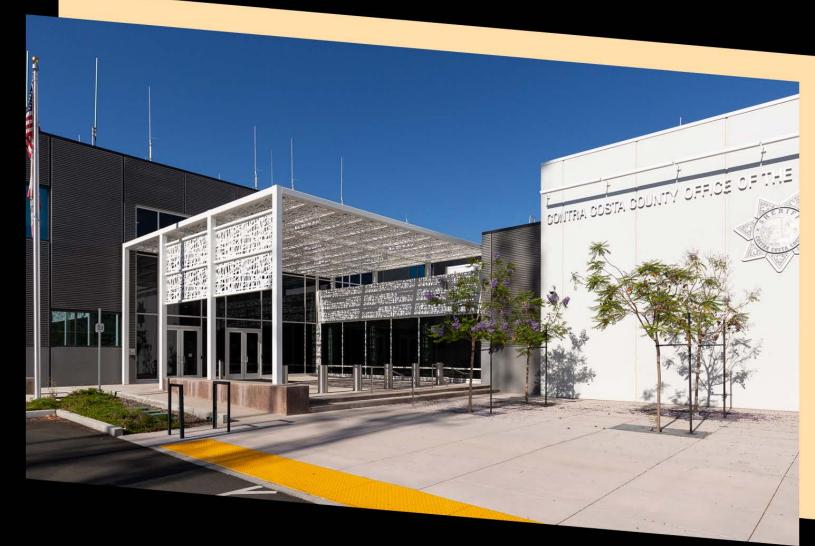
CONTRA COSTA COUNTY OFFICE OF THE SHERIFF



GC 7070 DEFINED EQUIPMENT REPORT

JANUARY 1, 2022 -DECEMBER 31, 2022



Sheriff-Coroner David O. Livingston Contra Costa County Office of the Sheriff Government Code 7070 Defined Equipment Annual Report January 1, 2022 to December 31, 2022

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Introduction

On September 30, 2021, Governor Newson signed into law Assembly Bill 481 ("AB 481"), effective January 1, 2022, which added Sections 7070-7075 to the Government Code relating to the funding, acquisition, and use of military equipment (as defined) by local law enforcement agencies.

As required by AB 481, in May 2022, the Contra Costa County Office of the Sheriff commenced the process to obtain Board of Supervisors' approval of the use of existing qualifying equipment and acquisition of additional military equipment in the remainder of 2022. The Office of the Sheriff posted its draft Government Code 7070 Defined Equipment Policy on its website for more than 30 days prior to the Contra Costa County Board of Supervisors meeting concerning the equipment at issue.

On July 26, 2022, the Office of the Sheriff requested that the Board of Supervisors adopt an ordinance, as required by AB 481, related to the use and acquisition of qualifying equipment. On August 2, 2022, the Board of Supervisors adopted Ordinance No. 2022-29, approving the Office of the Sheriff's Government Code 7070 Defined Equipment Policy and making the findings required by AB 481.

This is the first annual report of the Contra Costa County Office of the Sheriff as required by Government Code section 7072(a) and Ordinance 2022-29. This report includes the following information for the 2022 calendar year:

- (1) A summary of how the equipment was used and the purpose of its use.
- (2) A summary of any complaints or concerns received concerning the equipment.
- (3) The results of any internal audits, any information about violations of the equipment use policy, and any actions taken in response.
- (4) The total annual cost for each type of equipment.
- (5) The quantity possessed for each type of equipment.
- (6) The intent to acquire additional equipment in the next year and the quantity sought for each type of equipment.

Since the Board of Supervisors approved the Office of the Sheriff's Government Code 7070 Defined Equipment Policy, the Office of the Sheriff has not received any complaints regarding the approved equipment. In addition, the Office of the Sheriff reviewed all uses of the equipment to ensure adherence to policy and use requirements. There were no violations of the equipment use policy. The Office of the Sheriff is committed to transparent reporting and responsible use of the equipment.

Definitions

Pursuant to AB 481 and Government Code §7070, the following definitions are applicable to the Office of the Sheriff's GC 7070 Defined Equipment Policy and Inventory:

Governing body – The elected or appointed body that oversees the Office of the Sheriff

Military equipment – Includes but is not limited to the following:

- Unmanned, remotely piloted, powered aerial or ground vehicles
- Mine-resistant ambush-protected (MRAP) vehicles or armored personnel carriers
- High mobility multipurpose wheeled vehicles (HMMWV), two-and-one-half-ton trucks, five-ton trucks, or wheeled vehicles that have a breaching or entry apparatus attached
- Tracked armored vehicles that provide ballistic protection to their occupants and utilize a tracked system instead of wheels for forward motion
- Command and control vehicles that are either built or modified to facilitate the operational control and direction of public safety units
- Weaponized aircraft, vessels, or vehicles of any kind
- Battering rams, slugs, and breaching apparatuses that are explosive in nature. This does not include a handheld, one-person ram
- Firearms and ammunition of .50 caliber or greater, excluding standard-issue shotguns and standard-issue shotgun ammunition
- Specialized firearms and ammunition of less than .50 caliber, including assault weapons as defined in Sections 30510 and 30515 of the Penal Code, except for standard issue service weapons and ammunition of less than .50 caliber that are issued to officers, agents, or employees of a law enforcement agency or state
- Any firearm or firearm accessory that is designed to launch explosive projectiles
- "Flashbang" grenades and explosive breaching tools, "tear gas," and "pepper balls," excluding standard, service-issued handheld pepper spray
- TASER® Shockwave, microwave weapons, water cannons, and long-range acoustic devices (LRADs)
- The following projectile launch platforms and their associated munitions: 40mm projectile launchers, "bean bag," rubber bullet, and speciality impact munitions

GC 7070 Defined Equipment Use Summary

This section outlines the usage of military equipment by the Office of the Sheriff in 2022. Certain items of military equipment, particularly ammunition, diversionary devices, *PepperBalls*, and chemical agents are used throughout the year on a regular basis for training to maintain proficiency. Therefore, this section does not capture training usage and only provides data for the operational use of equipment listed within the GC 7070 Defined Equipment Annual Report.

Unmanned, Remotely Piloted Aircraft

The Office of the Sheriff's unmanned, remotely piloted aircraft deployed a total of 77 times in 2022. The following are summaries of the date and reason for the deployments:

- January 9, 2022 Assisted Pleasant Hill PD with a search for an outstanding suspect.
- January 13, 2022 Used to search a large auction yard for suspects who set off an alarm and were seen on video inside an auction yard.
- January 21, 2022 Assisted Concord PD with a search for an assault with a deadly weapon suspect armed with a gun.
- January 26, 2022 Used to assist Hercules PD during a situation involving a suspect who had fired a gun and was barricaded inside a residence.
- January 26, 2022 Used to assist during a situation involving a barricaded suspect who fired a round at a neighbor's residence. This use was not related to the incident listed above.
- January 27, 2022 Used to search a vacant home that people had been seen entering illegally.
- January 28, 2022 Used to document a residential burglary and the likely path taken by the suspect.
- January 29, 2022 Used during a vehicle stop involving a suspect who neighbors reported was armed with a firearm.
- February 7, 2022 Used to search for an at-risk missing person.
- February 9, 2022 Used to assist during the execution of a search warrant.
- **February 9, 2022** Used to search a large open area for a subject reported to be acting erraticly and holding a shotgun at an encampment.

- **February 11, 2022** Used to search several neighborhoods for a missing at-risk child.
- **February 11, 2022** Used to assist Concord PD during an in-progress residential burglary and possible hostage situation.
- February 15, 2022 Used to assist during the execution of a search warrant.
- February 17, 2022 Used to document a crime scene.
- **February 17, 2022** Used to search for a suspect who had fled from a vehicle after a pursuit.
- **February 25, 2022** Used to assist Concord PD with documenting the scene of a fatal traffic collision.
- March 2, 2022 Used to document a homicide crime scene.
- March 2, 2022 Used to search for a suspect who had fled from a vehicle after a pursuit.
- March 6, 2022 Used to assist during a situation involving an assault with a deadly weapon suspect who was barricaded inside a residence.
- March 11, 2022 Used to search for a firearm discarded during a vehicle pursuit.
- March 17, 2022 Used to assist in a search for two missing juveniles, one of whom was at-risk.
- March 17, 2022 Used to assist during the execution of a search warrant.
- March 22, 2022 Used to assist the Dive Team in mapping a search pattern for a missing person.
- March 22, 2022 Used to document the scene of an officer-involved shooting.
- March 25, 2022 Used to conduct a check of an area for a suspect reported to be armed with a firearm.
- March 30, 2022 Used to document the crime scene of a battery against a peace officer.
- April 12, 2022 Used to assist in the search for a missing juvenile.
- April 13, 2022 Used to search an open field for a suspect involved in a residential burglary.
- April 18, 2022 Used during the execution of a search warrant.
- April 24, 2022 Used to assist deputies in the search of a a residence for a suspect who was involved in a shooting.
- April 29, 2022 Used to assist during a situation involving a barricaded suspect.

- April 30, 2022 Used to assist in clearing a residence during an incident involving suspects who had been involved in a shooting.
- May 3, 2022 Used to assist in documenting a crime scene at the termination point of a pursuit.
- **May 4, 2022** Used to assist CHP with a call involving a suicidal subject armed with a knife.
- May 6, 2022 Used to assist at an interrupted residential burglary.
- May 12, 2022 Used to assist Walnut Creek PD at a residential burglary.
- **May 18, 2022** Used during the execution of a search warrant involving an attempted murder investigation.
- May 29, 2022 Used to document the scene of a traffic accident.
- June 1, 2022 Used during the execution of a search warrant.
- June 9, 2022 Used to clear the interior of a residence where an armed barricaded suspect was believed to be hiding.
- June 11, 2022 Used to assist Concord PD at a possible commercial burglary call.
- June 11, 2022 Used to assist Concord PD in clearing the interior of a carjacked vehicle, where a suspect was believed to be hiding.
- June 14, 2022 Used to locate a homicide suspect who had fled and was hiding in a neighbor's yard.
- June 19, 2022 Used to search for a suspect that had fled from a vehicle into a large field.
- June 21, 2022 Used to document a homicide crime scene.
- June 21, 2022 Used to document the scene of an armed robbery.
- June 24, 2022 Used to document the area where human remains were located.
- June 24, 2022 Used during the search for armed robbery suspects.
- **June 25, 2022** Used to assist Oakley PD with a search for an armed assault with a deadly weapon suspect.
- June 26, 2022 Used to assist with the search for a missing adult.
- July 2, 2022 Used to look for suspects related to a call of shots being fired.
- **July 20, 2022** Used to assist the SWAT team in the execution of a search warrant related to a homicide investigation.
- July 28, 2022 Used during the tracking of a suspect armed with a knife as he fled on foot.

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- **July 29**, **2022** Used during a call involving a suspect barricaded inside a residence.
- August 1, 2022 Used during the search for an assault with a deadly weapon suspect.
- **August 8, 2022** Used during a call of an at-risk subject barricaded inside a garage who was believed to have shot himself.
- August 13, 2022 Used to assist with the search of a missing female in Nevada County.
- August 28, 2022 Used to search for an at-risk subject reported to be armed with a firearm.
- August 29, 2022 Used to search for an attempted homicide suspect and also document the crime scene.
- September 4, 2022 Used to search for two inmates who had escaped from the Marsh Creek Detention Facility.
- September 5, 2022 Used during an armed barricaded suspect call.
- September 16, 2022 Used during the arrest of a carjacking suspect who had fled and hid inside a motorhome.
- September 27, 2022 Used during a search for an at-risk missing juvenile subject.
- September 28, 2022 Used to assist the Central County SWAT Team during a search for a suspect who had fled from a vehicle into a commercial building.
- September 30, 2022 Used to assist during the arrest of a suspect wanted for assault with a deadly weapon.
- October 5, 2022 Used to assist Concord PD with an armed suspect incident at the Sunvalley Mall.
- October 6, 2022 Used to document the crime scene where numerous stolen vehicles were located.
- October 26, 2022 Used to assist during the execution of a search warrant.
- October 26, 2022 Used to assist during the execution of a search warrant.
- October 27, 2022 Used to assist during the execution of a search warrant.
- **November 21, 2022** Used during a barricaded suspect incident.
- November 29, 2022 Used during the execution of a search warrant.
- **December 12, 2022** Used to document the scene of a vehicle collision with serious injuries.
- December 14, 2022 Used during the execution of a search warrant

- **December 18, 2022** Used to assist CHP with documentation of a major traffic accident.
- December 22, 2022 Used to search for a missing juvenile.

Each use of GC 7070 defined equipment is reviewed to ensure it complies with Office of the Sheriff policy. There were no reported uses that violated any policy of the Office of the Sheriff.

Unmanned, Remotely Piloted Ground Vehicle

The Office of the Sheriff's unmanned, remotely piloted ground vehicles were not deployed in 2022.

Armored Personnel Carrier

The Office of the Sheriff's armored personnel carriers were used a total of five times during 2022. The following are summaries of the date and reason for the deployments:

- January 26, 2022 Two Bearcats were used during a call involving a suspect who was armed with firearms and barricaded inside his residence. The armed suspect had fired in the direction of the neighbor's residence.
- June 6, 2022 A Bearcat was deployed to assist deputies in apprehending an armed felon with multiple arrest warrants who had fled and barricaded himself inside a residence
- June 14, 2022 A Bearcat was deployed to assist deputies in apprehending a homicide suspect hiding in the backyard of a residence
- July 20, 2022 Two Bearcats were used during the service of an arrest and search warrant related to a homicide investigation
- November 16, 2022 A Bearcat was used to assist San Pablo PD with the service of a search and arrest warrant for a suspect associated with multiple armed robberies

Each use of GC 7070 defined equipment is reviewed to ensure it complies with Office of the Sheriff policy. There were no reported uses that violated any policy of the Office of the Sheriff.

Command and Control Vehicle (Mobile Command Post)

The Office of the Sheriff's command and control vehicle was used two times during 2022. The following are summaries of the date and reason for the deployments:

- January 26, 2022 The LDV C40MCC-10 was used as the command vehicle during a SWAT team operation involving a suspect who was armed with firearms, and barricaded inside his residence. The armed suspect had fired in the direction of the neighbor's residence.
- July 20, 2022 The LDV C40MCC-10 was used as the command vehicle during the service of an arrest and search warrant related to a homicide investigation

Each use of GC 7070 defined equipment is reviewed to ensure it complies with Office of the Sheriff policy. There were no reported uses that violated any policy of the Office of the Sheriff.

Explosive Breaching Apparatus / Battering Rams

The Office of the Sheriff's battering ram was used one time during 2022. The following is a summary of the date and reason for the deployment:

• January 26, 2022 – During a call involving an armed suspect barricaded inside a residence who had fired at a neighbor's residence, the battering ram was mounted onto the front of a Bearcat and used to breach the front door of the suspect's residence to create an entry point.

Each use of GC 7070 defined equipment is reviewed to ensure it complies with Office of the Sheriff policy. There were no reported uses that violated any policy of the Office of the Sheriff.

Specialized firearms and ammunition

The Office of the Sheriff's specialized firearms and ammunition were not deployed in 2022.

"Flashbang" Grenades

The Office of the Sheriff's "flashbang" grenades were not deployed in 2022.

Tear Gas and Pepper Balls

The Office of the Sheriff's tear gas and pepper balls were used five times in 2022. The following are summaries of the date and reason for the deployments:

- January 26, 2022 The SWAT team deployed eight (8) 40mm CS ferret rounds into an armed barricaded suspect's residence in an attempt to have the suspect exit the residence and surrender. The suspect was armed with a firearm and had fired at the neighbor's residence before the SWAT team arrived.
- January 30, 2022 An inmate at the Martinez Detention Facility (MDF) had been kicking his cell door which caused the glass window frame to break, which could potentially be the source of an injury to the inmate. After attempts were made by staff to talk and calm the inmate were unsuccessful, the inmate needed to be removed from his cell to ensure his safety. A Defense Technology Stinger Rubber Ball was deployed into the cell and the inmate was safely restrained using the minimal amount of force required to place him into handcuffs.
- February 24, 2022 An inmate refused to receive his court ordered medications and deputies were unable to negotiate his voluntary compliance to exit the cell. The inmate had a violent history at the Martinez Detention Facility (MDF), which included violence against staff. A Defense Technology Stinger Rubber Ball was deployed into the cell and an extraction team entered to safely restrain the inmate in handcuffs using the minimal amount of force required to safely control the inmate.
- April 16, 2022 An inmate at the Martinez Detention Facility (MDF) potentially
 caused significant injury to himself when he violently kicked and punched his cell
 door numerous times. Attempts were made to calm the inmate and a request
 was made to have the inmate voluntarily submit to being handcuffed through the
 cell door food port. When de-escalation attempts were unsuccessful, an
 extraction team was assembled and a Defense Technology Stinger Rubber Ball
 was deployed into the cell prior to the the team entering. The inmate was safely
 restrained using the minimal amount of force required to place him in handcuffs.
- August 5, 2022 An inmate at the Martinez Detention Facility (MDF) was inside a cell holding a weapon. After deputies were unable to calm the inmate and get him to comply with the deputies' orders to drop the weapon, the inmate had to be removed from the cell for his own safety. A Defense Technology Stinger Rubber Ball was deployed into the cell before staff entered and restrained the inmate with handcuffs while using the minimal amount of force necessary to safely secure the inmate.

Each use of GC 7070 defined equipment is reviewed to ensure it complies with Office of the Sheriff policy. There were no reported uses that violated any policy of the Office of the Sheriff.

Long Range Acoustic Device (LRAD)

The Office of the Sheriff's Long Range Acoustic Device (LRAD) was used a two times during 2022. The following is a summary of the date and reason for the deployment:

- January 26, 2022 The SWAT team responded to a residence where an armed suspect was barricaded inside a residence. The suspect was armed with a firearm and had fired at the neighbor's residence before the SWAT team arrived. The Long Range Acoustic Device was used to make announcements in the direction of the suspect's home.
- July 20, 2022 The Long Range Acoustic Device was used to make announcements to the residents of a residence during the service of arrest and search warrants related to a homicide investigation.

Each use of GC 7070 defined equipment is reviewed to ensure it complies with Office of the Sheriff policy. There were no reported uses that violated any policy of the Office of the Sheriff.

40mm projectile launchers and munitions

The Office of the Sheriff's 40mm projectile launchers and munitions were used three times in 2022. The following are summaries of the date and reason for the deployments:

- January 26, 2022 The SWAT team responded to a residence where an armed suspect was barricaded inside a residence. The suspect was armed with a firearm and had fired at the neighbor's residence before the SWAT team arrived. The suspect opened the garage door and refused to comply with the orders to get on the ground. The suspect attempted to run back into the garage at which time one Exact impact sponge round was fired from a 40mm single launcher striking the suspect in the abdomen.
- April 3, 2022 An inmate inside a cell at the West County Detention Facility (WCDF) threw their desk at their cell door several times and the cell door window broke. The desk was also broken into several large pieces, one of which the inmate picked up and used as a potential weapon. Several verbal attempts were made to get the inmate to drop the piece of the desk and comply with the deputies' orders., which the inmate refused to follow. Two rounds of the FN303

Less Lethal Launcher were fired, striking the inmate. The inmate was then restrained and placed in handcuffs using the minimal amount of force necessary to safely place him in handcuffs.

- April 14, 2022 An inmate at the Martinez Detention Facility (MDF) with a history of weapon possession and violence on inmates and staff, armed himself with a wooden broom and began violently swinging the broom at the deputies. A deputy armed with the FN303 Less Lethal Launcher, gave commands for the inmate to drop the broom. The inmate refused to comply, and the deputy fired two projectiles which struck the inmate's legs with no effect. The deputy continued to order the inmate to drop the wooden broomstick and fired two more projectiles toward the inmate, which struck the inmate in the midsection of the inmate's body. The inmate was restrained in handcuffs using the minimal amount of force necessary.
- July 28, 2022 A suicidal suspect armed with a knife was at his mother's residence in violation of a restraining order. The suspect began stabbing himself and refused law enforcement commands to drop his weapon. During the incident, eight Exact impact sponge rounds were fired at the suspect.

Each use of GC 7070 defined equipment is reviewed to ensure it complies with Office of the Sheriff policy. There were no reported uses that violated any policy of the Office of the Sheriff.



2023 Projected Purchases

The Office of the Sheriff makes two different kinds of equipment purchases in regard to GC 7070 defined equipment: consumable and non-consumable equipment. Consumable equipment such as ammunition, chemical agents, "flash bang" grenades, less lethal munitions, and other similar equipment purchases are anticipated to be consistent with current replenishment schedules. The current inventory and need for replenishment can be impacted based on training, operational usage, and recommended replacement guidelines.

Non-consumable purchases are projected to be made in the small unmanned aircraft systems, breaching apparatuses, less lethal launchers categories. All of the DJI made sUAS equipment will be paid for using grant funding. The two Brinc Lemur sUAS drones will be paid for partially using grant funding. The remaining non-consumable equipment purchases will be made from the Office of the Sheriff general fund. The Office of the Sheriff is only intending to purchases equipment previously approved by the Board of Supervisors in 2022.

Type of Military Equipment	Manufacturer / Make	Model	Quanity	Cost Per Item	Total Cost
Small Unmanned Aircraft System	DJI	Matrice 30T	2	\$ 14,041.00	\$ 28,082.00
	DJI	Mavic 3 Enterprise Thermal	4	\$ 5,498.00	\$ 21,992.00
	DJi	Mavic Mini 3	4	\$ 1,252.00	\$ 5,008.00
	DJI	Mavic Enterprise	2	\$ 3,600.00	\$ 7,200.00
	DJI	Avata FPV	2	\$ 1,388.00	\$ 2,776.00
	Brinc	Lemur	2	\$ 20,544.00	\$ 41,088.00
Explosive Breaching Apparatuses	Royal Arms	Tesar 2 Black Cap	125	\$ 5.00	\$ 625.00
	Royal Arms	Tesar 3 Green Cap	25	\$ 5.00	\$ 125.00
	Royal Arms	Tesar 4 Yellow Cap	25	\$ 5.00	\$ 125.00
	Royal Arms	MB-70S	25	\$ 5.00	\$ 125.00
	AARDVARK	Kinetic Breaching Tool	2	\$ 9,650.00	\$ 19,300.00
Specialized firearms ammunition	Federal	Tactical TRU .308	8,000	\$ 1.65	\$ 13,200.00
	Federal	Tactical Bonded Tip .308	2,000	\$ 1.60	\$ 3,200.00
"Flashbangs" grenades	Defense Technology	8902NR	125	\$ 50.00	\$ 6,250.00
	CTS	7290-9 9 Bang	48	\$ 55.00	\$ 2,640.00
Tear gas and pepper balls	Defense Technology	Riot Control CS1082	75	\$ 25.00	\$ 1,875.00
U	Defense Technology	Spede Heat 6182	10	\$ 25.00	\$ 250.00
	Defense Technology	Flameless Tri-Chamber CS (1032)	10	\$ 35.00	\$ 350.00
	Defense Technology	CS Powder 40mm Ferrets	40	\$ 20.00	\$ 800.00
	Defense Technology	CS Barricade Penetrating Ferrets	40	\$ 20.00	\$ 800.00
	Defense Technology	Direct Impact OC Foam Round	151	\$ 20.20	\$ 3,050.20
	CTS	Jet Lite CS 5230	10	\$ 40.00	\$ 400.00
40mm and less lethal launchers	Defense Technology	40mm single shot	8	\$ 902.00	\$ 7,216.00
	Jaycor	Pepperball launcher	4	\$ 657.00	\$ 2,628.00
40mm munitions	Defense Technology	eXact Impact Sponge Round	206	\$ 17.98	\$ 3,703.88
	Defense Technology	Direct Impact Marking Foam Round	76	\$ 17.98	\$ 1,366.48
	Defense Technology	40mm warning/signal round	45	\$ 34.80	\$ 1,566.00

Below is a list of the equipment which is projected to be purchased in 2023:

Summary of Citizen Complaints

Any member of the public can register a question or concern regarding GC 7070 defined equipment by contacting the Sheriff's Office via email at webmaster@so.cccounty.us or by mail attention of the Professionals Standards Division at 1850 Muir Road, Martinez CA 94533. A response to the question or concern shall be completed by the appropriate Division and routed to the Professional Standards Captain in a timely manner.

Also, any member of the public can register a complaint regarding GC 7070 defined equipment by using the Citizen Report Procedure Form which can be found at https://www.cocosheriff.org/community-information/citizen-complaint-form. All complaints received will be sent to Internal Affairs for handling.

In 2022, the Office of the Sheriff did not receive any complaints regarding the use of GC 7070 defined equipment.



GC 7070 Defined Equipment Inventory

Equipment Name / Category: Small Unmanned Aircraft System (sUAS) – Government Code §7070(c)(1)

Quantity Owned: See description below | Lifespan: 10 years

Manufacturers Product Description(s):

DJI Matrice M200v2 with Z30 and XT2 cameras, approx. cost \$35,000, quantity: 1. The ultimate platform for aerial productivity combines a rugged design and simple configurability to work as a solution for a variety of industrial applications. Improvements to the M200 Series V2 enhance intelligent control systems, flight performance, and add flight safety and data security features. <u>https://www.dji.com/matrice-200-series-v2</u> Additional description: An enterprise platform UAV that provides up to 45 minutes of flight time and around 3 miles of range. This UAV has interchangeable zoom and thermal imaging cameras that record video and still pictures. The Matrice can be tethered to the ground for unlimited flight.

DJI Mavic 2 Enterprise Advanced, approx. cost \$7,000 each, quantity: 6. Capture accurate details in any mission with the Mavic 2 Enterprise Advanced – a highly versatile yet compact tool that packs a whole lot of performance upgrades. With high-resolution thermal and visual cameras, the M2EA supports up to 32× digital zoom and is capable of centimeter-level positioning accuracy with the RTK module. <u>https://www.dji.com/mavic-2-enterprise-advanced</u> Additional description: An enterprise platform UAV that provides up to 30 minutes of flight time and around 2 miles of range. This UAV has fixed color and thermal imaging cameras that can record video and still pictures. This UAV can be outfitted with a loudspeaker or spotlight. This UAV has an approximate weight of 899 grams.

DJI Phantom 4 Pro, approx. cost \$2,000 each, quantity: 4. An uprated camera is equipped with a 1-inch 20-megapixel sensor capable of shooting 4K/60fps video and Burst Mode stills at 14 fps. The adoption of titanium alloy and magnesium alloy construction increases the rigidity of the airframe and reduces weight, making the Phantom 4 Pro similar in weight to the Phantom 4. The Flight Autonomy system adds dual rear vision sensors and infrared sensing systems for a total of 5-direction of obstacle sensing and 4-direction of obstacle avoidance. https://www.dji.com/phantom-4pro?from=p4p-or-p4a Additional description: A prosumer UAV that provides up to 30 minutes of flight time and around 2 miles of range. This platform is dated, but still has one of the best camera systems available, as the camera has a mechanical shutter for optimal picture quality. This UAV is mostly used for overhead mapping and 3D imaging. **DJI Mavic Mini 1**, approx. cost \$500 each, quantity: 2. DJI Mavic Mini - Drone FlyCam Quadcopter UAV with 2 7K Camera 3-Axis Gimbal GPS 30min Flight Time less than 0 55lbs Gray. Charging Temperature Range - 5° to 40°C (41° to 104°F). https://www.dji.com/mavic-mini Additional description: A consumer UAV that provides up to 20 minutes of flight time and around 1 mile of range. This UAV has a color camera

to 20 minutes of flight time and around 1 mile of range. This UAV has a color camera that can record video and still images. The Mavic Mini 1 is an extremely small platform that can be fitted with propellor guards and flown inside buildings and tight spaces.

DJI Mavic Mini 2, approx. cost \$600 each, quantity: 19. DJI Mini 2 is beginner-friendly, powerful, and well, mini. Impressive performance, stunning image quality, and creative videos are just a few taps away. Explore an entirely new perspective, capturing the moments that make your life truly yours. <u>https://www.dji.com/mini-2</u> Additional description: A consumer platform UAV that provides up to 25 minutes of flight time and around 1 mile of range. This UAV has a 4K color camera that can record video and still images. Like its predecessor, the Mini 1, this is a very small platform UAV that is ideally suited for flying inside buildings and tight spaces, especially when fitted with propellor guards. The Mini 2 weighs 249 grams.

DJI Mavic Pro, approx. cost \$1500, quantity: 1. The DJI Mavic Pro is a portable and powerful drone with a 3-axis gimbal 4K camera, a max transmission range of 4.1 mi (7 km), and a sophisticated design. <u>https://www.dji.com/mavic</u> Additional description: This consumer platform UAV is dated but still has an excellent camera system. This UAV weighs approximately 1.5 pounds and has a 30-minute flight time.

Wingtra Gen 1, approx. cost \$45,000, quantity: 1. The Wingtra is a professional fixedwing platform UAV that can take off and land from a vertical position. The Wingtra has around 60 minutes of flight time and is only used for overhead imaging. The primary purpose of this UAV is to rapidly map large areas during disaster response. The Wingtra cannot record video and flights must be pre-programmed before takeoff.

DJI Mavic Enterprise Zoom, approx. cost \$2200 each, quantity: 2. The DJI Mavic 2 Enterprise is a foldable, portable, long-range flying camera and accessory system that adapts well to uses by first responders and businesses that routinely inspect hard-toreach assets. <u>https://www.dji.com/mavic-2-enterprise</u> Additional description: An enterprise level UAV that has a color camera as well as an audible speaker and light. As the name implies, this UAV has good zooming capability, which enables it to fly higher, as to not agitate potential suspects on the ground. This UAV is capable of video recording and weighs approximately 2 pounds. The Mavic Zoom offers up to a 30minute flight time.

DJI Mavic Enterprise Dual, approx. cost \$2500 each, quantity: 2. Mavic 2 Enterprise Dual features a three-axis gimbal stabilized camera housing a side-by-side 4K sensor for capturing visible light and a FLIR imaging sensor for capturing thermal data. Together these sensors allow pilots to perform flights at night, as well as fly in complex daytime conditions like fog and smoke. https://www.dii.com/mavic-2-enterprise

Additional description: UAV that has a color "Day" camera as well as infrared nighttime capabilities. This UAV also has an audible speaker and light. This UAV is the predecessor to the more robust Mavic 2 Enterprise Advanced, which has a much better infrared and zoom camera system. This UAV weighs approximately 2 pounds and offers up to a 30-minute flight time.

DJI FPV, approx. cost \$1500 each, quantity: 2. DJI FPV has a built-in imaging system, high-definition, low-latency transmission with a range of up to 10 km, and a battery life of approximately 20 minutes. <u>https://www.dji.com/dji-fpv</u> Additional description: This unique "First Person View" UAV offers an immersive flying experience and is currently being tested for indoor flying. The pilot wears a headset and can view a live feed of the UAV as if walking through the building it is being flown through. This UAV also serves as a training platform, as it requires a much higher level of skill to fly than most other UAVs.

DJI Mavic 3 Pro, approx. cost \$2500 each, quantity: 1. DJI Mavic 3 is DJI's latest flagship consumer drone. Compared with Mavic 2, Mavic 3 has substantially upgraded camera performance, integrating a 4/3 CMOS Hasselblad camera and a lightweight 24mm equivalent tele camera. Mavic 3 is capable of capturing 5.1K/50fps and 4K/120fps videos, and Mavic 3 Cine even supports Apple ProRes 422 HQ, Apple ProRes 422, and Apple ProRes 422 LT encoding, offering higher image quality and greater flexibility during post-processing. In addition to the camera system, Mavic 3 also delivers a comprehensively upgraded flight experience. Flight time has been extended to 46 minutes, and the new O3+ extends video transmission range to a maximum distance of 15 km. Obstacle sensing has been developed into a truly omnidirectional system, with a more powerful APAS 5.0 and Advanced RTH to give users greater peace of mind during flight. https://www.dji.com/mavic-3?site=brandsite&from=nav

Purpose: To be deployed when its view would assist officers or incident commanders with the following situations, which include but are not limited to: (1) major collision investigations, (2) search for missing persons, (3) natural disaster management, (4) crime scene photography, (4) SWAT, tactical, or other public safety and life preservation mission, and (6) in response to specific requests from local, state, or federal fire authorities for fire response and/or prevention.

Authorized Use: Only assigned operators who have completed the required training shall be permitted to operate the drones during approved missions.

Fiscal Impact: Annual maintenance and battery replacement cost is approximately \$500 per unit

Training: All Sheriff's Office sUAS operators are licensed by the Federal Aviation Administration for sUAS operation as remote pilots under FAA Part 107. In addition, each operator must attend Sheriff's Office approved ongoing training.

Legal and Procedural Rules: Use is established under General Policy 1.06.84 (Small Unmanned Aircraft Systems) and FAA Regulation 14 CFR Part 107. It is the policy of the Sheriff's Office to utilize UAS only for official law enforcement or training purposes, and in a manner that respects the privacy of our community, pursuant to applicable law. Additional Information: None

Equipment Name / Category: Unmanned, remotely piloted, powered ground vehicles – Government Code §7070(c)(12)

Quantity Owned: 4Lifespan: All robots, 8-10 yearsManufacturer's Product Description(s):ROBOTEX Avatar II, cost \$12,500, quantity:2. The AVATAR® enhances the capabilities of SWAT and tactical response teams by
allowing them to inspect dangerous situations quickly and safely, there is no longer a
need to send personnel in before you have had a chance to assess the situation.

The AVATAR® saves lives by keeping first responders out of harm's way, and it does so at a fraction of the price of other robots. The AVATAR® Robots are regarded by tactical teams as a standard operational tool, like a firearm, vehicle, or piece of body armor. Departments across the United States and internationally are using the AVATAR® Robots. <u>https://robotex.com/products/avatar-tactical-robot/</u>

TRANSCEND TACTICAL Vantage, cost \$16,900, quantity: 1. Transcend's Vantage robot is the world's only double-patented automatic stair and obstacle climbing robot for First Responders. It's the only option for First Responders that want their robot to "just figure it out" on the first attempt to climb stairs, clothes, and junk without the burden of tedious manual controls associated with flippers and other limb systems. This means the Vantage can be used without prior training to enter a house or building to see, hear and learn what's happening before sending officers inside.

https://www.transcendrobotics.com/transcendproduct/vantage-patrol-robot/#overview

RECON ROBOTICS Throwbot 2, cost \$2,000, quantity: 1. The Recon Robotics Throwbot 2 is a throwable micro-robot platform that enables operators to obtain instantaneous video and audio reconnaissance within indoor or outdoor environments. <u>https://reconrobotics.com/products/throwbot-2-robot/</u>

Purpose: This robot is used in response to critical incidents to enhance officer and community safety. They can be used to remotely gain visual/audio data, deliver the Hostage Negotiation Team throw phone, open doors, and clear buildings.

Authorized Use: Only personnel who have been trained in the use of the robots will be authorized to use them.

Fiscal Impact: Annual maintenance cost is approximately \$500

Training: All operators must have completed a familiarization training in the set-up, control, and safe deployment of the robots. All operators are also members of the SWAT team who have completed an 80-hour POST-certified Special Weapons and Tactics Course.

Legal and Procedural Rules: It is the policy of the Sheriff's Office to utilize a robot only for official law enforcement purposes, and in a manner that respects the privacy of our community, pursuant to applicable law.

Additional Information: None

Equipment Name / Category: Armored Personnel Carrier – Government Code §7070(c)(2)

Quantity Owned: 2

Lifespan: 25 years

Manufacturers Product Description(s):

LENCO BEARCAT, G2, cost: \$244,043.42, quantity: 1. The Lenco BearCat G2 is the standard tactical armored vehicle for special operations units within the US Law Enforcement community. Since the early 2000s, agencies such as LAPD, LASD SEB, NYPD ESU, Boston PD and hundreds of Federal, State and Local Law Enforcement agencies have made the BearCat G2 part of their standard operating procedure. The G2 has excellent on-road driving characteristics and maneuverability in tight urban settings. The large floor plan seats 10 – 12 fully equipped officers with a long list of tactical features <u>only</u> found on the Lenco BearCat line of armored SWAT vehicles for Police and Government. <u>https://www.lencoarmor.com/model/bearcat-g2-police-government/</u>LENCO BEARCAT, G3, cost: \$291,283, quantity: 1. The BearCat G3 provides Lenco's proven armor system in a ruggedized off-road platform. The G3 utilizes the same body design, interior features, and tactical options as the G2, but it comes standard with a heavier duty upgraded suspension and off-road tires, rims & run flats to provide

enhanced off-road performance. The increased ground clearance and robust suspension allows for emergency response in rural regions and natural disaster scenarios where standard armored SWAT vehicles would experience challenges. If your mission takes you off-road, the Lenco BearCat G3 will get you where you need to go. Available with mission-specific design features for Police and Government, Medical and Fire Response. https://www.lencoarmor.com/model/bearcat-g3-police-government/
Purpose: To be used in response to critical incidents to enhance officer and community

safety, improve scene containment and stabilization, and assist in resolving critical incidents.

Authorized Use: The use of armored rescue vehicles shall only be authorized by a SWAT commander, Assistant SWAT commander, or designee, based on the specific circumstances of a given critical incident. The Patrol Division Commander will be notified of the deployment of the armored vehicle as soon as practical. Armored rescue vehicles shall be used only by personnel trained in their deployment and in a manner consistent with Patrol Division policy 3.01.72.

Fiscal Impact: Annual maintenance cost of approximately \$2,500 each.

Training: Operators are required to participate in initial and yearly Sheriff's Office approved training to demonstrate familiarity with the operation and controls of the armored vehicle.

Legal and Procedural Rules: Use is established under General Policy 1.06.24 and Patrol Division policy 3.01.72, as well as applicable law.

Additional Information: The Lenco Bearcat G2 was purchased in 2007 with Homeland Security grant funding.

Equipment Name / Category: Command and control vehicles – Government Code §7070(c)(5)

Quantity Owned: 1 Lifespan: 20 years

Manufacturers Product Description(s):

LDV, C40MCC-10, cost \$913,110.11, quantity: 1. Ten large workstations, an additional exterior workstation, a lavatory and plentiful communications storage and interior workspace, this floorplan is all business. With middle entry and four slide outs, there is room to spare allowing for front conference space as needed.

https://www.ldvusa.com/truck/contra-costa-county-sheriff-mobile-command-center/

Purpose: To be used based on the specific circumstances of a given critical incident. A mobile office that provides shelter, access to computer systems, and restroom facilities during extended events. The Mobile Command Vehicle (MCV) can also be utilized for SWAT/HNT and other critical incidents, pre-planned large events, searching for missing persons, natural disasters, and community events.

Authorized Use: The MCV shall be used by officers trained in its deployment and in a manner consistent with Sheriff's Office policies and training. Only officers who have completed the California Class B Commercial driving school and are properly licensed are allowed to drive the MCV.

Fiscal Impact: Annual maintenance cost is approximately \$2,500

Training: The driver/operator shall receive Sheriff's Office approved training in the safe handling of the vehicle. Driver/operators shall also undergo California Department of

Motor Vehicles commercial vehicle testing.

Legal and Procedural Rules: Use is established under General Policy 1.06.26, as well as applicable law.

Additional Information: The MCV was purchased using Homeland Security grant funds.

Equipment Name / Category: Explosive breaching apparatuses / battering rams – Government Code §7070(c)(7)

Quantity Owned: See description below | Lifespan: 10 years

Manufacturers Product Description(s):

REMINGTON 870 breaching shotgun, cost is unknown as they were purchased before 2006, quantity: 2. A specially designed Remington 870 shotgun that is retrofitted with a spiked standoff breaching barrel that allows for the safe and effective firing of frangible copper rounds. Similar breaching shotgun: <u>https://royalarms.com/shop/royal-remington-870-police-parkerized-breaching-shotgun-2/</u>

ROYAL ARMS TESCR shotgun breaching ammunition, cost \$4.50 per round, quantity: 21. Green Cap 2-3/4" 375 Grain Clayvon® Frangible 12 Ga Shotgun Slug. Additional description: A frangible round which is deployed from a 12-gauge breaching shotgun. https://royalarms.com/shop/tescr3-frangible-breaching-ammo/

NONEL nonelectric delay detonator, cost \$7.50 each, quantity: 56. It consists of a length of orange shock tube with high strength detonator attached to one end and the other end sealed. A white J-hook is affixed near the sealed end, providing easy means of connection to detonating cord.

PRIMACORD 10 Detonating cord, cost \$691, quantity: 950 ft. PRIMACORD detonating cords are flexible linear explosives with a core of PETN explosive encased in a textile outer jacket. PRIMACORD detonating cords are designed for use as trunklines and/or downlines in various mining, quarrying and construction applications.

BATTERING RAM, cost (included with Lenco Bearcat), quantity: 2. Each Lenco Bearcat has the ability to mount a ram to the front of the vehicle. The ram can be used for both creating an entry point into a location, as well as safely deploying a chemical agent into a location.

Purpose: Used in high-risk tactical operations to destroy deadbolts, locks, and hinges. During crisis situations, it may become necessary for a SWAT team to facilitate an entry into a location to ensure the safety of innocent persons inside the stronghold, the suspect, the officers, and the public.

Authorized Use: SWAT personnel trained in its proper use for law enforcement purposes.

Fiscal Impact: Approx. \$5.00 per round and will be purchased as needed to replenish existing supply as they are used during deployments and training. Expected to purchase approximately 10 breaching rounds for \$50 during the year.

Training: Instructor-led training which involves familiarization, authorized uses, and hands-on instruction. The instructor will have attended a Shotgun Breaching Course. Additionally, all operators are also members of the SWAT team who have completed an 80-hour POST certified Special Weapons and Tactics Course.

Only SWAT team members who have attended a 9-day tactical explosive breacher

course are allowed to handle the nonelectric detonators and detonating cord. **Legal and Procedural Rules:** Use is established under General Policy 1.06.24, 1.06.61, and 1.07.32, as well as applicable law.

Additional Information: None

Equipment Name / Category: Specialized firearms and ammunition – Government Code §7070(c)(10)

Quantity Owned: See description below **Lifespan:** Approximately 5 to 15 years depending on usage

Manufacturers Product Description(s):

The Office of the Sheriff has the following rifles in its inventory which are capable of firing .223/5.56mm caliber rifle rounds. These rifles are used by SWAT personnel. **HK G36C**, approx. cost \$1,900, quantity: 4. With its short 8.98-inch (228 mm) barrel and buttstock folded, the G36C (compact carbine) has an overall length of less than 20 inches— shorter that an MP5 submachine gun. It is the perfect 5.56 mm weapon for use in confined areas such as a vehicle. The G36C can even be fired with its buttstock folded. With the installation of an HK G36 magazine conversion magazine well, the G36C can use widely available AR/M16/M4 type magazines. <u>https://hk-usa.com/hk-models/g36c/</u>

The Office of the Sheriff has the following rifles in its inventory which are capable of firing .308 caliber rifle rounds:

GA Precision .308 rifles, cost \$4,986, quantity: 8.

Remington 700 .308 rifles, Cost is unknown as the last one was purchased in 2006, quantity: 8. The Model 700 SPS Tactical is a highly maneuverable member of the family. It's built for tack-driving accuracy with a 20" heavy-contour tactical-style barrel and dualpoint pillar bedding in its black synthetic stock. Hogue® over moldings on the stock facilitate sure handling, and it has a semi-beavertail fore-end for added stability off a rest. <u>https://www.remarms.com/rifles/bolt-action/model-700/model-700-sps-tactical</u>

The Office of the Sheriff has the following firearms in its inventory that are capable of firing 9mm rounds:

HK MP5, approx. Cost \$2,000, quantity: 2. Developed by Heckler & Koch in the mid-1960s, the 9 mm MP5 submachine gun uses the same delayed blowback operating system found on the famous HK G3 automatic rifle. Reliability, accuracy, ease of handling, simple maintenance, and safety - all the elements of HK excellence are highlighted on the MP5. Firing from the closed-bolt position in all modes of fire make MP5 submachine guns extremely accurate and controllable. <u>https://hk-usa.com/hkmodels/mp5-2/</u>

HORNADY .308 WIN TAP ELD, approx. cost: \$1.25 per round, quantity: 6,250. Hornady 308 WIN TAP 168 gr. ELD MATCH TAP PRECISION ammunition was designed as an improvement on the 168 gr. A-MAX TAP PRECISION load by incorporating the new ELD Match bullet. The 168 gr. ELD Match bullet with Heat Shield tip delivers the excellent terminal performance TAP Precision is known for, but features a resilient, heat

resistant polymer tip that improves the ballistic coefficient, resulting in higher impact velocities, less drop, less wind drift, and more energy on target.

https://www.hornadyle.com/rifle-ammunition/168-gr-eld-match-tap-precision#!/

Purpose: The rifle can be more effective than a sidearm when dealing with certain critical and life-threatening situations including overcoming heavily armed resistance, achieving containment, and saving lives. Such situations include but are not limited to: (1) Violent and armed suspects wearing body armor, (2) Subjects armed with high-capacity automatic or semi-automatic weapons, (3) Multiple armed suspects, (4) Distance is beyond the capabilities of handgun, and (5) Hostage situation where precision is necessary and is beyond the capabilities of a handgun.

Authorized Use: All full-time sworn peace officers are trained in its proper use for law enforcement purposes.

Fiscal Impact: Approximately \$6,000 per year for ammunition and \$1,000 per year for maintenance on the GA Precision rifles.

Training: All personnel issued a rifle capable of firing a .308 caliber round are members of the SWAT team, have attended an 80-hour POST-certified Special Weapons and Tactics Course and a 40-hour Rifle Marksmanship and Sniper/Observer Course. These personnel attend SWAT team training and an additional 8-hour training day each month specifically for the deployment of the .308 rifle.

Legal and Procedural Rules: Use is established under General Policy 1.06.61, 1.07.32, and as well as applicable law.

Additional Information: The HK G36C rifles and HK MP5 firearms are only used for training and demonstration purposes and have not been an assigned to a SWAT team member as their primary rifle for several years.

Five of the Remington 700 rifles are no longer in service.

Three of the Remington 700 rifles recently had their barrels and their triggers replaced. The three recently refurbished rifles can be used if a GA Precision rifle is being serviced and is unable to be used during a SWAT operation.

Equipment Name / Category: "Flashbang" grenades – Government Code §7070(c)(12)Quantity Owned: 101Lifespan: 5 years

Manufacturers Product Description(s):

Defense Technology Low Roll Non-Reloadable Distraction Device, cost \$50 each, quantity: 93. The Non-Reloadable Distraction Device® unit incorporates an M201A1 type fuze with hex design gun steel body. This is a compact version of the 8933 Low Roll® body Distraction Device is the newest version of the first reusable non-bursting canister that limits movement and rolling once deployed. The compact Distraction Device. This is a smaller, lighter device with the same output. https://www.defense-

technology.com/product/low-roll-12-gram-non-reloadable-distraction-device/

Purpose: The diversionary device is designed to temporarily incapacitate an individual through sound and light.

Authorized Use: The device is utilized in situations where it is necessary to gain a tactical advantage or provide a distraction, to overcome a situation where the threat of violence or danger exceeds the capabilities of standard Office of the Sheriff equipment.

Examples are a hostage or barricaded subject incident and a high-risk warrant where there may be extreme hazards to personnel.

Fiscal Impact: They will be purchased as needed to replenish existing supply as they are used during deployments and training. It is anticipated that 20 diversionary devices will be purchased for a cost of \$1,000.

Training: All members of the SWAT team who have completed an 80-hour POSTcertified Special Weapons and Tactics Course and personnel who have attended a course for diversionary devices are authorized for use. All SWAT team members receive refresher training from personnel who have attended an instructor course for diversionary devices.

Legal and Procedural Rules: It is the policy of the Sheriff's Office to utilize noise flash diversionary devices (NFDD) only for official law enforcement or training purposes and pursuant to applicable law.

Additional Information: None.

Equipment Name / Category: Tear gas and pepper balls – Government Code §7070(c)(12)

Quantity Owned: See description below | Lifespan: 5 years

Manufacturers Product Description(s):

DEFENSE TECHNOLOGY Spede-Heat CS Grenade, cost approx. \$20 each, quantity: 10. The Spede-Heat[™] CS Grenade is a high volume, continuous burn it expels its payload in approximately 20-40 seconds. The payload is discharged through four gas ports on top of the canister, three on the side and one on the bottom. This launchable grenade is 6.12 in. by 2.62 in. and holds approximately 2.9 oz. of active agent. <u>https://www.defense-technology.com/product/spede-heat-continuous-dischargechemical-grenade-cs/</u>

DEFENSE TECHNOLOGY Riot Control CS Grenade, cost approx. \$25, quantity: 171. The Riot Control CS Grenade is designed specifically for outdoor use in crowd control situations with a high-volume continuous burn that expels its payload in approximately 20-40 seconds through four gas ports located on the top of the canister. This grenade can be used to conceal tactical movement or to route a crowd. The volume of smoke and agent is vast and obtrusive. This launchable grenade is 6.0 in. by 2.35 in. and holds approximately 2.7 oz. of active agent. <u>https://www.defense-technology.com/product/riot-control-continuous-discharge-grenade-cs/</u>

DEFENSE TECHNOLOGY Riot Control OC Grenade, cost approx. \$25, quantity: 5. The Riot Control OC Grenade is designed specifically for outdoor use in crowd control situations with a high-volume continuous burn that expels its payload in approximately 20-40 seconds through four gas ports located on the top of the canister. This grenade can be used to conceal tactical movement or to route a crowd. The volume of smoke and agent is vast and obtrusive. This launchable grenade is 6.0 in. by 2.35 in. and holds approximately 0.88 oz. of active agent. <u>https://www.defense-</u>

technology.com/product/riot-control-continuous-discharge-grenade-oc/

DEFENSE TECHNOLOGY Pocket Tactical CS Grenade, cost approx. \$20, quantity: 13. The Pocket Tactical CS Grenade is small, and lightweight. The 0.9 oz. of active

agent will burn approximately 20-40 seconds. At 4.75 in. by 1.4 inches in size, it easily fits in most tactical pouches. This is a launchable grenade; however, it is normally used as a signaling or covering device. Though this device is slightly over four inches in length, it produces a smoke cloud so fast it appears to be an enveloping screen produced by a full-size tactical grenade. <u>https://www.defense-</u>

technology.com/product/pocket-tactical-grenade-cs/

DEFENSE TECHNOLOGY Instantaneous Blast CS Grenade, cost approx. \$35, quantity: 21. The Instantaneous Blast CS Grenade is designed for indoor or outdoor use; this grenade's powder is expelled upon initiation of a small internal detonator that has sufficient force to split the canister at six machined groves on the outside surface. this device is well suited for affecting numerous subjects grouped within a contained portion of a prison yard or area, using wind to the advantage. This 6.12 in. by 2.62 in. grenade will deliver approximately 1.5 oz. of active agent. <u>https://www.defense-</u>

technology.com/product/instantaneous-blast-cs-grenade/

DEFENSE TECHNOLOGY Instantaneous Blast OC Grenade, cost approx. \$20, quantity: 100. The Instantaneous Blast OC Grenade is designed for indoor or outdoor use; this grenade's powder is expelled upon initiation of a small internal detonator that has sufficient force to split the canister at six machined groves on the outside surface. This device is well suited for affecting numerous subjects grouped within a contained portion of a prison yard or area, using wind to the advantage. This 6.12 in. by 2.62 in. grenade will deliver approximately 1.5 oz. of active agent. https://www.defense-technology.com/product/instantaneous-blast-oc-grenade/

DEFENSE TECHNOLOGY Flameless Tri-Chamber Grenade, cost approx. \$35, guantity: 13. The design of the Tri-Chamber Flameless CS Grenade allows the contents to burn within an internal can and disperse the agent safely with reduced risk of fire. The grenade is designed primarily for indoor tactical situations to detect and/or dislodge a barricaded subject. This grenade will deliver approximately .70 oz. of agent during its 20-25 seconds burn time. The Tri-Chamber Flameless Grenade can be used in crowd control as well as tactical deployment situations by Law Enforcement and Corrections but was designed with the barricade situation in mind. Its applications in tactical situations are primarily to detect and/or dislodge barricaded subjects. The purpose of the Tri-Chamber Flameless Grenade is to minimize the risks to all parties through pain compliance, temporary discomfort, and/or incapacitation of potentially violent or dangerous subjects. The Tri-Chamber Flameless Grenade provides the option of delivering a pyrotechnic chemical device indoors, maximizing the chemicals' effectiveness via heat and vaporization, while minimizing or negating the chance of fire to the structure. https://www.defense-technology.com/product/flameless-tri-chamber-csgrenade/

DEFENSE TECHNOLOGY Triple-Chaser CS grenade, cost approx. \$33, quantity: 50. The Triple-Chaser® CS consists of three separate canisters pressed together with separating charges between each. When deployed, the canisters separate and land approximately 20 feet apart allowing increased area coverage in a short period of time. This grenade can be hand thrown or launched from a fired delivery system. The grenade is 6.5 in. by 2.7 in. and holds an approximately 3.2 oz. of active agent payload. It has an approximate burn time of 20-30 seconds. <u>https://www.defense-</u>

technology.com/product/triple-chaser-separating-canister-cs/

DEFENSE TECHNOLOGY Triple-Chaser Smoke grenade, cost approx. \$43, quantity: 52. The Triple-Chaser® Saf-Smoke[™] consists of three separate canisters pressed together with separating charges between each. When deployed, the canisters separate and land approximately 20 feet apart allowing increased area coverage in a short period of time. This grenade can be hand thrown or launched from a fired delivery system and is an effective way to quickly deploy a wide blanket of agent. The grenade is 6.5 in. by 2.7 in. and delivers Saf-Smoke[™]. It has an approximate burn time of 20 seconds. https://www.defense-technology.com/product/triple-chaser-separating-canister-saf-smoke/

DEFENSE TECHNOLOGY Stinger CS rubber ball grenade, cost approx. \$43, quantity: 52. The Stinger® CS Rubber Ball Grenade is a maximum effect device that delivers four stimuli for psychological and physiological effects: rubber pellets, light, sound, and CS. The Stinger® Grenade is most widely used as a crowd management tool by Law Enforcement and Corrections. The Stinger® Grenade has an initial 1.5 second delay that initiates fuze assembly separation, followed by another .5 second delay before the blast which is sufficient to project the rubber balls and chemical agent in a 50-foot radius. <u>https://www.defense-technology.com/product/stinger-cs-rubber-ball-grenade/</u>

DEFENSE TECHNOLOGY Stinger OC rubber ball grenade, cost approx. \$40.50, quantity: 68. The Stinger® OC Grenade is a maximum effect device that delivers four stimuli for psychological and physiological effects: rubber pellets, light, sound, and OC. The Stinger Grenade is most widely used as a crowd management tool by Law Enforcement and Corrections. The Stinger Grenade has an initial 1.5 second delay that initiates fuze assembly separation, followed by another .5 second delay before the blast which is sufficient to project the rubber balls and chemical agent in a 50-foot radius. https://www.defense-technology.com/product/stinger-rubber-ball-grenade-oc/

DEFENSE TECHNOLOGY 32 Caliber rubber ball grenade, cost approx. \$40.50, quantity: 28. The Stinger Rubber Ball Grenade s a maximum effect device that delivers three stimuli for psychological and physiological effects: rubber pellets, light, and sound. The Stinger Rubber Ball Grenade has an initial 1.5 second delay tat initiates fuze assembly separation, followed by another .5 second delay before the blast which is sufficient to project the runner balls in a 50 foot radius. <u>https://www.defense-technology.com/product/stinger-32-caliber-rubber-ball-grenade/</u>

DEFENSE TECHNOLOGY Inert rubber ball grenade, cost approx. \$36, quantity: 37. The Inert Rubber Blast Ball Grenade can be used effectively in both training and crowd management situations. It simulates the dispersion of Riot Control Agents from a CS, CN, or OC Blast Ball in a training environment, but without the actual chemical exposure. Deployed in crowd management /custodial situations to deliver light/sound stimuli from a rubber ball style grenade without chemical agent exposure https://www.defense-technology.com/product/rubber-ball-blast-grenade-inert/

DEFENSE TECHNOLOGY Military-style SAF-Smoke grenade (White), cost approx. \$26, quantity: 34. The Saf-Smoke[™] Grenade was designed for training, but may also be used in operations. The Saf-Smoke Grenade offers the same approximate burn times as the Spede-Heat[™] Grenade in CN or CS and the Riot Control Grenade in CN or CS. The similar burn times may make it the appropriate choice for training or simulation deployment of chemical agent canisters. The Saf-Smoke formulation is considered to be less toxic than Hexachloroethane (HC) smoke. The Saf-Smoke Grenade emits a very white smoke. <u>https://www.defense-technology.com/product/military-style-saf-smoke-grenade/</u>

DEFENSE TECHNOLOGY Military-style Green smoke grenade, cost approx. \$37, quantity: 15. The Maximum Smoke Grenade is designed specifically for outdoor use in crowd control situations with a high volume continuous burn that expels its payload in approximately 30-40 seconds through four gas ports located on the top of the canister. This grenade can be used to conceal tactical movement or to route a crowd. The volume of smoke and agent is vast and obtrusive. This launchable colored smoke grenade is 6.0 in. by 2.35 in. and holds approximately 2.9 oz. of active agent. https://www.defense-technology.com/product/military-style-green-smoke-grenade/

DEFENSE TECHNOLOGY Maximum HC Smoke, cost approx. \$39, quantity: 15. The Maximum Smoke Grenade is designed specifically for outdoor use in crowd control situations with a high volume continuous burn that expels its payload in approximately 1.5 – 2 minutes through four gas ports located on the top of the canister. This grenade can be used to conceal tactical movement or to route a crowd. The volume of smoke and agent is vast and obtrusive. This launchable grenade is 6.0 in. by 2.6 in. and holds approximately 2.9 oz. of active agent. <u>https://www.defense-</u>

technology.com/product/maximum-smoke-hc-large-style-canister/

DEFENSE TECHNOLOGY CS Powder 40mm Ferret, cost approx. \$20, quantity: 31. The ferret 40mm round is non-burning and suitable for indoor use. Used primarily by tactical teams, it is designed to penetrate barriers, such as windows, hollow core doors, wallboard, and thin plywood. Upon impacting the barrier, the nose cone ruptures and instantaneously delivers a small chemical payload inside the structure or vehicle. Defense Technology no longer makes this type of ferret.

DEFENSE TECHNOLOGY CS Barricade Penetrating 40mm Ferret, cost approx. \$20, quantity: 20. The Ferret® 40 mm Barricade Penetrating Round is filled with a CS powder chemical agent. It is a frangible projectile that is spin stabilized utilizing barrel rifling. It is non-burning and designed to penetrate barriers. Primarily used to dislodge barricaded subjects, it can also be used for area denial. Primarily used by tactical teams, it is designed to penetrate barriers, such as windows, hollow core doors, wallboard, and thin plywood. Upon impact the nose ruptures and instantaneously delivers the agent payload inside a structure or vehicle. https://www.defense-technology.com/product/ferret-40-mm-powder-barricade-round-cs/

DEFENSE TECHNOLOGY Liquid CS 40mm Ferret, cost approx. \$20, quantity: 33. The Ferret® 40mm Round is non-burning and suitable for indoor use. Used primarily by tactical teams, it is designed to penetrate barriers, such as windows, hollow core doors, wallboard, and thin plywood. Upon impacting the barrier, the nose cone ruptures and instantaneously delivers a small chemical payload inside of a structure or vehicle. In a tactical deployment situation, the 40mm Ferret is primarily used to dislodge barricaded subjects from confined areas. Its purpose is to minimize the risks to all parties through pain compliance, temporary discomfort and/or incapacitation of potentially violent or dangerous subjects. <u>https://www.defense-technology.com/product/ferret-40-mm-liquid-</u>

<u>barricade-penetrator-round-cs/</u>

DEFENSE TECHNOLOGY Direct impact 40mm OC crushable foam round, cost \$20 each, quantity: 81. The 40mm Direct Impact® munition is a point-of-aim, point-of-impact direct-fire round. An excellent solution whether you need to incapacitate a single subject or control a crowd. When loaded with OC powder, the Direct Impact combines blunt trauma with the effects of an irritant powder, maximizing the potential for incapacitation. <u>https://www.defense-technology.com/product/direct-impact-40-mm-oc-crushable-foam-round/</u>

COMBINED TACTICAL SYSTEMS 5210 White Smoke Grenade, cost \$40.90, quantity 5. Pyrotechnic smoke grenade used for concealment or as a signaling device. https://www.combinedsystems.com/product/5210-white-smoke-canister-grenade/

COMBINED TACTICAL SYSTEMS 5230 Jet Lite CS Grenade, cost \$40.90, quantity 9. A large diameter burning grenade designed to discharge a high volume of smoke and chemical agent rapidly through multiple emission ports. The smoke composition is formulated to burn rapidly decreasing the possibility that the grenade can be picked up and thrown back at crowd management officers. The Jet-Lite should not be deployed on rooftops, in crawl spaces or indoors due to fire producing capability. Can be hand thrown or launched. <u>https://www.combinedsystems.com/product/5230jl-cs-baffled-canister-grenade-pyro-low-flame-potential-copy/</u>

COMBINED TACTICAL SYSTEMS 5430 Flameless CS Grenade, cost \$40.90, quantity 6. Large diameter flameless grenade posing no risk of fire and discharging a large powder payload instantaneously through multiple emission ports. Provides best results when used indoors. <u>https://www.combinedsystems.com/product/5430-cs-flameless-expulsion-canister-grenade/</u>

Purpose: The chemical irritant causes discomfort and encourages subjects to retreat from its vicinity so officers can safely resolve a critical incident, such as a situation involving a barricaded subject.

Authorized Use: Only personnel who have received training by an instructor who has attended a POST chemical agent or less lethal instructor course may use.

Fiscal Impact: Munitions will be purchased as needed to replenish existing supply as they are used during deployments and training. It is anticipated that the Sheriff's Office will spend approximately \$6,000 this year on munitions.

Training: All operators will receive training by an instructor who has attended a POST certified chemical agent instructor or less lethal course.

Legal and Procedural Rules: Use is established under General Policy 1.06.24, 1.06.60, 1.06.61, and 1.07.32, as well as applicable law.

Additional Information: The Mutual Aid Mobile Field Force (MAMFF) has additional munitions in its inventory that have expired and are only for training purposes.

Equipment Name / Category: Long Range Acoustic Device (LRAD) – Government Code §7070(c)(13)

Quantity Owned: 2

Lifespan: 25 years

Manufacturers Product Description(s):

LRAD 100x, cost approx. \$15,000, quantity: 2. The LRAD 100X is a self-contained, portable communication system for on-scene and tactical communication. With

unparalleled vocal clarity and up to 30db louder than bullhorns, megaphones, and vehicle P.A. systems, the LRAD 100X is also four to six times louder than other acoustic hailers of comparable size and weight. LRAD's optimized driver and waveguide technology ensures every message is clearly broadcast, heard and understood, even above engine, crowd, siren, and background noise. The LRAD warning tone commands attention to the voice messages that follow and provides a safer alternative to non-lethal and kinetic measures for changing behavior. https://genasys.com/wp-

content/uploads/Datasheet LRAD 100X 2021 QR.pdf

Purpose: To safely communicate critical announcements and de-escalate critical incidents by ensuring communications are clear and effectively delivered. They are typically used by the Office of the Sheriff during high-risk search/arrest warrant service and barricaded subject incidents but can be used in other situations as needed when it is necessary to ensure information and messages are clearly communicated. The LRAD may also be used to issue a warning tone.

Authorized Use: The LRAD shall only be used by personnel trained in its deployment and used in a manner consistent with that training.

Fiscal Impact: Annual maintenance cost of approximately \$400.

Training: All operators will receive Sheriff's Office approved training prior to operating any of the LRADs in the field.

Legal and Procedural Rules: It is the policy of the Sheriff's Office to utilize the LRAD only for official law enforcement or training purposes and pursuant to applicable law. Additional Information: None.

Equipment Name / Category: 40mm projectile launchers and munitions – Government Code §7070(c)(14)

Quantity Owned: See produce	ct
description	

Lifespan: 15 years

Manufacturers Product Description(s):

PENN ARMS GL6-40, approx. cost \$1500, quantity: 3. A 40MM spring-advance magazine drum launcher with a six-shot capacity and a rifled barrel and six-inch cylinder. https://www.combinedsystems.com/product/I640-1-40mm-spring-wound/

DEFENSE TECHNOLOGY 4 SHOT 40mm launcher, approx. cost \$1500, quantity: 2. Designed for riot and tactical situation, the Defense Technology 1440 40mm Tactical 4-Shot Launcher is low-profile and lightweight, providing multi-shot capability in an easy to carry launcher, https://www.defense-technology.com/product/40mm-tactical-4-shotlauncher/

DEFENSE TECHNOLOGY 40mm single shot launcher, approx. cost \$900, quantity: 54. Manufactured exclusively for Defense Technology[®], the 40LMTS is a tactical single shot launcher that features an expandable ROGERS Super Stoc and an adjustable Integrated Front Grip (IFG) with light rail. The ambidextrous Lateral Sling Mount (LSM) and QD mounting systems allow both a single and two point sling attachment. The 40LMTS will fire standard 40mm less lethal ammunition, up to 4.8 inches in cartridge length. The Picatinny Rail Mounting System will accept a wide array of enhanced optics/sighting systems. https://www.defense-technology.com/product/40mm-Imttactical-single-launcher-expandable-stock/

LEWIS MACHINE AND TOOL 40mm single shot launcher, approx. cost \$1000, quantity: 2. The LMT® Tactical Single Shot Launchers are a lightweight, low-cost tactical single shot launcher available in 2 models: 40 mm and 37 mm. They feature an expandable ROGERS Super Stoc and an adjustable Integrated Front Grip (IFG) with light rail. The Picatinny Rail Mounting System with a bead sight will accept a wide array of enhanced optics/sighting systems for added customizability.

https://www.aardvarktactical.com/products/Imt-tactical-launcher

PEPPERBALL FTC pepperball launcher, approx. cost \$400, quantity: 13. Compact and lightweight, the PepperBall FTC is the industry gold standard for crowd-control and other applications where speed and reliability are a factor.

https://pepperball.com/launchers/ftc-1/

FN 303 LAUNCHER, approx. cost \$1,300, quantity: 7. The FN 303 Less Lethal Launcher is constructed from durable lightweight polymer with comfortable ergonomics and an easy to operate safety. The FN 303 Launcher is equipped with both flip-up iron sights and an integrated MIL-STD-1913 top mounting rail for optical or electronic sights or other accessories. The lightweight polymer magazine holds 15 projectiles and offers a clear rear cover to allow the operator to instantly verify both the payload type and the number of projectiles remaining. <u>https://fnamerica.com/products/discontinued-products/fn-303-launcher/</u>

DEFENSE TECHNOLOGY eXact impact 40mm sponge round, cost \$18 each, quantity: 572. The eXact iMpact[™] 40 mm Sponge Round is a point-of-aim, point-ofimpact direct-fire round. This lightweight, high-speed projectile consisting of a plastic body and sponge nose that is spin stabilized via the incorporated rifling collar and the 40 mm launcher's rifled barrel. The round utilizes smokeless powder as the propellant, and, therefore, have velocities that are extremely consistent. Used for Crowd Control, Patrol, and Tactical Applications. <u>https://www.defense-technology.com/product/exact-impact-</u> 40-mm-standard-range-sponge-round/

DEFENSE TECHNOLOGY Direct impact 40mm marking crushable foam round, cost \$18 each, quantity: 83. A 40mm sponge round that is a point-of-aim, point-of-impact direct-fire round. The direct impact round has a green marking agent that can be used to indicate the aggressor in a crowd or riot situation to the team on the ground.

https://www.defense-technology.com/product/direct-impact-40-mm-marking-crushablefoam-round/

DEFENSE TECHNOLOGY Stinger 40mm 60-caliber rubber balls, cost \$19 each, quantity: 43. The Stinger® 40 mm 60-Caliber Round is most widely used as a crowd management tool by Law Enforcement and Corrections. The round contains approximately eighteen 60-Caliber rubber balls. It utilizes smokeless powder as the propellant and has more consistent velocities and tighter patterns compared to its 37 mm counterpart. It is suitable for administering a means of pain compliance over a greater distance than its 32-Caliber Stinger® counterpart. Used for routing crowds or groups that are mildly resistive. <u>https://www.defense-technology.com/product/stinger-40-mm-60-caliber-rubber-balls-round/</u>

DEFENSE TECHNOLOGY 40mm warning/signaling munition, cost \$39 each, quantity: 252. The 40mm Aerial Warning/Signaling Munition, 50 meters, is intended for use in situations where stand-off distance is desired, giving the operator the ability to

engage crowds, vehicles, or vessels. Launched from a 40mm platform, the munitions deflagrate at a set distance of 50 meters to deliver 170 dB of sound and 5 million candelas of light, noticeable in day or night conditions. A tactile feature on the nose of the cone indicates the designated distance. <u>https://www.defense-</u>

technology.com/product/40-mm-warning-signaling-munition-50-meter/

DEFENSE TECHNOLOGY Drag Stabilized 12-gauge bean bag round, cost \$5.50 each, quantity: 22. The Drag Stabilized 12-gauge round is a translucent 12-gauge shell loaded with a 40-gram tear shaped bag made from a cotton and ballistic material blend and filled with #9 shot. This design utilizes four stabilizing tails and utilizes smokeless powder as the propellant. The 12-Gauge Drag Stabilized Round has secured its place as the Law Enforcement Communities' number one choice for specialty impact munitions. This round has a velocity of 270 fps with a maximum effective range of 75 feet. https://www.defense-technology.com/product/drag-stabilized-12-gauge-bean-bag-round/

PEPPERBALL PAVA ammunition, approx. cost: \$2.25 per round, quantity: 918. .68 caliber A powerful concentration of 5% PAVA pepper powder. One round of LIVE-X[™] contains the equivalent PAVA irritant chemical agent in more than 2 classic PepperBall LIVE[™] rounds. Excellent for direct impact, area saturation and crowd control. https://pepperball.com/projectiles/live-x/

FN 303 marking projectile, approx. cost \$5 per round, quantity: 292. This projectile is intended for marking suspects and objects with an indelible colorant for later identification, arrest or questioning. <u>https://fnamerica.com/products/less-lethal/projectiles/?referrer=law-enforcement</u>

FN 303 PAVA/OC POWDER projectile, approx. cost \$5 per round, quantity: 300. This projectile is intended as an irritant for individual suspects, point-specific targets or smallarea denial. The active ingredient is 0.5% PAVA/OC in a powder form for ease of storage, deployment, and clean-up. <u>https://fnamerica.com/products/less-lethal/projectiles/?referrer=law-enforcement</u>

Purpose: The 40mm and less lethal launchers are a necessary de-escalation tool which can reasonably result in use of a lesser level of force being used against a subject. Less lethal munitions may also be deployed when other levels of force are not proportional or are inappropriate because of the surroundings or situation. The goal of less lethal deployment is to exert control over a subject(s) with increased safety and with a lower potential for injury.

Authorized Use: Personnel trained in its proper use for law enforcement purposes.

Fiscal Impact: Each type of munition will be purchased as needed to replenish existing supply as they are used during deployments and training. It is anticipated that the Sheriff's Office will be spend approximately \$2,000 on munitions this year.

Training: All operators will receive training by an instructor who has attended a POST certified less lethal course.

Legal and Procedural Rules: Use is established under General Policy 1.06.24, 1.06.60, 1.06.61, and 1.07.32, as well as applicable law.

Additional Information: The Defense Technology 40mm chemical agent rounds are listed in the inventory for Government Code §7070(c)(12) equipment.

The Mutual Aid Mobile Field Force (MAMFF) has additional Stinger rounds, 40mm bean

bag rounds, and 12-gauge bean bag rounds which are all expired and are being disposed of. They also have 6 Pepper Ball launchers which are no longer used.

