

**AB 481 – HPD Equipment List**

**NOTE: This is a draft document. Per AB 481, we will be adding training requirements, which are contained in other associated HPD policies.**

**CURRENT EQUIPMENT:**

1. Robot (Category 1)
  - a. **Description, quantity, capability, and purchase cost:**  
Avatar Tactical Robot – Unit Cost: \$30,000 (purchased under a Bay Area UASI grant).  
Quantity: 2. This equipment is a battery powered, remote operated device equipped with cameras and communication capabilities. This equipment is for (potential) use during high-risk incidents and use is authorized for all members of the department who have been trained in its use. Incidents that may qualify for its use include, but are not limited to, high-risk warrant services, barricaded subjects, and hostage negotiation/rescue operations. Before entering a structure, particularly in a tactically compromised and dangerous situation, knowledge of a subject’s location is very important, and the robot can provide that without placing anyone at risk. Cameras can also help determine if a subject is armed and if there are other subjects inside that need assistance. The two-way speakers can be used to communicate, de-escalate, and determine resistance level.
  - b. **Purpose:**  
To be used to remotely gain visual/audio information during high-risk incidents, deliver CNT phone, open doors, and clear buildings.
  - c. **Authorized Use:**  
Only members of the department who have been trained in the use of the robot shall be permitted to operate the robot. Use is authorized by the on-scene Incident or Tactical Commander and shall comply with all associated HPD and City policies regarding privacy.
  - d. **Expected Lifespan:**  
10 years
  - e. **Fiscal Impact:**  
No known annual maintenance cost.
  
2. Unmanned Aerial Systems (Category 1)
  - a. **Description, quantity, capability, and purchase cost:**  
DJI Mavick Advanced unmanned aerial system (UAS) – Unit Cost: \$6,500. Quantity: 2. The DJI Mavick Advanced is a commercial grade UAS. This UAS is a battery powered, remote operated device. The controller allows operators to fly UAS and view live feed from UAS-mounted cameras in accordance with HPD and City policy. The cameras have both RGB (normal) and FLIR (heat sensing) capabilities consistent with those mounted on all law enforcement helicopters. Flight time is approximately 25-30 minutes per battery, depending on weather and flight conditions. The UAS has also proven to be useful to public safety agencies in emergency response, search and rescue, and other

situations where aerial views enhance the safety and efficiency of law enforcement and fire personnel.

The DJI Mini 2 unmanned aerial system (UAS) – Unit Cost: \$1,411.39. Quantity: 2. This UAS is a battery powered, remote operated device. The controller allows operators to fly UAS and view live feed from UAS-mounted cameras in accordance with HPD and City policy. This is a smaller UAS specifically designed for clearing structures or other areas that are difficult or unsafe to reach for first responders. Flight time is approximately 25-30 minutes per battery, depending on weather and flight conditions. The UAS has also proven to be useful to public safety agencies in emergency response, search and rescue, and other situations where aerial views enhance the safety and efficiency of law enforcement and fire personnel.

**b. Purpose:**

To be deployed when its use would assist members of the department with the situations outlined in HPD Policy subsection 611.6 (Approved Uses).

**c. Authorized Use:**

Only assigned operators who have completed the required training, including obtaining their FAA Part 107 certification, shall be permitted to operate UAS during approved missions.

**d. Expected Lifespan:**

3-4 years

**e. Fiscal Impact:**

No known annual maintenance cost.

3. Armored Personnel Carrier (Category 2)

**a. Description, quantity, capability, and purchase cost:**

Armored Solutions Armored Rescue Vehicle – Unit Cost: \$82,660.00. Quantity: 1. The ARV is a Ford F550 truck designed to provide ballistic protection during high-risk incidents. It is designed to withstand multiple bullet impacts and low-level explosions. The ARV is equipped with emergency lights, siren, and a public address system for communications. It is not weaponized, nor does it contain any breaching apparatuses. Common uses of the ARV include community member or officer rescues, evacuations, and it provides ballistic protection for officers during in-progress, high-risk incidents. The ARV is also a regional mutual-aid asset, which has been requested by and deployed to assist neighboring agencies in Alameda County.

**b. Purpose:**

To be used during responses to high-risk incidents to enhance the safety of community members and officers, improve scene containment and stabilization, and to contribute to the safe resolution evolving critical events.

**c. Authorized Use:**

The use of the ARV can be requested by any Officer based on the specific circumstances of in-progress, high-risk incidents or high-risk planned operations. The ARV shall only be used by Officers trained in its deployment and in a manner consistent with

departmental training. Use shall be authorized by the Special Operations Lieutenant or the on-duty Watch Commander.

**d. Expected Lifespan:**

20 years

**e. Fiscal Impact:**

Annual maintenance cost of approximately \$2,500.

4. Command and Control Vehicle (Category 5)

**a. Description, quantity, capability, and purchase cost:**

Freightliner MT-55 LDV Model C34MCC-10 – Unit Cost: \$387,672.00. Quantity: 1. The Command Vehicle is a bus style vehicle with front and rear doors. It is painted white with HPD markings affixed to the front, sides, and rear of the vehicle. There are 2 separate internal office-style working spaces, most commonly used by Dispatch or Crisis Negotiations personnel. It can be used as a field-based, mobile command center for major incidents and as a backup Communications Center for the City. The Command Vehicle is also capable of transporting equipment and personnel.

**b. Purpose:**

To be used as a field-based mobile command center, communications center, and crisis negotiations center during major incidents. It also serves as a backup Communications Center in the event the City's primary Communications Center experiences technical issues.

**c. Authorized Use:**

The Command Vehicle can be requested by any member of the department for use in the field during major incidents. Use of the Command Vehicle shall be approved by the Special Operations Lieutenant and can only be operated by members of the department specifically trained in its use.

**d. Expected Lifespan:**

20 years

**e. Fiscal Impact:**

Annual maintenance cost of approximately \$2,500.

5. Breaching Apparatus: Shotgun Slugs (Category 7)

**a. Description, quantity, capability, and purchase cost:**

Royal Arms Tesar-2 – Unit Cost: \$4 per round. Quantity: 50. Shotgun breaching rounds are specialty shotgun shells utilized for door breaching. The Royal Arms Tesar-2 rounds contain compressed copper powder and are fired through a specialized breaching shotgun barrel. The copper powder is designed to strike and destroy the locking mechanism inside of the door, allowing entry into the room or structure. The powder is designed to dissipate after striking the locking mechanism in order to minimize entry into the target space for the safety of occupants and operators. These rounds are designed to breach heavy locks, dead-bolts, and hinges mounted inside of solid oak or steel doors. Royal Arms Tesar-2 rounds are good until they are expended if stored properly.

**b. Purpose:**

To gain rapid entry into a structure during critical incidents.

**c. Authorized Use:**

Only members of the department who have been trained in the use of a breaching shotgun shall deploy a breaching shotgun in the field. Shotgun breaching may only occur after authorization by the Incident Commander or Tactical Commander in the field and during training exercises.

**d. Expected Lifespan:**

Until expended

**e. Fiscal Impact:**

Replaced as needed (estimated \$0 to \$200 annually).

6. Specialized Firearms and Ammunition (Category 10)

**a. Description, quantity, capability, and purchase cost:**

(1) Carbine Rifle – Unit Cost: \$1,039.75. Quantity: 64. The carbine rifle is a firearm capable of stopping an armed subject at various distances. It is a light weight, air-cooled, gas operated, magazine fed, shoulder fired weapon capable of operating in semi-automatic and selective fire modes. These rifles fire a .223 or 5.56 caliber cartridge, which is capable of penetrating soft body armor worn by armed subjects.

(2) H&K MP5 and H&K MP5 PDW entry rifle – Unit Cost: \$1,200. Quantity: 4. The H&K MP5 and MP5 PDW are firearms capable of stopping an armed subject at various distances. They are a light weight, magazine fed, shoulder fired weapon capable of operating in semi-automatic and selective fire modes. These rifles fire a 9mm caliber cartridge.

(3) PWS MK216-LE .308 precision rifle – Unit Cost: \$1,994.99. Quantity: 5. The PWS MK216-LE is a precision rifle capable of stopping an armed subject at various distances. It is a magazine fed, shoulder fired weapon capable of operating in semi-automatic mode. This rifle fires a .308 caliber cartridge, which is capable of penetrating soft body armor worn by armed subjects, and is utilized by the department's Special Response Unit during high-risk situations.

(4) Remington 700 .308 long rifle – Unit Cost: \$1,300. Quantity: 5. The Remington 700 is a long-range firearm capable of stopping an armed subject at various distances. It is a bolt action, shoulder fired weapon capable of firing single precision shots out to significant distances. This rifle fires a .308 caliber cartridge, which is capable of penetrating soft body armor worn by armed subjects, and is utilized by the department's Special Response Unit during high-risk situations.

(5) Winchester .223 Ranger power-point 64 grain cartridge – Unit Cost: \$9.76 (per 20 rounds). Quantity: 25,000. The .223 cartridge is the primary duty ammunition for the department's carbine rifles.

(6) Winchester 5.56 full metal jacket 55 grain cartridge – Unit Cost: \$7.16 (per 20 rounds). Quantity: 67,000. The 5.56 cartridge is the primary training ammunition for the department’s carbine rifles.

(7) Winchester .223 Ranger frangible 55 grain cartridge – Unit Cost: \$12 (per 20 rounds). Quantity: 1,000. The .223 frangible cartridge is training ammunition used by the Special Response Training during live-fire exercises.

(8) Winchester .308 match king 168 grain cartridge – Unit Cost: \$50 (per 20 rounds). Quantity: 2,000. The .308 cartridge is both duty and training ammunition for the PWS MK216-LE and Remington 700 rifles, which are specifically used by the department’s Special Response Unit.

**b. Purpose:**

To be used during high-risk situations where precision and distance are factors as they are more accurate and effective than standard issued department firearms.

**c. Authorized Use:**

Only department members who are POST certified and who show proficiency during department training are authorized to carry a carbine rifle. The H&K MP5, H&K MP5 PDW, PWS MK216-LE, and Remington 700 are firearms that are only authorized for use by specially trained members of the department’s Special Response Unit.

**d. Expected Lifespan:**

- (1) Carbine rifles – 10 years or sooner depending on usage in training
- (2) .308 rifles – 10-15 years or sooner depending on usage in training
- (3) Ammunition – No expiration if stored properly

**e. Fiscal Impact:**

All rifles are inspected and serviced annually by certified department armorers. They are replaced according to date of purchase and as needed depending on usage.

- (1) Carbine rifles – Annual replacement and service costs between \$10,000 and \$20,000
- (2) .308 rifles – Annual replacement and service costs between \$0 and \$10,000
- (3) Ammunition – Annual replacement costs between \$50,000 and \$100,000

7. Noise Flash Diversionary Device (Category 12)

**a. Description, quantity, capability, and purchase cost:**

NFDD 7290M – Unit Cost: \$82.27. Quantity: 24. A noise flash diversionary device (NFDD), often referred to as a “flashbang”, is a device designed to create a bright flash of light and a loud sound to temporarily divert the attention of a subject in the area where it is deployed. NFDDs are used to distract and temporarily disorient dangerous subjects by overwhelming their senses of sight and hearing. This allows members of the department to take control of high-risk situations and/or accomplish legitimate law enforcement objectives during critical incidents. NFDDs are not weapons as they do not fragment as a military grenade would and oversight of the department’s purchase/use

of NFDDs is performed by the Federal Department of Alcohol, Tobacco, Firearms, & Explosives (commonly referred to as the ATF).

**b. Purpose:**

To be used during high-risk situations to obtain a tactical advantage or to establish control by creating a diversion.

**c. Authorized Use:**

NFDDs may only be used by specially trained members of the department's Special Response Unit during high-risk situations or during training.

**d. Expected Lifespan:**

5 years (manufacturer shelf life)

**e. Fiscal Impact:**

Varies depending on usage and training (\$0 to \$1,000)

8. Chemical Agents "Tear Gas" (Category 12)

**a. Description, quantity, capability, and purchase cost:**

(1) 2-chlorobenzylidene malononitrile (CS) – Unit Cost: Depends on the munition (see fiscal impact). CS is used by law enforcement agencies across the country. CS, commonly referred to as "tear gas", is an irritating agent and a lachrymator (irritates the eyes, causing tears and mucous flow). It can be delivered in a variety of ways and can be used by the department as a less-lethal force option during high-risk incidents, including riots and barricaded subjects. The types of CS munitions in the department's inventory are as follows (the contents are the same, but the delivery systems for each munition are different):

- (49) Model 1292 40 mm CS
- (6) Model 1092 CS Handballs
- (6) Model 1088 CS Stingerballs
- (9) Model 1090 Stingerballs
- (6) Model 1032 CS Flameless Tri-Chamber
- (3) Model 1072 CS Speed Heat

(2) Oleoresin Capsicum (OC) – Unit Cost: Depends on the munition (see fiscal impact). OC is used by law enforcement agencies across the country. OC, commonly referred to as "pepper spray", is an irritating agent that causes involuntary closure of the eyes, mucous flow, and temporary respiratory inflammation. Its primary ingredient is capsaicin, which is found in chili peppers, and OC is available to the general public for purchase. It can be delivered in a variety of ways and can be used by the department as a less-lethal force option during high-risk incidents, including riots and barricaded subjects. The types of OC munitions in the department's inventory are as follows (the contents are the same, but the delivery systems for each munition is different):

- (6) Model 2040 OC Expulsion
- (6) Model 1089 OC Stingerballs

- (6) Model 3090 OC Shotgun ferret rounds

**b. Purpose:**

To be used as a less-lethal force option during high-risk situations, including but not limited to those involving dangerous or combative subjects, riots, or when a tactical advantage needs to be obtained.

**c. Authorized Use:**

Only members of the department who are POST certified to use chemical agents are authorized to do so. The use of the above listed munitions is only authorized for specially trained members of the department's Special Response Unit.

**d. Expected Lifespan:**

5 years (manufacturer shelf life)

**e. Fiscal Impact:**

Varies depending on usage and training (\$0 to \$5,000)

9. Pepper Powder Less Lethal Launcher (Category 14)

**a. Description, quantity, capability, and purchase cost:**

FN 303 Less Lethal Launcher – Unit Cost: \$850. Quantity: 2. The FN 303 Less Lethal Launcher is a system that uses compressed air to deliver OC powder, paint, and specialty impact munitions. It is similar to a paintball system as it fires frangible plastic ammunition, which contains liquid OC. This system offers members of the department a less-lethal force option during high-risk situations. This system allows for liquid OC and kinetic energy impacts to be delivered to dangerous or combative subjects at various distances.

**b. Purpose:**

To be used as a less-lethal force option during high-risk situations, including but not limited to those involving dangerous or combative subjects, riots, or when a tactical advantage needs to be obtained.

**c. Authorized Use:**

The FN 303 Less Lethal Launcher may only be used by specially trained members of the department's Special Response Unit.

**d. Expected Lifespan:**

10 years

**e. Fiscal Impact:**

Varies depending on ammunition usage and training (\$0-\$2,000)

10. Specialty Impact Munition Systems and Ammunition (Category 14)

**a. Description, quantity, capability, and purchase cost:**

(1) Defense Technology LMT Tactical Single Shot 40 mm Launcher – Unit Cost: \$1,100. Quantity: 10. CTS 40 mm Launcher – Unit Cost: \$1,250. Quantity: 4. The 40 mm launcher is a chemical agent and/or specialty impact munition delivery system that can be used by members of the department during high-risk situations. It is capable of delivering CS into a structure or direct fire specialty

impact munitions (sponge rounds) to a dangerous or combative subject at various distances.

(2) 40 mm Sponge Rounds – Unit Cost: \$20. Quantity: 100. The 40 mm sponge round is a direct fire specialty impact munition that is similar in size and consistency to a racquet ball. It can be fired from a 40 mm and be used to neutralize a dangerous or combative subject during high-risk situations.

**b. Purpose:**

To be used as a less-lethal force option during high-risk situations, including but not limited to those involving dangerous or combative subjects, riots, or to deliver CS into a structure.

**c. Authorized Use:**

The 40 mm launcher may only be used by members of the department specially trained in its use and who have shown proficiency during departmental training.

**d. Expected Lifespan:**

All 40 mm launchers are inspected and serviced annually by certified department armorers. They are replaced according to date of purchase and as needed depending on usage.

(1) 40 mm launchers – 10 years

(2) 40 mm sponge rounds – 5 years (manufacturer shelf life)

**e. Fiscal Impacts:**

Replaced as needed (estimated \$0 to \$2,000 annually)