

Unmanned Aerial Systems (Category 1)

a. Description:

The Skydio X2E is an unmanned aerial system (UAS), is commercial grade, commonly used by construction and utility companies for the inspection of buildings, powerlines, windmills, and other infrastructure. The West Valley College Unmanned Aerial Technology Certification Program uses this type of UAS to prepare, train and certify students, to enter the Unmanned Aircraft Technology field.

b. Quantity:

- One - Skydio X2E UAS
- Four - Skydio 2 UAS

c. Capabilities:

The Skydio X2E is a battery powered, remote operated device. Controller: Skydio Enterprise Controller with 6.8-inch integrated screen. Controller allows operators to control UAV and view live feed from UAS-mounted cameras. The Skydio X2E has 360-degree environmental coverage, and omnidirectional avoidance coverage. Camera: Sony IMX577 camera with dual RGB and FLIR capabilities. Camera provides operators ability to switch between standard RGB camera and views based on heat of objects within frame. Flight time of approximately 35 minutes per battery, depending on weather and flight conditions. The UAS has also proven to be useful to public safety agencies in firefighting, search and rescue, pre-operational surveillance, and other tactical situations where aerial views enhance the safety and efficiency of law enforcement, fire personnel, and the public.

d. Purpose:

Use of these systems by WVMPD is secondary to their primary educational mission, except in the case of life safety events. The UAS will be deployed by WVMPD when its use would assist officers or incident commanders with overall situational awareness in varying situations, which include but are not limited to:

- i. de-escalating a situation
- ii. collision investigations
- iii. search for missing persons.
- iv. natural disaster management
- v. crime scene photography
- vi. tactical or other public safety and life preservation missions.
- vii. In response to specific requests from local, state, or federal fire authorities for fire response and/or prevention.

e. Authorized Use:

Only assigned operators who have completed the required training shall be permitted to operate the Skydio X2E during approved activities. All other applicable WVMPD policies remain in effect, to include, but not limited to, Policy 322 -Search and Seizure, Policy 332 -Missing Persons, Policy 406 -Crime and Disaster Scene Integrity.

f. Expected Lifespan:

The Skydio X2E has an estimated expected lifespan of approximately 5-7 years.

g. Fiscal Impact:

The Skydio X2E as configured costs 14,499.00 per unit. Currently there is no direct cost to the department. These systems are purchased by the district and primarily used as part of the West Valley College Unmanned Aerial Technology Program. Unless the UAS is damaged in flight, there is no known annual maintenance cost.

Specialized Firearms and Ammunition (Equipment Category 9)

a. Description

The Carbine Rifle is a standard issue firearm for sworn members of the department. It is capable of stopping an armed subject at various distances and with far greater accuracy than the standard issue sidearm.

b. Quantity:

- Five - Colt AR-15/M4 Carbine Rifles
- Four - Bushmaster XM-15 Carbine Rifles
- 2800 Rounds - Winchester RA223R cartridge, .223/5.56 caliber, .55 grain. This is the primary duty ammunition used by the department for this firearm.
- 6500 Rounds - Winchester Q3131 cartridge, .223/5.56 caliber, .55 grain. This is the primary training ammunition used by the Department for this firearm.

Note: Other ammunition manufacturers and types of ammunition, including those with different ballistic characteristics may be selected and used by the department based upon availability, evaluation and or recommendation.

c. Capabilities:

The Carbine Rifle is a lightweight, air-cooled, gas operated, magazine fed, shoulder fired weapon, designed for semi-automatic fire. The Carbine Rifle does not have an expiration and is

regularly serviced and or replaced when the firearm fails or breaks. The .223 / 5.56 cartridge is used in the Carbine Rifle and designed to stop a deadly threat /violent encounter.

d. Purpose:

Carbine Rifles are more accurate than a handgun. They are intended to be used to address a significant threat over distance with greater precision.

e. Authorized Use:

Only sworn members of the department who are POST certified in the use of a Carbine Rifle and have met department qualification standards are authorized to use it. All other applicable WVMPD policies remain in effect, to include, but not limited to; Policies 300 – Use of Force, 304 – Shooting Policy, 312 – Firearms.

f. Expected Lifespan:

Carbine Rifle – No expiration.

g. Fiscal Impact:

Five – Colt AR-15/M4 Carbine Rifles: \$1,524.91 each

Four – Bushmaster XM-15 Carbine Rifles: Approx. \$900.00 each

No on-going annual cost

Ammunition – Approximately \$3000.00 annual cost

Kinetic Energy Weapons and Munitions (Equipment Category 14)

a. Description

The Mossberg Less Lethal Shotgun will be a standard issue less lethal option for sworn members of the department. It is a converted 12-gauge shotgun capable of firing a less lethal projectile. The less lethal projectile is proven effective in stopping an armed or combative suspect without having to resort to lethal force. The Less Lethal Shotgun is a converted industry standard shotgun that is specifically marked to indicate its less lethal capacity. Less lethal shotguns are clearly distinguished from lethal shotguns and the two are never converted back and forth.

b. Quantity:

- Five – Mossberg 590 pump-action shotgun (less lethal)
- Five - Mossberg 500 12 Gauge Less Lethal Orange Over Molded Shotgun Stock w/for end (conversion kit)

Note: Other ammunition manufacturers and types of ammunition, including those with different ballistic characteristics may be selected and used by the department based upon availability, evaluation and or recommendation.

c. Capabilities

The converted Mossberg Shotgun is capable of firing a less lethal round. This less lethal munition is in its deployed state immediately upon exiting the shotgun barrel. It does not require a minimum range to “unfold” or “stabilize.” The less lethal round is an aerodynamic projectile and its accuracy is relative to the shotgun, barrel length, environmental conditions, and the operator. The less lethal munition is capable of providing point control accuracy and consistent energy to momentarily incapacitate violent, combative subjects. Effective range is 75ft.

d. Purpose:

The deployment of less-lethal rounds is key evidence of intent to prevent lethal injury. This "Less Lethal" shotgun is designed to be easily identified as a less-lethal option for use in a tactical situation. Special blaze orange stocks are used to quickly designate the "Less lethal" loaded firearm.

e. Authorized Use:

Only sworn members of the department who are POST certified in the use of a Mossberg 590 pump-action shotgun and have met department qualification standards are authorized to use it. All other applicable WVMPD policies remain in effect, to include but are not limited to; Policies 300 – Use of Force, 304 – Shooting Policy, 312 – Firearms, 308 – Control Devices & Techniques.

e. Expected Lifespan:

Mossberg 590 pump-action shotgun – No expiration.

a. Fiscal Impact:

Less lethal Shotgun – \$700 per Shotgun with blaze orange stocks installed

Ammunition – \$400 @ 3.00 per round