



City of Culver City

Mike Balkman Council
Chambers
9770 Culver Blvd.
Culver City, CA 90232

Staff Report Details (With Text)

File #: 21-635 **Version:** 1 **Name:** Unmanned Aerial Vehicles (UAV)/Drone End of Pilot Program Report
Type: Minute Order **Status:** Action Item
File created: 1/25/2021 **In control:** City Council Meeting Agenda
On agenda: 2/8/2021 **Final action:**
Title: CC - (1) Review and Discussion of the Police and Fire Department's Unmanned Aerial Vehicle (UAV) End of Pilot Program Report; and (2) Direction to the Police Chief as Deemed Appropriate.
Sponsors:
Indexes:
Code sections:
Attachments: 1. 2021-02-08_ATT - The Culver City Police and Fire Department's Unmanned Aerial Vehicle (UAV) End of Pilot Program Report, 2. 2021-02-08_ATT - Unmanned Aerial Vehicles (UAV) Operations Policy

Date	Ver.	Action By	Action	Result
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CC - (1) Review and Discussion of the Police and Fire Department's Unmanned Aerial Vehicle (UAV) End of Pilot Program Report; and (2) Direction to the Police Chief as Deemed Appropriate.

Meeting Date: February 8, 2021

Contact Person/Dept: Assistant Police Chief Jason Sims/Police Department

Phone Number: (310) 253-6391

Fiscal Impact: Yes ☐ No ☒

General Fund: Yes ☐ No ☐

Public Hearing: ☐

Action Item: ☒

Attachments: ☒

Commission Action Required: Yes ☐ No ☐

Public Notification: (E-Mail) Meetings and Agendas - City Council (02/04/2021); Culver City News Publication Notification (01/28/2021) and Notice of Publication (02/04/2021)

Department Approval: Acting Chief Manuel Cid (01/26/2021)

RECOMMENDATION

Staff recommends the City Council (1) review and discuss the Police and Fire Department's Unmanned Aerial Vehicle (UAV) end of pilot program report; and (2) provide direction to the Police

Chief as deemed appropriate.

BACKGROUND/DISCUSSION

On January 28, 2019, Culver City Police and Fire staff presented the Culver City Police (CCPD) and Fire Departments' (CCFD) 18-month UAV pilot program to City Council. At that meeting, Council requested that staff provide Council with a mid-pilot program report at the halfway point of the UAV pilot program and a final report at the end of the pilot program. On December 9, 2019, staff provided Council with a mid-pilot program report and staff was directed to report back to City Council at the conclusion of the pilot program. Due to the COVID-19 pandemic and other extenuating circumstances, staff was delayed in returning to Council with an end of pilot program report, and the pilot program was extended by four months, making it a 22-month pilot program.

The UAV pilot program began in February of 2019. Since then, there have been a total of 50 deployments. See the below table for further information:

Drone Deployment Criteria	2019 Feb	2019 Mar	2019 Apr	2019 May	2019 Jun	2019 Jul	2019 Aug	2019 Sept	2019 Oct
Disaster Management/ CBRN						1			
Fires						2			
Perimeter Searches for Armed and/or Felony Suspects			1		3		4		1
Crime Scene			2						
Search and Arrest Warrant Operations	1	1	1	2	4				2
Total	1	1	4	2	7	3	4	0	3

Drone Deployment Criteria	2019 Nov	2019 Dec	2020 Jan	2020 Feb	2020 Mar	2020 Apr	2020 May	2020 Jun	2020 July
Disaster Management/ CBRN									
Fires									1
Perimeter Searches for Armed and/or Felony Suspects	1	1	1		3	2	2	3	
Crime Scene	1								2
Search and Arrest Warrant Operations			1						
Total	2	1	2	0	3	2	2	3	3

Drone Deployment Criteria	2020 Aug	2020 Sept	2020 Oct	2020 Nov	2020 Dec	2021 Jan	Total
Disaster Management/ CBRN							1
Fires					1		4
Perimeter Searches for Armed and/or Felony Suspects	1	1	1			1	26
Crime Scene							5
Search and Arrest Warrant Operations	1		1				14
Total	2	1	2	0	1	1	50

It is important to point out that 16 of the 50 deployments were outside of Culver City. These deployments were either related to a crime that occurred in Culver City or a request for assistance from another police agency.

See the below table for an overview of the overtime and equipment costs of the program:

Overtime Costs	Hours	Cost
Months 1-7	258	\$21,418
Months 8-22	148	\$11,657
TOTAL OT COSTS		\$33,075
Equipment Costs		Cost
Months 1-7		\$85,687
Months 8-22		\$1,464
TOTAL EQUIPMENT COSTS		\$87,151
TOTAL COST OF PROGRAM		\$120,226

Although the pilots are often on duty when a UAV is needed, there are times when a pilot is called in from home on overtime or held over their regular work hours on overtime for emergency incidents. Overtime is also incurred when training days are held, as many of the pilots are off duty when the training occurs. The total overtime cost for the first seven months of the pilot program was approximately \$21,418. Most of that was incurred early in the program when the pilots were being trained and were working towards their license. The overtime costs over the next fifteen months of the pilot program was \$11,657, making the total overtime cost for the 22-month pilot program \$33,075.

The initial purchase price of the UAVs was approximately \$67,000. This included a total of eight UAVs: four DJI Phantom 4, two Sparks, and two Matrice 210 models. Also included in the initial purchase price were batteries, cameras, service plans for some of the UAVs, and other supporting equipment.

After the initial purchase of the UAVs, CCPD purchased additional service plans and equipment. Some the additional equipment we purchased included: aftermarket lights, additional batteries,

storage racks, additional warranties, training materials and classes, and propeller cages. These purchases brought the total equipment costs to \$85,687.

Two UAVs were damaged in training incidents. In the first incident, a UAV lost power during a test flight and fell several feet onto the roof of the Police Department facility due to an equipment malfunction. The second UAV was damaged when it collided with a power pole guide wire due to pilot error. Both UAVs were under warranty and repaired by the manufacturer at no cost. There have not been any accidents or UAVs damaged during field deployments.

Training materials and classes costs during the second portion of the pilot program were approximately \$1,464 dollars. This brings to total equipment costs for the twenty-two-month pilot program to \$ 87,151.

Although all eight of the City's current stock of UAVs are out of warranty, staff does not foresee the need for additional funding at this time since the City possesses enough drones to sustain the program for at least the next year. CCPD will utilize funds from its existing budget to repair and or replace any damaged or inoperable drones or equipment on an as needed basis.

A tremendous amount of community engagement related to this program took place at the outset, midway point, and now the conclusion of the program. This included: at least ten community meetings, two community demonstrations, a social media campaign, and articles in local news outlets. Many of the community recommendations were incorporated into the UAV policy. The end of pilot program report was also presented to the Chief's Advisory Panel, who provided staff with input. It's important to note that, to date, we have not received a citizen complaint related to any of the City's UAV deployments.

FISCAL ANALYSIS

None

ATTACHMENTS

1. 2021-02-08_ATT - The Culver City Police and Fire Department's Unmanned Aerial Vehicle (UAV) End of Pilot Program Report
2. 2021-02-08_ATT - Unmanned Aerial Vehicles (UAV) Operations Policy

MOTION

That the City Council:

1. Discuss the Police and Fire Department's Unmanned Aerial Vehicle (UAV) End of Pilot Program Report; and
2. Provide Direction to the Police Chief as Deemed Appropriate.

