



Legislation Text

File #: #19-332, Version: 1

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DATE OF MEETING: 08/05/19

SUBJECT:

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SAN PABLO APPROVING (1) THE POLICE DEPARTMENT'S USE OF DRONES; (2) APPROPRIATION OF \$125,000 FROM SUPPLEMENTAL LAW ENFORCEMENT SERVICES GRANT REVENUES TO SPENDABLE ACCOUNTS IN THE POLICE DEPARTMENT'S GENERAL FUND BUDGET (100-2110-46300) FOR PURCHASE OF EQUIPMENT, TRAINING, AND INFRASTRUCTURE FOR A DRONE PROGRAM; AND (3) WAIVER OF FORMAL BID REQUIREMENTS AND AN AGREEMENT TO PURCHASE THREE US-1 DRONES FROM IMPOSSIBLE AEROSPACE AT A COST OF \$76,881 PURSUANT TO AN AGREEMENT TO BE NEGOTIATED AND APPROVED BY THE CITY MANAGER AND CITY ATTORNEY

CITY MANAGER RECOMMENDATION

Adopt Resolution

COMPLIANCE STATEMENTS

Strengthen Technological Infrastructure is an adopted Policy Item under the Improve Public Safety Policy Area in the FY 2019-21 City Council Priority Work plan, effective March 1, 2019.

CEQA Compliance Statement

This proposed action is not a project under CEQA pursuant to Guidelines Section 15378(b)(2): Continuing administrative or maintenance activities, such as purchases for supplies, personnel-related actions, general policy and procedure making.

Drone Technology

The City of San Pablo has committed to enhancing technology within the Police Department that enables staff to provide a higher quality level of service and increased public safety. Over the last ten years, the use of drone technology by law enforcement has dramatically increased and proven to be a valuable tool. Law enforcement can now utilize drone technology to better assess the scope of a critical incident, assist search and rescue, support tactical operations, or provide advanced documentation of a crime or accident scene. Based on a recent study from Bard College in 2018, at least 910 state and local public safety agencies have established drone programs across the country. Law enforcement agencies make up two-thirds of those agencies with drone programs. In 2017, the total number of agencies with drones increased by 82 percent. Contra Costa County currently has three law enforcement agencies with established drone programs with more agencies planning to deploy drones within the next year.

The San Pablo Police Department wishes to deploy a drone program to enhance public safety and service to the community.

FAA Certifications: Part-107 & COA

The Federal Aviation Administration regulates drone use by local government to support specific missions. This requires agencies to obtain either a Part-107 certification or a Certificate of Waiver or Authorization (COA). Part-107 requires individual staff members to train and pass the FAA Aeronautical Knowledge Test. The COA encompasses the entire agency and offers additional control in training and self-certification. The City of San Pablo has a unique advantageous situation as the City is only 2.6 square miles and there is relatively no controlled airspace within the region (Concord to Oakland). This allows for a far more comprehensive drone program to be developed in the City of San Pablo.

On July 24, 2019, the FAA awarded the San Pablo Police Department with a COA (see Attachment 1). The City is one of two agencies in Contra Costa County to have been awarded a COA certificate. In addition, the San Pablo Police Department has four certified pilots under the Part-107 certification. It is the intent of the Police Department to have each staff member participating in the drone program to be certified both under the COA and via Part-107 for operational flexibility and overall comprehensive training.

Policy on the Use of Drones for Law Enforcement Purposes

With input from the community and City Attorney, as well as a review of best practices from law enforcement leadership, staff has developed a policy outlining technical and procedural requirements for deployment of drones to ensure compliance with federal regulations, appropriate safety precautions and respect for privacy interests (see Attachment 2). Deployment of drones will be limited to law enforcement and public safety operations, unless the Chief of Police authorizes a specific public relations use. The policy is attached to the staff report for reference. As with other departmental policies, staff will continually review and update accordingly as changes to technology, regulations and laws occur.

Impossible Aerospace

The San Pablo Police Department began inquiring into possible drone manufacturers to meet operational needs. According to numerous articles and studies, drone flight times range from 10-30 minutes under a single charge. We found this to be very restrictive as time of actual operational monitoring is greatly limited when taken into account time of flight to a location and time of flight to return. In 2018, San Pablo Officers responded to more than 36,000 calls for service. Priority-1 calls require an immediate police response to preserve life or apprehend a felony suspect. A review of thirty days of Priority-1 calls for service shows an average time of 42 minutes to include time of dispatch to time of closing the call. Some Priority-1 calls were in excess of three hours.

Da-Jiang Innovations (DJI), the Chinese manufacturer of consumer and prosumer drones, represents approximately 85% of the public safety market. DJI's top model, the Matrice-600 Pro, has a flight time of 18 minutes (with camera payload) at a cost of approximately \$40,000 per drone.

Impossible Aerospace is a regionally located company in Santa Clara with a team of engineers who previously worked on and developed Tesla battery technology. Impossible Aerospace is the only

manufacturer of the US-1 drone, which offers the only battery powered drone with technology increasing flight time to 1-2 hours (with camera payload). This proprietary technology allows staff to respond to priority calls and sufficiently monitor critical incidents without the necessity of deploying overlapping assets and compromising valuable time and resources. The cost of one fully outfitted US -1 drone is approximately \$22,000. Staff recommends purchasing three US-1 drones as having two additional assets ensures operational efficiency for extended operations covering multiple locations, and in preparation for down time for maintenance.

Waiver of Formal Bid Requirements

Staff recommends that the procurement of three Impossible Aerospace drones be exempted from City bidding requirements because: (1) the purchase involves specialized services combined with equipment and products, in which the City acquires and installs equipment but must also retain specialized services for consulting on use, training, installing, maintaining, and servicing the products (San Pablo Municipal Code section 3.16.110(B); and (2) the unique software attributes discussed above support the use of sole source agreements (San Pablo Municipal Code section 3.16.110(C)).

Further, competitive bidding requirements may be dispensed if the public interest is better served by doing so, as where competitive bidding would not produce an advantage. (*Graydon v. Pasadena Redevelopment Agency* (1980) 104 Cal.App.3d 631; *Los Angeles Dredging Co. v. Long Beach* (1930) 210 Cal.348.) The exception may be invoked where the product or service contracted for is of unique value and may not be obtained elsewhere (*Hodgeman v. City of San Diego* (1942) 53 Cal.App.2d 610,618).

Acquisition pursuant to the specialized services and equipment exception and sole source justification are met because the goods and services required to satisfy the agency's specific operational needs and the extended battery life technology is only developed and available for purchase from Impossible Aerospace, who is the sole developer and vendor of the proprietary US-1 drone (see Attachment 3). The San Pablo Police Department has not been able to find another vendor to reliably deliver a similar product with technology to meet the agency's specific operational needs.

Public Safety Technology Development Community Meeting

On June 20, 2019, the Office of the Police Chief facilitated a community information meeting on the success of current technology systems and a possible drone program (see Attachment 4). This included a complete overview of the proposed drone program with Impossible Aerospace. Impossible Aerospace CEO Spencer Gore was present and highlighted the US-1 drone to the community, and staff from Public Works presented on potential drone uses for their projects. Staff answered questions and addressed concerns from the community. The meeting was well attended by the public and included members from the North East Bay Area Chapter of the ACLU (American Civil Liberties Union).

Public Safety Standing Committee

The Office of the Police Chief presented to the Public Safety Standing Committee (Vice Mayor Cruz and Council Member Pabon-Alvarado) on the success of technology platforms and the requested

procurement and deployment of the US-1 Impossible Aerospace drone on July 17, 2019 (see Attachment 5). The Committee voted to receive the presentation and recommended it be forwarded to City Council for formal consideration.

FISCAL IMPACT

The cost of the three US-1 Impossible Aerospace drones is \$76,881. Included in that price is a two-day training course, additional replacement equipment and a 12-month full warranty coverage (see Attachment 6). The Police Department proposes to appropriate \$125,000 in Supplemental Law Enforcement Grant funds that the City has already received for the purchase of the three US-1 Impossible drones and additional infrastructure to deploy a potential launch site from the Police Department. Requested appropriations are as follows:

From Account	Amount	To Account	Amount
210-0000-00000	\$125,000		
		100-2110-46300	\$125,000
TOTAL	\$125,000		\$125,000

Officer participation in the drone program is considered an ancillary duty within the Patrol Division. There are currently no plans to add FTE's to staff this program. Considerable staff time would be spent in additional training and maintenance of the program which cost is unknown at this time. However, at least a portion of this additional expense could be offset by reduced investigative time and other increased efficiencies.

Attachments:

1. FAA Certificate of Authorization
2. San Pablo Police Department Policy 613: Unmanned Aerial System Operations
3. Sole Source Letter from Impossible Aerospace
4. Public Safety Technology Development Community Meeting
5. PowerPoint from Public Safety Standing Committee (7/17/19)
6. Price Quote from Impossible Aerospace