



South San Francisco Police Department Drone Program

Presentation Overview

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Program Benefits

- ◆ Increased Safety for Officers and the Public
- ◆ Faster Emergency Response
- ◆ Enhanced Situational Awareness
- ◆ Workforce Multiplier
- ◆ Reduce Search Times / Minimize Impact to Public
- ◆ Crime Scene Documentation / Collision Investigations



Authorized Uses

- ◆ Patrol Operations: Support the deployment of officers and equipment in emergency situations (e.g., area searches for wanted subjects, incidents involving hostages and barricades, support for large scale operations, missing person searches, disaster response).
- ◆ Investigations: Locate, measure, and document evidence at crime scenes, collision scenes, or other major incidents.
- ◆ Event Management: Assist decision-makers in understanding the nature, scale, and scope of an event or incident. Aid in the planning and coordination of an effective response of resources and personnel.



Prohibited Uses



- ◆ Will not be used to impinge or restrict 1st Amendment right to assemble/free speech.
- ◆ Will not weaponize any UAV
- ◆ Will not be used to conduct random surveillance activities
- ◆ Will not be used to harass, intimidate, or discriminate against any individual or group
- ◆ Absent a warrant or exigent circumstances, operators shall not intentionally record or transmit images of any location where a person would have a reasonable expectation or privacy

Program Development

- ◆ Ensured compliance with all applicable FAA rules and regulations for the use of drones in public service
- ◆ Obtained Certificate of Authorization from FAA outlining procedures for operating UAS in airspace throughout San Mateo County
- ◆ Developed policy and procedures for deployment of UAS
- ◆ Requirement for all pilots to obtain FAA Certification for UAS Operations
- ◆ Developed policy and procedures for data management / FAA reporting
- ◆ Comprehensive record keeping software that includes automated tracking of pilots, aircraft, and flight logs
- ◆ Initial purchase of three (3) outdoor and eight (8) indoor drones
- ◆ Developed comprehensive training, inventory and maintenance plans



Equipment Overview



- ◆ (2) DJI Mavic 3T
- ◆ Compact (2lbs)
- ◆ Flight time 30 min
- ◆ Thermal camera
- ◆ 7x-56x zoom
- ◆ Wind resistant up to 26 mph

Equipment Overview



- ◆ (1) DJI Matrice 30 T
- ◆ Larger platform (8lbs)
- ◆ Longer flight time (45 min)
- ◆ Thermal camera
- ◆ 16x optical zoom / 200x digital zoom
- ◆ Higher weather resistance (rain, wind, temperature ranges)

Equipment Overview



- ◆ (8) DJI Avata
- ◆ Indoor use
- ◆ Small airframe (1 lb)
- ◆ 18 min flight time
- ◆ Maneuverability enables officers to look under and over objects at any height / angle

Safety Measures and Regulations

- ◇ All flights will conform to strict FAA regulations regarding UAS flights in Class B Airspace
- ◇ Pilots will establish communication with SFO ATC for flights within Class B Airspace
- ◇ All UAS flights will be recorded and reported to the FAA monthly
- ◇ Pilots must obtain an FAA license for UAS operations (recertification every 2 years)
- ◇ Pilots will conduct on-going training to maintain fluency
- ◇ All operational flights will be recorded and uploaded into evidence for tracking / transparency

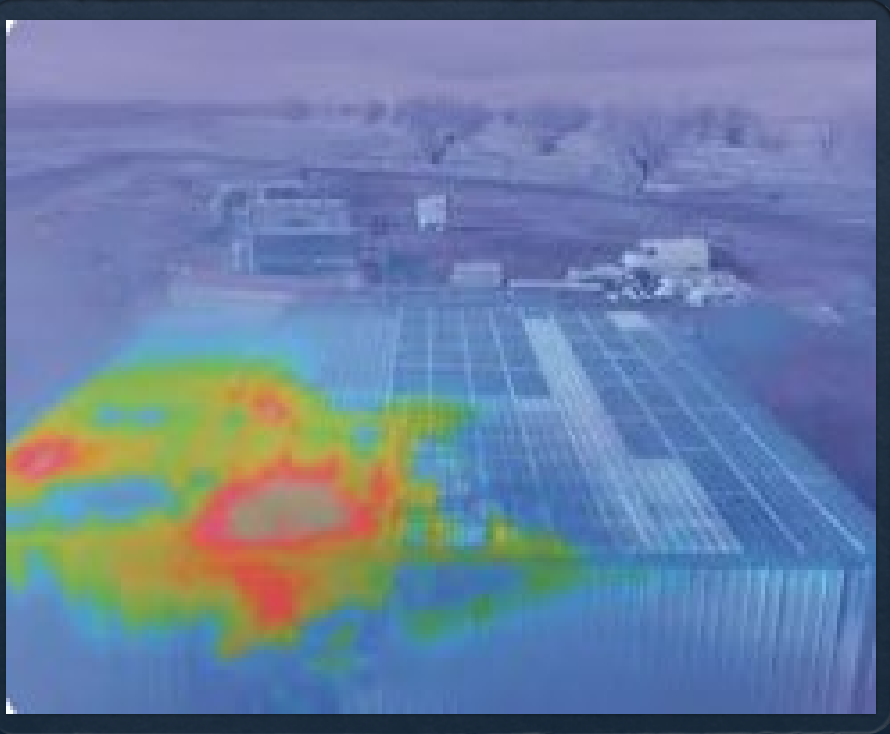


Fire Department Drone Program



- ◆ Using similar aircraft to the Police Dept.
- ◆ 1 Aircraft assigned to the Battalion Chief
- ◆ Same certification requirements as Police Dept. (FAA License with flight hour requirements and biannual recertification)
- ◆ All flight data and media is captured and logged for both training and emergency incidents
- ◆ Field monitoring capabilities from the responding Command Vehicle

Fire Department Drone Program – Uses 1/2



- ◆ Enhanced Situational Awareness on Vegetation and Structure Fire Incidents
- ◆ Reduces exposure of personnel to smoke and hazardous materials
- ◆ Provides thermal imaging capability in low visibility/smoke conditions
- ◆ Allows for improved identification of fire location within a structure
- ◆ Aids in structure stability assessments during fire incidents

Fire Department Drone Program – Uses 2/2

- ◆ Improved efficiency when locating victims during Search and Rescue incidents
- ◆ Allows for enhanced scene management without placing personnel in dangerous environments
- ◆ Provides for rapid searches over large areas (Sign Hill, San Bruno Mountain, San Francisco Bay Waters)
- ◆ Is deployable from department's fire boat





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