

MEMORANDUM

Milpitas Police Department



DATE: August 21, 2019

TO: Captain Jared Hernandez #229

FROM: Lieutenant Frank Morales #248

SUBJECT: Unmanned Aircraft Systems (UAS)

Background

Municipalities throughout the United States have been using UAS (Unmanned Aircraft Systems) technology to improve operational efficiency and employee safety. Law enforcement has utilized UAS to provide critical real-time information and situational awareness during volatile and life-threatening incidents. For example, law enforcement agencies have successfully used UAS to detect explosives, respond to major disasters, assist with hostage rescues, respond to armed and barricaded suspect calls, collect data for traffic collisions and find survivors during search and rescue operations. Fire departments have used UAS to help commanders quickly analyze the scene of fires or emergency events. The UAS camera and thermal imaging technology can transmit footage and crucial data straight to a command center. Public Works Departments have used drones to inspect utilities, inspect structures, and oversee road projects.

Analysis

In recent years, the use of UAS within the public safety community (law enforcement and fire departments) has exploded. A study dated in May 28, 2018 titled, "Center for the Study of the Drone" at Bard College revealed that 58 public safety agencies in California had acquired UAS. Based on current trends in the field of UAS, it is reasonable to infer that the number of public safety agencies that have implemented a UAS program has only increased since the release of the study.

UAS have impressive capabilities including the use of spotlights, loud speakers, powerful zoom cameras and thermal cameras all while being able to fly or hover for approximately 25 to 30 minutes. This tool has proven to be highly effective force multiplier for public safety agencies. The ability to survey a scene from the air allows for the effective and efficient deployment of resources thus creating a significant benefit to our community. UAS have been an invaluable tool to public safety agencies but given their wide range of capabilities, UAS can serve an important role when used by Public Works and Building Departments. A UAS would be able to deploy during emergencies such as flooding and natural disasters to assist Public Works and the Building Department.

The FAA maintains authority over the use of UAS by government agencies and private citizens. Certification from the FAA is required in order for government agencies to operate a UAS program. There are two types of certifications, Part 107 and Certificate of Waiver or Authorization (COA). The Part 107 certificate is remote pilot license that allows for the operation of a UAS under significant restrictions such as not being able to fly at night, fly over people or fly in restricted airspace without a waiver from the FAA. The FAA maintains authority over the use of UAS by government agencies and private citizens. Certification from the FAA is required in order for government agencies to operate a UAS program

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Program Management

The Milpitas Police Department will implement a rigorous policy that will govern the UAS program. The policy will outline approved uses, documentation of flights, identify those who will authorize deployment, specify training requirements, and designate a lieutenant who will oversee the program to ensure that pilots adhere to all policies and procedures.

The Milpitas Police Department is fully aware of the privacy concerns some may have regarding the use of UAS within our City. Mitigating concerns is a top priority for this organization. We hope to alleviate these concerns by hosting several educational presentations for our community members. Our educational presentations will explain the program, the capabilities and limitations of the UAS, under what circumstances UAS will be deployed, data retention, and policies and procedures. Finally, a significant portion of the presentation will allow community members to ask questions, address privacy concerns and offer feedback on the suggested policy. The goal is to demonstrate our ability to be transparent with the use of this technology, maintain public trust, and ensure the manner in which the Police Department is servicing the community is aligned with community values

The Milpitas Police Department UAS policy will reflect our respect for the privacy of our community members and their 4th Amendment rights. UAS will not be flown randomly over residential neighborhoods. Live or recorded viewing of flights will be limited to staff members who have a right and need to review captured video.

Deployments

UAS technology presents different deployment opportunities for each department within our City. The Milpitas Police Department would deploy this tool during incidents involving, but not limited to, a threat to human life, the protection of property, enhancing officer safety, and the apprehension of suspects. The Milpitas Fire Department can benefit from this tool during fires, search and rescues, and natural disasters. Public Works could use this tool during floods to observe water levels at creeks and to inspect damaged roadways or pipelines. The Building Department would be able to deploy UAS to inspect buildings for potential damage or defect.

Cost Analysis

Implementing a UAS program involves the purchase of equipment, maintenance costs, training costs and the costs associated with preparation and submission of the proper FAA documentation. Startup cost to implement a UAS program can range between \$45,000 to \$65,000.

Recommendation

The integration of a UAS program for the Police Department would be a great technological advancement that would help improve safety to officers and citizens, support tactical actions, perform search-and-rescue missions, enhance investigation efficiency, augment personnel through smart technology, and

ultimately save taxpayers money. This would be a tool not only available to the Milpitas Police Department but to the Milpitas Fire Department, Public Works Department and the Building Department under circumstances outlined in our policy. The benefits of this tool are consistent with our Department's strategic operational goals and guiding principle of reverence for human life.

I concur
#229
8/22/19