City of Sacramento

Legislation Details (With Text)

File #:	2020-00279	**Version:**	1	**Name:**	
Type:	Discussion Item			**Status:**	Agenda Ready
File created:	2/20/2020			**In control:**	City Council - 2PM
On agenda:	3/10/2020			**Final action:**	
Title:	Use of Unmanned Aircraft Systems for Public Service				
Sponsors:					
Indexes:					
Code sections:					
Attachments:					

Date	Ver.	Action By	Action	Result

Title:
Use of Unmanned Aircraft Systems for Public Service

File ID: 2020-00279

Location: Citywide

Recommendation:
Receive and file.

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Attachments:
1-Description/Analysis

Description/Analysis

Issue Detail: This presentation provides an overview of the current and future uses of Unmanned Aircraft Systems (UAS) for public service activities within the City.

Policy Considerations: The Federal Aviation Administration (FAA) under the Department of Transportation is responsible to regulate aviation within the National Airspace System (NAS). There are two ways a public agency can operate a small unmanned aircraft in the National Airspace System. If the aircraft is flown as a civil operation under 14 Code of Federal Regulation (CFR) Part 107 with an aircraft weighing less than 55 lbs. operating below 400 Above Ground Level (AGL) or flown as a public aircraft strictly for public missions by a public agency under a Certificate of Waiver/Authorization (COA) issued by the FAA.

Economic Impacts: None.

Environmental Considerations: This presentation is not a project that is subject to the California Environmental Quality Act (CEQA) because it is an administrative activity that will not result in direct or indirect physical changes in the environment, and it relates to government fiscal activities that do not involve any commitment to any specific project that may result in a potentially significant physical impact on the environment. (CEQA Guidelines § 15378 (a), (b)(2), and (b)(5)).

Sustainability: None.

Commission/Committee Action: None.

Rationale for Recommendation: This presentation is to provide City Council with a briefing on how UAS technology is currently used within city departments and what future activities will be aided by this technology. This presentation will also outline the coordinated approach between departments to address major issues such as privacy protection, interoperable equipment, and training.

Financial Considerations: When Unmanned Aircraft System equipment is procured, the City will comply with the policy set forth for the procurement of supplies (AP-4001) and, if necessary, will return to Council for approval for funding and the purchase.

Local Business Enterprise (LBE): Not applicable.

Background: Over the last several years, the use of UAS by the public, commercial operators, and public agencies has grown drastically. As UAS has become more accessible, public agencies have taken advantage of this technology to perform tasks that pose a high-risk to employees or are costly to perform by other means.

Four departments within the City of Sacramento have developed unique UAS programs to aid with specific public services. Each department has carefully developed its program to limit the impact on privacy and to comply with FAA regulations.

Below is a brief description of the status, scope and background of each department's UAS program.

Community Development Department, Building Division

The Building Division has developed an Unmanned Aircraft Systems Inspection Program. As of this January 2020, the Division expects a large increase in solar panel installations on residential homes due to new State requirements. This program will provide a tool for the building inspection team to efficiently meet this demand while keeping its inspectors safely on the ground.

The Community Development Department is continuously exploring innovative ways to better serve its community and keep pace with its growing development. The UAS Inspection Program is an example of this commitment and will be one of the first of its type in the region.

Recognizing this is new technology for building inspections, extensive planning was done to ensure that the UAS Inspection Program was developed in a responsible manner. Building Division staff communicated directly with the Federal Aviation Administration's (FAA) Unmanned Aircraft Systems Integration Office to discuss appropriate UAS operations for building inspections. Based on the guidance provided by FAA, and Risk Management, the Building Division's Policy and Procedures were developed. The Building Division also sought legal advice from the City Attorney's Office concerning the use of UAS.

Additionally, to ensure the safety of our citizens and employees, all Building Division UAS operators will hold a FAA Remote Pilot Certificate in order to perform UAS inspections. Incentive pay for these employees was established through Human Resources and the International Union of Operating Engineers, Stationary Engineers, Local 39.

Implementation of the UAS Inspection Program is anticipated by March 2020. Initial UAS use will be limited to solar panel inspections.

Fire Department

The Sacramento Fire Department has developed a draft policy for its Unmanned Aircraft System Program. The department has developed this policy to align with FAA regulations and industry standards.

Currently, the Department participates in a regional group which provides mutual aid during large incidents. In the future, the department would like to utilize UAS technology for damage assessments, emergency response, and fire investigations.

Police Department

The Sacramento Police Department has developed a small Unmanned Aircraft System program. This new technology will provide another option for our officers to conduct area searches, building searches or searches for missing persons. This program will also allow an officer to deploy the UAS and make visual observations of potentially hazardous situations while the officer maintains a safe

distance. The UAS program plays a critical function to maintain the safety of our community, our officers and provides another means of de-escalation.

Select officers will receive specialized training in the safe and legal operations of the Department's UAS. This training is consistent with both national best practices and Federal Aviation Administration regulations and guidelines. Additionally, all operators will hold an FAA Remote Pilot Certificate and will be required to complete regular recurrent training. Officers assigned to the UAS team will be able to deploy their UAS within minutes after arriving on scene to support both patrol and special operations.

UAS are being widely used in public safety by both law enforcement agencies and fire departments across the nation. The Sacramento Police Department has existing policy and procedures related to the use and deployment of UAS. The safety and privacy of the citizens in our community is paramount and Sacramento Police Department UAS will not be utilized for random patrols or for the surveillance of individuals.

The Sacramento Police Department obtained its Certificate of Authorization from the FAA in July 2019 and is currently operating tactical UAS to conduct indoor searches for barricaded or potentially resistive individuals. The deployment of UAS for outdoor operations in support of our patrol officers is anticipated by March 2020.

Utilities Department, Wastewater/Storm Drainage Division

The Department of Utilities (DOU), Wastewater/Storm Drainage Division has developed an Unmanned Aircraft System Inspection Program. Operations and Maintenance staff plan to use this technology to inspect critical or inaccessible infrastructure that includes levees, creeks, channels, detention basins, and treatment plants maintained by DOU. This program provides up-to-date technology for DOU to inspect and effectively maintain critical sites.

DOU promotes innovative ways to better serve and protect our community by keeping the ageing infrastructure operating at performance. The UAS Inspection Program exemplifies DOU's commitment to innovation and will be one of the first in the region to use UAS technology for these types of inspections.

Extensive planning is being done by DOU to ensure that the UAS Inspection Program is developed in a responsible manner. Utilities staff communicated directly with the Fire, Police, and Community Development Departments to determine appropriate UAS operations for infrastructure inspections. Based on guidance provided by the FAA, the City Attorney's Office, and Risk Management, DOU drafted a Policy and Procedure. DOU is currently working with DOU Logistics to purchase the UAS and DOU GIS to determine survey details and data storage requirements. Notification handouts are being developed to address public concerns.

All DOU UAS operators will maintain FAA Remote Pilot Certificate to ensure the safety of citizens and

employees.

Implementation of the UAS Inspection Program is anticipated by May 2020. Initial UAS use will be limited to critical infrastructure inspections.