

Assembly Bill 481 (AB 481)



Prepared by:
UC COUNCIL OF CHIEFS OF POLICE

SUMMARY

Assembly Bill 481 (AB 481), the Law Enforcement and State Agencies Military Equipment Funding, Acquisition, and Use Act was signed into law and became effective on January 1, 2022. AB 481 requires law enforcement agencies to obtain approval from their governing bodies before purchasing, raising funds for, or acquiring military equipment, by any means, including surplus military equipment from the federal government.

Law enforcement agencies are also required to seek governing body approval before collaborating with another law enforcement agency in the deployment or use of military equipment within the governing body's territorial jurisdiction or before using any new military equipment for a purpose, in a manner, or by a person not previously approved by the governing body.

The Act defines the governing body as “the elected body that oversees a law enforcement agency or, if there is no elected body that directly oversees the law enforcement agency, the appointed body that oversees a law enforcement agency. In the case of a law enforcement agency of a county, including a sheriff’s department or a district attorney’s office, “governing body” means the board of supervisors of the county.”

AB 481 requires a law enforcement agency seeking to continue the use of any military equipment acquired prior to January 1, 2022, to commence a governing body approval process no later than May 1, 2022, and the adoption of a use policy within 180 days following submission of the use policy or cease the use of the military equipment until it receives approval of the governing body.

In considering the proposed Military Equipment Use Policy, the governing body must place the proposed policy as an agenda item for an open session of a regular meeting and provide for public comment in accordance with the Bagley-Keene Open Meeting Act.

Before seeking the governing body's approval, a law enforcement agency shall make its proposed equipment use policy and any supporting documents available on its internet website at least 30 days prior to any public hearing concerning the military equipment at issue.

The governing body, as part of its approval process, must determine the following:

1. The military equipment is necessary because there is no reasonable alternative that can achieve the same objective of officer and civilian safety.
2. The proposed Military Equipment Use Policy will safeguard the public’s welfare, safety, civil rights, and civil liberties.
3. If purchasing the equipment, the equipment is reasonably cost-effective compared to available alternatives that can achieve the same objective of officer and civilian safety.
4. Prior military equipment use complied with the Military Equipment Use Policy that was in effect at the time, or if prior uses did not comply with the accompanying Military Equipment Use Policy, corrective action has been taken to remedy nonconforming uses and ensure future compliance.

ANALYSIS

The UC Police Department (refers to all ten UC campus police departments) retains and employs various equipment that falls within AB 481's definition of "military equipment." The equipment is maintained and in place, so the UC Police Department can safely achieve its mission to safeguard and protect the communities on all the UC campuses, medical centers, and properties.

The mere possession of this equipment does not warrant its use for every incident, nor has the department been accused recently or in the past decade of indiscriminate use of these types of equipment.

The department recognizes that critical incidents are unpredictable, often fluid and dynamic in nature. The department prides itself on its training, use of best practices, and forward-thinking in technology and the tools it acquires and utilizes in its mission for the safety of its personnel and the safety of community members, patients, and visitors alike.

The use of all equipment, not just "military equipment," is predicated on the mission of the department, policy, training, law, the safety of our officers, and the safety of our communities. Officers and incident commanders alike are influenced by the totality of the circumstances, public safety, civil rights, and all available information at the time of a critical incident or disaster and the desire to bring that incident to a safe resolution.

Assembly Bill 481 (AB 481)

AB 481 is intended to increase transparency, accountability, and oversight surrounding the acquisition and use of military equipment by state and local law enforcement. AB 481's definition of "military equipment" was much more than armored vehicles, large-caliber firearms, explosive projectile launchers, explosive breaching tools, and "flashbang" grenades.

AB 481 speaks to the acquisition of military equipment by any means, including the 1033 Federal Surplus Property Program (1033 Program) and the purchase of military equipment using grants or University funding.

It requires the department to seek approval from the Board of Regents through an Ordinance and the adoption of a Military Equipment Use Policy, which must address a number of specific topics, including the type, quantity, capabilities, purposes, and authorized uses of each type of military equipment, the fiscal impact of their acquisition and use, the legal and procedural rules that govern their use, the training required by any officer allowed to use them, the policies in place to ensure policy compliance, and the procedures by which the public may register complaints.

The Regents must consider the proposed Military Equipment Use Policy in open session and may only approve a Military Equipment Use Policy if it makes various findings regarding the necessity of the military equipment and the lack of reasonable alternatives.

If the Military Equipment Use Policy is approved, the Police Department must submit an annual report to the Regents. The report must contain specific information, including the equipment's uses, any complaints received, any internal audits or other information about violations of the Military Equipment Use Policy, and the cost of such use.

Police Department staff and legal counsel have reviewed AB 481, its definition of military equipment, and the requirements of the legislation. Based on this review, the department has determined that it retains and utilizes equipment defined as military equipment.

None of the ten campuses participates in or has acquired equipment under the 1033 Federal Surplus Property Program.

AB 481 designated the following 15 categories of items as military equipment:

1. Unmanned, remotely piloted, powered aerial or ground vehicle.
2. Mine-resistant ambush-protected vehicles or armored personnel carriers.
3. High mobility multi-purpose wheeled vehicles (HMMWV), two-and-one-half-ton trucks, five-ton trucks, or wheeled vehicles that have a breaching or entry apparatus.
4. Tracked armored vehicles that provide ballistic protection to their occupants.
5. Command and control vehicles that are either built or modified to facilitate the operational control and direction of public safety units.
6. Weaponized aircraft, vessels, or vehicles of any kind.
7. Battering rams, slugs, and breaching apparatuses that are explosive in nature.
8. Firearms and ammunition of .50 caliber or greater, excluding standard-issue shotguns and standard-issue shotgun ammunition.
9. Specialized firearms and ammunition of less than .50 caliber, including firearms and accessories identified as assault weapons in Penal Code 30510 and Penal Code 30515, with the exception of standard-issue firearms.
10. Any firearm or firearm accessory that is designed to launch explosive projectiles.
11. Noise-flash diversionary devices and explosive breaching tools.
12. Munitions containing tear gas or O.C., excluding standard, service-issued hand-held pepper spray.
13. TASER® Shockwave, microwave weapons, water cannons, and long-range acoustic devices.
14. Kinetic energy weapons and munitions.
15. Any other equipment as determined by a governing body or a state agency to require additional oversight.

The UC Police Department maintains and utilizes equipment in categories 1, 5, 8, 11, 12, 13, and 14.

Each of the ten campus department policies requires officers to be trained in using this equipment and be certified before its use. In addition to the initial training, annual reoccurring training and/or qualification are required in most categories.

Categories and Descriptions	UCB	UCD	UCI	UCLA	UCM	UCR	UCSD	UCSF	UCSB	UCSC	Total
Category 1 - Unmanned, remote Piloted, Powered Aerial or Ground Vehicles											
<i>Remotec Andros F6A Robot</i>	1	0	0	0	0	0	0	0	0	0	1
Category 5 - Command and Control Vehicles that are either built or modified to facilitate operational control and direction of public safety units											
<i>Command Post - Vehicle</i>	1	0	0	0	0	0	0	0	0	0	1
Category 8 - Firearms and Ammunition of .50 caliber or greater, excluding standard issue shotguns and standard issue shotgun ammunition											
<i>Remington 870 12 Ga. Shotgun (Bean Bag Use Only)</i>	13	0	0	0	0	5	10	0	0	0	28
Category 11 - Noise-Flash Diversionary Devices and Explosive Breaching Tools											
<i>Def-Tec Multi-port Plus II Distraction Device Model #8922</i>	0	0	0	0	0	0	0	10	0	0	10
Category 12 - Munitions Containing Tear Gas or OC Excluding Standard Service Issued Hand-Held Pepper Spray											
<i>FN Herstal 303-5 18mm Rounds (PAVA/OC)</i>	480	0	300	0	120	0	135	1500	0	0	2535
<i>Def-Tec 40mm Direct Impact Munition Model #6320 (OC)</i>	5	0	5	50	5	0	0	4	0	0	69
<i>Def-Tec 40mm Direct Impact Munition Model #6322 (CS)</i>	5	0	5	0	5	0	0	18	0	0	33
<i>FTC PAVA Capsaicin Rounds</i>	0	0	0	1550	0	0	1210	0	0	0	2760
<i>Def-Tec MK-9 Pepper Spray (OC) Canisters, Model #5099</i>	8	0	0	0	0	0	0	4	0	0	12
<i>Sabre MK-9 Pepper Spray (OC) Canister Model 91H2060</i>	0	0	6	0	0	0	0	0	0	0	6
Category 13 - Taser Shockwave, Microwave Weapons, Water Cannons, and Long Range Acoustic Devices											
<i>Long Range Acoustic Device (LRAD)</i>	1	1	1	2	1	1	1	1	1	1	11
Category 14 - Kinetic Energy Weapons and Munitions											
<i>FN Herstal 303 Launcher</i>	5	1	1	1	1	5	1	4	1	1	21
<i>FN Herstal 303-3 18mm Rounds (Washable Paint)</i>	390	100	0	0	0	200	150	2400	0	200	3440
<i>Def-Tec/LMT 40mm Launcher (Models #1327, #1425, #1426)</i>	4	5	13	18	1	1	1	14	15	11	83
<i>Def-Tec 40mm eXact Impact Munition Model #6325</i>	100	100	150	120	7	20	120	281	356	55	1309
<i>Def-Tec 40mm Bean Bag Round Model #6025</i>	0	0	0	0	0	0	0	22	0	0	22
<i>FTC Pepper ball Rifle</i>	0	0	0	4	0	0	2	0	0	0	6
<i>Def-Tec 12 Ga. Bean Bag Rounds Model #3027</i>	625	0	0	0	0	0	168	0	0	0	793
<i>Accusox 12ga. Bean Bag Rounds</i>	0	0	0	0	0	233	0	0	0	0	233

EQUIPMENT

CATEGORY 1 – UNMANNED, REMOTE PILOTED, POWERED AERIAL OR GROUND VEHICLES

Type: Andros Bomb Robot Model F6A

Quantity: One

Cost: \$159,199

No annual cost other than the price of parts, if needed. All Hazardous Device Technicians (HDTs) are sent to a regional Remotec Robot Maintenance course. Active HDTs maintain the Andros Robot.

Lifespan: 8-10 years

Capability: The ANDROS F6A is a heavy-duty robot. It has a stair-climbing ability and an arm capable of lifting 65lbs. The F6A also offers multiple communications options, a

chassis and manipulator that allow for accessories and tool combinations, and quick-release pneumatic wheels for rapid width reduction.

Manufacturer Description: The Remotec ANDROS F6A is the most versatile, heavy-duty robot on the market. Speed and agility unite to make it the first choice for a wide range of missions, and its proven stair climbing ability, rugged and dependable chassis, and an arm capable of lifting 65lbs mean that the F6A is more than strong enough to handle any task. The F6A also offers multiple communications options, a chassis and manipulator that allow for unlimited accessories and tool combinations, and quick-release pneumatic wheels for rapid width reduction.

Purpose: The Andros Robot is utilized by the UC Berkeley Bomb Squad, trained and certified by the FBI's Hazardous Device School since approximately 1971. The robot's sole purpose is to remotely manipulate hazardous devices such as improvised explosive devices. The UC Berkeley Bomb Squad provides hazardous device disposal for the UC Berkeley campus, Lawrence Berkeley Laboratory, surrounding agencies, and the County of Marin.

Legal: UCB Policy 408 – Response to Bomb Calls. The department shall only utilize this equipment for official law enforcement purposes and pursuant to State and Federal Law and applicable department policy.

Training:

UC Berkeley PD personnel must attend the FBI's Hazardous Device School and obtain their Hazardous Device Technician (HDT) certification. In addition, all HDTs must attend a Remotec Robot Maintenance course, obtain HDT recertification every three years, and strive to maintain 24 hours of HDT-related training per month.



CATEGORY – 5 COMMAND AND CONTROL VEHICLES THAT ARE EITHER BUILT OR MODIFIED TO FACILITATE OPERATIONAL CONTROL AND DIRECTION OF PUBLIC SAFETY UNITS.

Type: Command Vehicle – 2007 Ford Motorhome

Quantity: One

Cost: \$459,910

Annual maintenance cost estimated between \$0 and \$1,000 annually.

Lifespan: 80,000-100,000 miles

Capability: A vehicle used as a mobile office that provides shelter, access to department computer systems, and restroom facilities during extended large pre-planned events, natural disasters, searching for missing persons, and community events.

Manufacturer Description: This is a standard 2007 Ford chassis developed as a command vehicle. There is no specific manufacturer description.

Purpose: UC Berkeley PD is located on the Hayward Fault Line. The command vehicle is utilized as a remote command center in the event of the loss of their primary command center located in the basement of Sproul Hall.

Legal: UCB Policy 706.5 – Special Purpose Vehicles. The department shall only utilize this equipment for official law enforcement purposes and pursuant to State and Federal Law and applicable department policy.

Training: No additional training. Class C license.



CATEGORY 8 – FIREARMS AND AMMUNITION OF .50 CALIBER OR GREATER, EXCLUDING STANDARD-ISSUE SHOTGUNS AND STANDARD-ISSUE SHOTGUN AMMUNITION

Type: Remington 870 Shotgun (Bean Bag deployment)

Quantity: 28

Cost: Approximately \$500

Annual maintenance is estimated to be \$0 to \$25.

Lifespan: 25 years

Capability: Beanbag shotguns can fire a 12-gauge beanbag round with a maximum effective range of sixty feet.

Manufacturer Description: The Remington Model 870™ is a pump-action shotgun design with ultimate strength, durability, silky-smooth bind-free action, with sleek and classical lines. As one of the most popular shotguns, the Model 870 is offered in dozens of configurations to suit hundreds of applications.

Purpose: Beanbags are less-lethal munitions used as an option to de-escalate a potentially dangerous/deadly situation, with a reduced potential for death or serious injury to all persons involved.

It is accepted that the probability exists for bodily harm to occur. However, it must also be accepted that the application of such force may be the only alternative to using lethal force to stop the subject's actions. Situations when the deployment of less-lethal beanbags is authorized but not limited to include self-destructive, dangerous, and/or combative individuals.

Legal: Use of Force Policy, Control Devices and Techniques Policy, Less-Lethal Policy. The department shall only utilize this equipment for official law enforcement purposes and pursuant to State and Federal Law and applicable department policy.

Training: Officers that have been trained in the use of the beanbag shotgun undergo thorough classroom and live-fire training in its use and application. Additionally, officers trained in the use of the beanbag shotgun must pass annual qualifications to maintain proficiency and certification.



CATEGORY 11 – NOISE-FLASH DIVERSIONARY DEVICES AND EXPLOSIVES BREACHING TOOLS

Type: Defense Technologies Low Roll 11-gram Non-Reloadable Distraction Device Model #8922

Quantity: 10

Cost: \$48 per device

Estimated annual costs \$1,000 (UCSF)

Lifespan: Five years

Capability: A less-lethal explosive device that emits an extremely loud bang and bright lights to disorient people as it goes off.

Manufacturer Description: The Low Roll II™ Non-Reloadable Distraction Device® utilizes an M201A1 type fuse with a hex design steel body. This compact version of the 8933 Low Roll body is the newest version of the original reusable non-bursting canister that limits movement and rolling once deployed.

The compact distraction device unit fits safely in your hand and packs all the power of the full-size 12-gram distraction device unit. This steel body is designed to reduce rolling, fit in tactical pouches easily and deliver the safest and most effective stimuli in the industry. The compact distraction device unit should only be deployed in areas that have been visually observed to be clear of potential hazards.



Purpose: Used during critical incidents as a diversionary device to disorient. A distraction device is ideal for distracting dangerous suspects during assaults, hostage rescue, room entry, or other high-risk arrest situations. To produce atmospheric overpressure and brilliant white light and, as a result, can cause short-term (6 - 8 seconds) physiological/psychological sensory deprivation to give officers a tactical advantage.

Legal: UCSF General Orders 4.3.6 (D) 1. The department shall only utilize this equipment for official law enforcement purposes and pursuant to State and Federal Law and applicable department policy.

Training: Before use, officers must attend divisionary device training conducted by POST-certified instructors.

CATEGORY 12 – MUNITIONS CONTAINING TEAR GAS OR O.C., EXCLUDING STANDARD, SERVICE-ISSUED HAND-HELD PEPPER SPRAY

Type: FN 303 PAVA/ Oleoresin Capsicum (OC) Projectiles

Quantity: 2,535

Cost: \$6-\$7 each

Annual costs \$0 to \$6,000.

Lifespan: Shelf life of three years

Capability: To compel individuals to cease their actions when such munitions present a reasonable option. Effective range 50 to 100 meters.



Manufacturer Description:

Dedicated to reducing lethality, the basis of the FN 303 lies in its unique projectiles. These .68 caliber, 8.5-gram projectiles utilize a fin-stabilized polystyrene body and a non-toxic bismuth forward payload to provide more accuracy and a greater effective range than other less-lethal systems.

The primary effect of the projectile is trauma, which directly neutralizes the aggressor. Secondary effects from the projectiles can be delivered via a chemical payload depending on mission requirements.

PAVA/OC Powder

This projectile is intended as an irritant for individual suspects, point-specific targets or small-area denial. The active ingredient is 0.5% PAVA/OC in powder form for easy storage, deployment and clean-up. (The name "PAVA" stands for Pelargonic Acid Vanillyl Amide, also called Nonivamide, and is the organic compound characteristically in natural chili pepper).

Purpose: To limit the escalation of conflict where the deployment of lethal force is prohibited or undesirable. Situations for using a less-lethal weapon system may include but are not limited to the following:

- Self-destructive, dangerous, and/or combative individuals.
- Riot/crowd control and civil unrest incidents.
- Circumstances where a tactical advantage can be obtained.
- Potentially vicious animals.
- Training exercises or approved demonstrations.

Legal: Use of Force Policy, Crowd Demonstration and Management Policy, and Control Devices and Techniques Policy. The department shall only utilize this equipment for official law enforcement purposes and pursuant to State and Federal Law and applicable department policy.

Training: All department personnel utilizing FN-303 launchers and projectiles are trained by POST/STC (Standards and Training in Corrections)-certified less-lethal and/or chemical agent instructors.

Type: Def-Tec 40mm Direct Impact Munition Model #6320 (OC)

Quantity: 69

Cost: Approximately \$30.50 - \$32.00 each
Annual costs \$0 to \$2,100.

Lifespan: Five years from the date of manufacture

Capability: The 40mm Direct Impact OC Round provides accurate and effective performance when fired from the approved distance of not less than five feet and as far as 120 feet from the target.



Manufacturers Description: 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.

Purpose: To limit the escalation of conflict where the deployment of lethal force is prohibited or undesirable. Situations for using a less-lethal weapon system/chemical agent may include but are not limited to the following:

- Self-destructive, dangerous, and/or combative individuals.
- Riot/crowd control and civil unrest incidents.
- Circumstances where a tactical advantage can be obtained.
- Potentially vicious animals.
- Training exercises or approved demonstrations.

Legal: Use of Force Policy, Crowd Demonstration and Management Policy, and Control Devices and Techniques Policy. The department shall only utilize this equipment for official law enforcement purposes and pursuant to State and Federal Law and applicable department policy.

Training: All department personnel utilizing 40mm launchers and projectiles are trained in their use by POST/STC-certified less-lethal and chemical agent instructors.

Type: Def-Tec 40mm Direct Impact Munition Model #6322 (CS)**Quantity:** 33**Cost:** Approximately \$30.50 - \$32.00 each
Annual costs \$0 to \$1,056.**Lifespan:** Five years from the date of manufacture**Capability:** The 40mm Direct Impact CS Round provides accurate and effective performance when fired from the approved distance of not less than five feet and as far as 120 feet from the target.**Manufacturers Description:** 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 CS (0-chlorobenzalmalononitrile) powder, the Direct Impact combines blunt trauma with the effects of an irritant powder, maximizing the potential for incapacitation.**Purpose:** To limit the escalation of conflict where the deployment of lethal force is prohibited or undesirable. Situations for using a less-lethal weapon system/chemical agent may include but are not limited to the following:

- Self-destructive, dangerous, and/or combative individuals.
- Riot/crowd control and civil unrest incidents.
- Circumstances where a tactical advantage can be obtained.
- Potentially vicious animals.
- Training exercises or approved demonstrations.

Legal: Use of Force Policy, Crowd Demonstration and Management Policy, and Control Devices and Techniques Policy. The Department shall only utilize this equipment for official law enforcement purposes and pursuant to State and Federal Law and applicable Department policy.**Training:** All Department personnel utilizing 40mm launchers and projectiles are trained in their use by POST/STC-certified less-lethal and chemical agent instructors.

Type: FTC PAVA Capsaicin Rounds**Quantity:** 2,760**Cost:** Approximately \$1.70 to \$2.50 each
Annual costs are \$0 to \$5,244.**Lifespan:** Three years from the date of manufacture

Capability: Pepper ball launchers allow officers to address an armed and/or violent individual(s) with a non-lethal munition that delivers both chemical agent and kinetic energy impact. This combination can be extremely effective in gaining compliance or reducing threat potential with a less lethal platform. Due to its design, pepper balls can be delivered from a larger standoff distance allowing for an added degree of officer safety. Its high round capability and accuracy allow for its use in a wide variety of operational environments.



Manufacturers Description: PepperBall's most potent and powerful concentration of PAVA pepper powder. One round of LIVE-X™ contains the equivalent PAVA irritant chemical agent in 10 regular PepperBall® LIVE™ rounds.

Features:

100% waterproof

Shell color indicated payload

Formula: 5% PAVA powder

Operational temps of -30°F to 150°F

Used for direct impact and area saturation

Proudly made in the USA

Purpose: A non-lethal munitions system that employs paintball launchers to fire "pepper balls" that contain powdered OC in place of the paint. The pepper ball delivery system combines chemical agent exposure with kinetic energy impact to aid in its effectiveness in addressing armed and/or violent individuals as well as crowds. Pepper ball munitions also include glass-breaking rounds and marking rounds. Used to limit the escalation of conflict where the deployment of lethal force is prohibited or undesirable. Situations for using a less-lethal weapon system/chemical agent may include but are not limited to the following:

- Self-destructive, dangerous, and/or combative individuals.
- Riot/crowd control and civil unrest incidents.
- Circumstances where a tactical advantage can be obtained.
- Potentially vicious animals.
- Training exercises or approved demonstrations.

Legal: Use of Force Policy, Crowd Demonstration and Management Policy, Control Devices and Techniques Policy. The department shall only utilize this equipment for official law enforcement purposes and pursuant to State and Federal Law and applicable department policy.

Training: Before deploying the pepper ball launcher and munitions, officers must complete a POST-certified course in the operation of the pepper ball launcher. Additionally, all members who operate any less-lethal Devices must pass a qualification course of instruction.

Type: Def-Tec MK-9 OC Spray Canisters

Quantity: 12

Cost: \$58 to \$62 each
Annual costs are \$0 to \$868.

Lifespan: Five years from the date of manufacture

Capability: Intended for use in crowd management and will deliver 14 short bursts of OC at an effective range of 18-20 ft.



Manufacturers Description: The MK-9 features an easy-to-use trigger handle, is intended for use in crowd management and will deliver 14 short bursts of OC at an effective range of 18-20 feet. This 1.3% MC (Major Capsaicinoids) OC aerosol product utilizes a stream delivery method providing a target-specific, strong concentrated stream for greater standoff.

Non-flammable / Electronic Discharge Weapon (EDW) safe.

Purpose: To limit the escalation of conflict where employment of lethal force is prohibited or undesirable. Situations for use may include but are not limited to the following:

- Self-destructive, dangerous, and/or combative individuals.
- Riot/crowd control and civil unrest incidents.
- Circumstances where a tactical advantage can be obtained.
- Potentially vicious animals.
- Training exercises or approved demonstrations.

Legal: Use of Force Policy, Crowd Demonstration and Management Policy, Control Devices and Techniques Policy. The Department shall only utilize this equipment for official law enforcement purposes and pursuant to State and Federal Law and applicable Department policy.

Training: All members attend a POST-certified Basic Academy that includes instruction and certification on chemical agents (Learning Domain 35). Officers receive periodic chemical agent update training.

Type: Sabre MK-9 Pepper Spray (OC) Canisters Model 91H2O60**Quantity:** 6**Cost:** \$45 to \$59 each
Annual costs are \$0 to \$826.**Lifespan:** Five years from the date of manufacture**Capability:** Intended for use in crowd management and will deliver 14 short bursts of OC at an effective range of 18-20 feet.**Manufacturers Description:** SABRE's MK-9 was designed for crowd management and cell extractions and can be carried in cruisers or with a convenient thigh holster. It is a high-volume streamer that fires up to 8–10 meters.

Sabre pepper sprays are recognized as the best and strongest solutions available on the world market. They are used by many law enforcement units around the world. The gas formula is based on natural ingredients: red pepper and paprika. This formula does not cause serious side effects.

Pepper spray also works on people under the influence of alcohol or drugs. Each tank of gas contains components visible in ultraviolet light, which allows for later identification of the assailant by the police officers.

Flip-top protection is quick and easy to use even in high-stress situations and provides reliable protection against accidental use. This product is especially recommended for uniformed services personnel and private security agencies.

Features:

- | | |
|--|-----------------------------|
| - Capacity: 473 mL | - Weight: 621g |
| - Nozzle: High Volume Stream | - Range: 8-10 meters |
| - Active ingredients: Capsicum Oleoresin 10% | - Gas propellant: Nitrogen |
| - Power: 2,000,000 SHU (Scoville Heat Units) | - 1.33% Major Capsaicinoids |
| - Dimensions: 264 mm x 143 mm | |
| - Contains components visible in ultraviolet light | |

Purpose: To limit the escalation of conflict where employment of lethal force is prohibited or undesirable. Situations for the use of the less-lethal weapon systems may include but are not limited to the following:

- Self-destructive, dangerous, and/or combative individuals.
- Riot/crowd control and civil unrest incidents.
- Circumstances where a tactical advantage can be obtained.
- Potentially vicious animals.
- Training exercises or approved demonstrations.

Legal: Use of Force Policy, Crowd Demonstration and Management Policy, and Control Devices and Techniques Policy. The Department shall only utilize this equipment for official law enforcement purposes and pursuant to State and Federal Law and applicable Department policy.

Training: All members attend a POST-certified Basic Academy that includes instruction and certification on chemical agents (Learning Domain 35). Officers receive periodic chemical agent update training.

CATEGORY 13 – TASER SHOCKWAVE, MICROWAVE WEAPONS, WATER CANNONS, AND LONG-RANGE ACOUSTIC DEVICES.

Type: Long Range Acoustic Device (LRAD)

Quantity: 11

Cost: \$9,700 each
No annual operating expense

Lifespan: No expiration provided by the manufacturer

Capability: Long Range Acoustical Device (LRAD) is a high-intensity directional acoustical array for long-range, crystal-clear hailing, notification, and an unmistakable warning tone. The LRAD is primarily used as a communication device.

Manufacturer Description: The LRAD 100X is a self-contained, portable communication system for on-scene tactical communication. With unparalleled vocal clarity and up to 30db louder than bullhorns, megaphones, and vehicle P.A. systems, the LRAD 100X is 4 to 6 times louder than other acoustic hailers of comparable sizes and weights.

LRAD's optimized driver and waveguide technology ensure every message is clearly broadcast, heard and understood, even above engine, crowd, siren, and background noises. 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.



**Purpose:**

The Long-Range Acoustic Device (LRAD) is a self-contained loudspeaker system used for communicating and warning people over large areas. The LRAD delivers clear and highly comprehensible sound up to 600 meters.

LRAD's proprietary audio technology focuses sound in a 30° beam in front of its devices. This ensures that individuals in large crowds and people spread out over large areas with competing noises and audible distractions can hear and clearly understand the message.

The LRAD facilitates communication in evacuation scenarios, emergency messages to the public, hazardous warnings, and information to large crowds. Coastal communities have utilized LRAD devices for tsunami warnings and to provide lifeguards with the ability to communicate clearly with swimmers in the water.

The LRAD emits a noise that causes a piercing tone, which protestors have criticized in communities where it has been used for crowd control. These concerns are addressed in the UC use policy.

Legal: The department shall only utilize this equipment for official law enforcement purposes and pursuant to state and federal law and applicable department policy.

Training: All operators receive training before operating any LRADs in the field.

Category 14 – KINETIC ENERGY WEAPONS AND MUNITIONS

Type: FN Herstal 303 Launcher

Quantity: 21

Cost: \$1,300 each unit

Annual costs are \$0 to less than \$100 per unit.

Lifespan: No lifespan indicated by the manufacturer. Lifespan varies on operational usage and wear.

Capability: The FN-303 Less-Lethal Launcher is a semi-automatic, shoulder-fired device that fires non-lethal munitions and liquids. The device is powered by compressed air to fire the projectiles loaded into an attached 15-round drum magazine.

Projectiles provide blunt impact, marking, and oleoresin capsicum (OC) effects to deny access, move, and/or suppress individuals from 5–100 meters. The FN 303® is used for crowd control.

Manufacturer Description: 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. Easy-to-change air bottle provides approximately 110 shots per filling. It has a molded polymer frame, pistol grip, and buttstock flip-up iron sights (note: shown with red dot).



Purpose: The FN303 is a less-lethal, semi-automatic launcher that uses compressed air and launches plastic sphere projectiles from a 15-round drum magazine. The plastic spheres burst on impact and release paint or contain PAVA powder (The name "PAVA" stands for Pelargonic Acid Vanillyl Amide, also called Nonivamide, and is the organic compound characteristically in natural chili pepper). The OC powder can effectively control, dissuade or disperse an individual(s) engaged in violent or riotous behavior.

Legal: Use of Force Policy, Crowd Demonstration and Management Policy, and Control Devices and Techniques Policy. The department shall only utilize this equipment for official law enforcement purposes and pursuant to State and Federal Law and applicable department policy.

Training: Officers authorized to carry and use the FN-303 must have completed the POST-approved Less-Lethal Instructor course.

Type: FN Herstal 303-3 18mm Rounds (Washable Paint)**Quantity:** 3,440**Cost:** Approximately \$5.10 each
Annual costs \$0 to \$6,000.**Lifespan:** Shelf life of three years**Capability:** To compel individuals to cease their actions when such munitions present a reasonable option. The effective range is 50 to 100 meters.**Manufacturer Description:** This projectile is intended for training and marking suspects and objects with a washable colorant. Completely dedicated to reducing lethality, the basis of the FN 303® concept lies in its unique projectiles. These .68 caliber, 8.5-gram projectiles utilize a fin-stabilized polystyrene body and a non-toxic bismuth forward payload to provide more accuracy and a greater effective range than other less-lethal systems. The primary effect of the projectile is trauma, which directly neutralizes the aggressor. Secondary effects from the projectiles can be delivered via a chemical payload depending on mission requirements.**Purpose:** To limit the escalation of conflict where the deployment of lethal force is prohibited or undesirable. Situations for using a less-lethal weapon system may include but are not limited to:

- Self-destructive, dangerous, and/or combative individuals.
- Riot/crowd control and civil unrest incidents.
- Circumstances where a tactical advantage can be obtained.
- Potentially vicious animals.
- Training exercises or approved demonstrations.

Legal: Use of Force Policy, Crowd and Demonstration Management Policy, and Control Devices and Techniques Policy, First Amendment Assemblies Policy. The Department shall only utilize this equipment for official law enforcement purposes and pursuant to State and Federal Law and applicable department policy.**Training:** All department personnel utilizing 303 launchers and projectiles are trained in their use by POST/STC-certified less-lethal and chemical agent instructors.**Type: Def-Tec/LMT 40mm Launcher (Models #1426, #1425, #1327)****Quantity:** 83**Cost:** Approximately \$1,300 to \$3,000 each (Depending on Model)
Annual costs are \$0 to less than \$50 per unit.**Lifespan:** No lifespan indicated by the manufacturer. Lifespan varies on operational usage and wear.

Capability: 40mm launchers can fire various munitions with a maximum effective range of one hundred twenty (120) feet. 40mm launchers can deliver 40mm munitions in the form of chemical agents, sponge baton rounds, or combined use sponge baton OC chemical agent rounds.

Manufacturer Description: (Model #1426/40LMTS) The 40LMTS is a tactical 40mm single-shot launcher that features a folding stock and an adjustable Integrated Front Grip (IFG) with a light rail. The ambidextrous Lateral Sling Mount (LSM) and QD mounting system 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. This weapon is not designed to fire 40mm High-Velocity HE ammunition. The Picatinny Rail Mounting System will accept a wide array of enhanced optics/sighting systems.



(Model #1425 40mm LMT) Manufactured exclusively for Defense Technology®, the 40mm LMT is a tactical single-shot launcher that features an expandable ROGERS Super Stock and an adjustable Integrated Front Grip (IFG) with light rail.

The ambidextrous Lateral Sling Mount (LSM) and QD mounting system allow both a single and two-point sling attachment. The 40mm LMT 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.



(Model #1327 40mm) The 40mm single-shot launcher that features an open-top, single shot, breech fed system, offers a single and double action trigger, 40mm rifled barrel that enhances the superb accuracy of the munitions, 12" Picatinny Rails (top and bottom) with front and rear pop-up adjustable sights, rail-mounted fore-grip, folding stock with adjustable cheek piece and grip, and prismatic powders black cerakote finish.



(Model #1440 40mm) Designed for riot and tactical situations, the Defense Technology® 1440 40mm Tactical 4-Shot Launcher is low-profile and lightweight, providing multi-shot capability in an easy-to-carry launcher. It features the Rogers Super Stoc™ expandable gun stock, an adjustable Picatinny mounted front grip, and a unique direct-drive system to advance the magazine cylinder.



Purpose: 40mm launchers with less-lethal sponge rounds may be deployed to impact subjects who demonstrate assaultive or life-threatening behavior. 40mm launchers utilized with less-lethal sponge rounds may also be used to control an actively resistive subject reasonably believed to possess or have immediate access to a deadly weapon.

The main objectives that officers attempt to achieve in using a 40mm sponge round on a subject exhibiting any of the criteria mentioned above are to effect investigative detention or arrest; control a subject who is in lawful custody; prevent an escape; or protect the officer, the subject, or another person from injury or death.

Legal: Use of Force Policy, Crowd and Demonstration Management Policy, and Control Devices and Techniques Policy, First Amendment Assemblies Policy. The department shall only utilize this equipment for official law enforcement purposes and pursuant to State and Federal Law and applicable department policy.

Training: Officers that have been trained in the use of the 40mm single launcher undergo thorough classroom and live-fire training in its use. Additionally, officers trained in using the 40mm single launcher must pass annual qualifications to maintain proficiency.

Type: Def-Tec 40mm eXact Impact Munition Model #6325

Quantity: 1,309

Cost: Retail price \$26.50 each
Annual costs \$0 to \$6,000.

Lifespan: Five years from the date of manufacture

Capability: 40mm eXact impact rounds can impact a suspect at a maximum effective range of 120 feet.



Manufacturer Description: The eXact iMpack™ 40mm Sponge Round is a point-of-aim, point-of-impact 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 40mm launchers rifled barrel. The round utilizes smokeless powder as the propellant and, therefore, has velocities that are extremely consistent. Used for crowd control, patrol, and tactical applications.

Purpose: 40mm ammunition used in conjunction with 40mm launchers may be deployed to impact subjects who demonstrate assaultive or life-threatening behavior.

40mm ammunition used in conjunction with 40mm launchers may also be used to control an actively resistive subject reasonably believed to possess or have immediate access to a deadly weapon within the force guidelines of Department policy.



The main objectives that officers attempt to achieve in using a 40mm on a subject exhibiting any of the criteria mentioned above are to effect investigative detention or arrest; control a subject who is in lawful custody; prevent an escape; or protect the officer, the subject, or another person from injury or death.

Legal: Use of Force Policy, Crowd and Demonstration Management Policy, Control Devices and Techniques Policy, and First Amendment Assemblies Policy. The department shall only utilize this equipment for official law enforcement purposes and pursuant to State and Federal Law and applicable department policy.

Training: Officers that have been trained in the use of the 40mm impact ammunition in conjunction with the 40mm single launcher undergo thorough classroom and live-fire training in its use. Additionally, officers trained in using the 40mm single launcher must pass annual 40mm qualifications to maintain proficiency.

Type: Def-Tec 40mm Bean Bag Round Model #6025

Quantity: 22

Cost: \$5 to \$7 each

Annual costs \$0 to \$2,000.

Lifespan: Five years from the date of manufacture



Capability: The 40mm Bean Bag Round is most suitable in moderately close to medium ranges of fire, approximately 20 to 35 feet.

Manufacturer Description: The 40mm Bean Bag Round is most widely used as a crowd management tool by law enforcement and corrections when there is a need to target individual instigators. It has also been successfully used as a dynamic, high-energy single subject round for incapacitation or distraction. The round contains one silica sand-filled bag. It utilizes smokeless powder as the propellant and has more consistent velocities and tighter patterns compared to its 37mm black powder counterpart.

Purpose: The Defense Technology 40mm bean bag round is designed to de-escalate a potentially violent situation without causing critical injuries where lethal force is prohibited or inadvisable.

Legal: Use of Force Policy, Crowd and Demonstration Management Policy, Control Devices and Techniques Policy, and First Amendment Assemblies Policy. The department shall only utilize this equipment for official law enforcement purposes and pursuant to State and Federal Law and applicable department policy.

Training: Officers that have been trained in the use of the 40mm bean bag round in conjunction with the 40mm single launcher undergo thorough classroom and live-fire training in its use. Additionally, officers trained in using the 40mm single launcher must pass annual 40mm qualifications to maintain proficiency.

Type: FTC Pepper Ball Rifle

Quantity: 6

Cost: Approximately \$495 each

No annual maintenance or replacement costs.

Lifespan: N/A

Capability: The SA 200 and TAC 700 launch new PepperBall 3-gram projectiles at 300-360 feet per second with a target accuracy of 60 feet and area saturation with PAVA pepper to 200 feet. An automatic feed system keeps rounds launching consistently and in synchronization with trigger pull speeds and settings.



Manufacturer Description:

The PepperBall TAC 700 Full Auto launcher brings full automatic capability, with up to 700 rounds per minute, to your non-lethal pepperball launcher options. The PepperBall TAC700 is a compressed air-powered launcher that shoots .68 caliber rounds. Officers can quickly create large pepper clouds for crowd control, barricade busting, or more quickly achieve individual suspect compliance.

Optional trigger settings assure the TAC 700 can be set up to conform to agency policy while giving officers the right capabilities to achieve their goals. Trigger settings include full automatic and semi-automatic. The TAC 700 is our top-of-the-line pepperball launcher designed to offer you the right amount of non-lethal firepower you require to control use of force situations that come your way.

- Distance: Target accurate up to 60 feet, area saturation out to 150 feet.
- Speed: Quickly deploy PAVA rounds at up to 700 rounds per minute.
- Versatility: Enhance officer safety and effectiveness in crowd control, jail barricade busting, domestic violence, suicide by cop, and many other one-to-one or one-to-many non-lethal situations.
- Maneuverability: The forward-mounted high-pressure air bottle allows for greater maneuverability and mobility in tactical situations.
- Variable Fire Power: Automatic feed system keeps rounds launching consistently while variable trigger settings allow you to conform to agency policy while giving officers the right capabilities to achieve all of their goals.

The SA200 is an air-powered, hopper-fed pepperball launcher that operates from the open bolt position. In order for the SA200 to launch projectiles, the bolt must be in the rear and locked position. The charging handle, located on the left rear side of the launcher, must be in the rear locked position prior to pressurizing the system or pulling the trigger. Specific information is contained below.

Model: PepperBall SA200
Action: Semi-automatic
Hopper Capacity: 200 rounds
Barrel Length: 10.5 inches
Weight: 2.56 pounds
Area Saturation: 100 feet

Caliber: .68
Power: High-pressure air
Cycle Rate: 7 rounds per second
Overall Length: 20.63 inches
Effective Range: Target–30 feet

Purpose: The SA200 and TAC 700 Pepperball Launchers are designed as less-lethal weapons for use in a wide variety of tactical applications encountered within law enforcement. They may be used as an area treatment device to deploy chemical agents upon resistive suspects or as a direct fire weapon on assaultive/high-risk suspects. The intended target zone for the pepperball launcher is low center mass unless the situation dictates otherwise.

The purpose is to limit the escalation of conflict where employment of lethal force is prohibited or undesirable. Situations for the use of the less-lethal weapon systems may include but are not limited to the following:

- Self-destructive, dangerous, and/or combative individuals.
- Riot/crowd control and civil unrest incidents.
- Circumstances where a tactical advantage can be obtained.
- Potentially vicious animals.
- Training exercises or approved demonstrations.

Legal: Use of Force Policy, Crowd and Demonstration Management Policy, and Control Devices and Techniques Policy, First Amendment Assemblies Policy. The department shall only utilize this equipment for official law enforcement purposes and pursuant to State and Federal Law and applicable department policy.

Training: Officers utilizing pepperball launchers and projectiles are trained in the use by POST-certified less-lethal and chemical agent instructors.

Type: Def-TEC Bean Bag Munitions Model #3027

Quantity: 793

Cost: Approximate cost is \$6 each
Annual costs \$0 to \$3,000.

Lifespan: Five years from the date of manufacture

Capability: Beanbag shotguns can fire a 12-gauge beanbag round with a maximum effective range of 75 feet.

Manufacturer Description: 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 feet per second with a maximum effective range of 75 feet.

Purpose: Beanbag shotguns used with beanbag rounds may be deployed to impact subjects who demonstrate assaultive or life-threatening behavior. Beanbag shotguns utilized with beanbag rounds may also be used to control an actively resistive subject reasonably believed to possess or have immediate access to a deadly weapon.

The main objectives that officers attempt to achieve in using a beanbag round on a subject exhibiting any of the criteria mentioned above are to effect investigative detention or arrest; control a subject who is in lawful custody; prevent an escape; or protect the officer, the subject, or another person from injury or death.



Legal: Use of Force Policy, Crowd and Demonstration Management Policy, and Control Devices and Techniques Policy, First Amendment Assemblies Policy. The department shall only utilize this equipment for official law enforcement purposes and pursuant to State and Federal Law and applicable department policy.

Training: Officers that have been trained in the use of the beanbag shotgun undergo thorough classroom and live-fire training in its use. Additionally, officers trained in the use of the beanbag shotgun must pass annual qualifications to maintain proficiency.

Type: West Coast Ammunition Accusox Bean Bag Rounds

Quantity: 233

Cost: Approximate cost of \$7 each
Annual costs \$0 to \$3,000.

Lifespan: N/A

Capability: Beanbag shotguns can fire a 12-gauge beanbag round with a maximum effective range of 60 feet.

Manufacturer Description: None available



Purpose: Beanbag shotguns used with beanbag rounds may be deployed to impact subjects who demonstrate assaultive or life-threatening behavior. Beanbag shotguns utilized with beanbag rounds may also be used to control an actively resistive subject reasonably believed to possess or have immediate access to a deadly weapon.

The main objectives that officers attempt to achieve in using a beanbag round on a subject exhibiting any of the criteria mentioned above are to effect investigative detention or arrest; control a subject who is in lawful custody; prevent an escape; or protect the officer, the subject, or another person from injury or death.

Legal: Use of Force Policy, Crowd and Demonstration Management Policy, Control Devices and Techniques Policy, and First Amendment Assemblies Policy. The department shall only utilize this equipment for official law enforcement purposes and pursuant to State and Federal Law and applicable department policy.

Training: Officers that have been trained in the use of the beanbag shotgun undergo thorough classroom and live-fire training in its use. Additionally, officers trained in the use of the beanbag shotgun must pass annual qualifications to maintain proficiency.

EQUIPMENT REVIEW

As part of each campuses equipment review, Berkeley, Riverside and San Diego have determined that the less-lethal beanbag is outdated equipment and have determined that replacing the 12 ga. shotgun launchers and the beanbags themselves with 40mm launchers and 40mm Exact Impact munitions, a more accurate system with increased range, is more cost-effective compared to the beanbags and can achieve a safer objective of officer and civilian safety.

UC Berkeley, Riverside and San Diego are proposing to eliminate the 12-gauge shotgun beanbag launchers and beanbags and replace them with 40mm launchers and 40mm exact impact munitions. Their request is included below in the additional equipment category.

ADDITIONAL EQUIPMENT APPROVAL REQUEST

In addition to the equipment already outlined in this report, UC Merced and UC Irvine are seeking authorization to purchase additional 40mm less-lethal equipment that qualifies as reportable under AB 481 and the proposed UC Military Equipment Policy.

UC Berkley, UC Riverside, and UC San Diego are seeking to purchase new 40mm launchers and eXact impact rounds to replace their outdated 12-gauge shotgun beanbag launchers and bean bag munitions

UC Merced

To increase the number of 40mm less-lethal launchers available to officers in the field as a less-lethal alternative when dealing with violent individuals that pose a threat to the public and officers.

(5) 40mm launchers

(100) Model #6324 eXact iMpack™ 40mm Sponge Round

UC Irvine

To increase the number of 40mm less-lethal launchers, so there is one launcher is available in each patrol car and a sufficient number of launchers for training.

(5) 40mm launchers

UC Berkeley

To replace existing shotgun and beanbag less-lethal equipment with more accurate 40mm less-lethal launchers and sponge impact rounds to effectively manage violent individuals that pose a threat to the public and officers.

(10) 40mm launchers

(150) Model #6324 eXact iMpack™ 40mm Sponge Round

UC Riverside

To replace existing shotgun and beanbag less-lethal equipment with more accurate 40mm less-lethal launchers and sponge impact rounds to effectively manage violent individuals that pose a threat to the public and officers.

(6) 40mm launchers

(60) Model #6324 eXact iMpack™ 40mm Sponge Round

UC San Diego

To replace existing shotgun and beanbag less-lethal equipment with more accurate 40mm less-lethal launchers and sponge impact rounds to effectively manage violent individuals that pose a threat to the public and officers.

(4) 40mm launchers

(120) Model #6324 eXact iMpack™ 40mm Sponge Round