



# Port of San Francisco Employee Drone Policy

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## OVERVIEW

The Port of San Francisco (“Port”) is committed to leveraging technologies that help improve operational efficiency, public and employee safety while protecting the privacy and safety of its tenants and visitors. As part of this vision, the agency has adopted this Employee Drone Policy to govern the operation of “drones” within the Port of San Francisco. In accordance with the CCSF Citywide Employee Drone Policy adopted on May 5, 2017, this policy will apply to all SF Port employees and SF Port contractors operating drones on Port of San Francisco property.

## PURPOSE AND SCOPE

The use of unmanned aerial vehicles (UAVs) in the public interest is expected to benefit residents and visitors to the City through the more efficient use of Port resources and improved ability to inspect, manage and protect City infrastructure and natural resources. The terms “**UAV**” and “**drone**” are used synonymously throughout this document and refer to an unmanned aircraft flown by a pilot via a ground control system, or autonomously through use of an on-board computer, communication links or any other additional equipment.

This Policy is subject to a one-year evaluation period. After the evaluation period, a Drone Oversight Committee composed of representatives from the Mayor’s Office, the City Administrator, and COIT will review the drone programs of all participating departments and provide recommendations to COIT on revisions to this Policy, as necessary.

This Policy applies to all to departments participating in the City’s drone program, including boards and commissions, employees, contractors, and volunteers. Elected officials, employees, consultants, volunteers, and vendors while working on behalf of the City are required to comply with this Policy.

**The authorized use of drones is limited to the following Port use cases.**

1. **Disaster Response & Recovery:** Inspections during and after a disaster.
2. **Inspections:** Surveys and assessments of Port properties.
3. **Marketing:** Capture video and still photographs.

## SF Port Drone Policy and Authorized Use

**Use Restrictions:** The authorized use of drones is limited to Port of SF lands, rights of way, and facilities (collectively Port of SF Property).

**Specifications:** Each Port drone must have a global positioning system (**GPS**). The software and/or firmware used to operate the drone must be up to date and maintained. **All drone hardware needs to be inspected by a certified pilot prior to use to ensure safe operation.**

**Safety:** Drones must be operated in a safe manner. Port drones should not be operated in a way that causes personal injury or property damage. Drones may not have features (e.g., lights, coloring) or be used in a way that distracts drivers or other aircraft.

Drones that lose GPS signals should be set to hover in place. Pre-planned operation of drones in areas without GPS signal coverage requires additional safety precautions to be approved by the Port. Additionally, drones that lose signals to their remote operator or when low power is detected should be set to return to home/origin.

Waterborne Remote Operated Vehicles, including those that operate in a boat or underwater are not subject to this policy, however, should information be incidentally collected that could



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be used to identify persons or private information, the Port must remove all personal identifiable information from raw data footage.

**Noise:** Port of SF and its contractors shall use best efforts to ensure that noise from drones does not interfere with the quality of life of City residents or visitors. All drone operators shall comply with the Noise Ordinance at San Francisco Police Code Article 29-Regulation of Noise at all times while operating drones within the geographic boundaries of the City.

**Training:** Drone operators must obtain remote pilot certifications from the **Federal Aviation Authority** (FAA) and must comply with all other FAA requirements. For Port employees, fees for pilot certifications will be covered by the Port. Record of certification will be kept with Port Human Resources.

**Notification:** The Port shall notify the public of intended drone operations at the site of operations through signage in readily viewable public areas. In addition, the Port shall notify the public of all drone flights by publishing flight summary data on the Open Data portal 24 hours in advance of operations. Port notifications shall include flight summary information and the type of data to be collected (See Appendix B for the City's Flight Summary Form).

NOTE: Pre-notification is not required when drones are used for emergency authorized uses. In those situations, flight summary information must be submitted within 48 hours after the operation.

**Operations:** A minimum of two (2) Port employees or contractors will be required for any given drone flight. One individual will act as the pilot and will have primary control of the drone and the other individual will serve as a spotter. The spotter may also serve as a camera operator for drones with separate flight and camera controls. A take-off and landing area will be clearly marked (e.g. with safety cones).

**Prohibited Zones:** Flying machines (drones) are not allowed over Port parks without permission per Port Code Section 2.7.

Flying machines (drones) are not allowed over SF Rec and Park **park** without permission per SF Rec and Park Code 3.09.

Drones are not authorized within 500 feet of historical landmarks without authorization from building management or owners. San Francisco historical landmarks are defined by Article 10 of San Francisco's Planning Code. (e.g. City Hall, the Ferry Building. A full list is available here:[http://sf-planning.org/sites/default/files/FileCenter/Documents/5081-PresBulletin09LANDMARKS\\_revMAR2015.pdf](http://sf-planning.org/sites/default/files/FileCenter/Documents/5081-PresBulletin09LANDMARKS_revMAR2015.pdf))

Drones may not fly over Port properties subject to the Maritime Transportation Security Act of 2002 without the permission of the Port and/or terminal operator. Port officials will provide City agencies with a list of regulated maritime facilities.

Drones may not be used within five miles of an airport or in any FAA no-fly zone unless approved by the appropriate authority. City drone operations must comply with FAA rules.

Drones may not hover over trolley, streetcar, or light rail line wires, above rail, bus and parking control facility yards, unless authorized by the SFMTA.

**Privacy:** The Port must have an authorized purpose to collect information using a drone, or use drone-collected information. Should information be incidentally collected that could be used to identify persons or private information, the Port must remove all personal identifiable information from raw data footage.

**Data Security:** Recently, potential security risks have been identified with regards to the data collected from D.J.I drones, the leading manufacturer of camera drones. In order to protect all data that is



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gathered from drones that are flown over any Port facilities, drone operators are required to agree to the following Privacy Risk Mitigation Standards. The Port Privacy Risk Mitigation Standards require all staff, along with anyone they contract to fly drones over Port facilities:

- Will not upload flight data (flight plans./videos) to D.J.I. company servers
- Will not utilize the D.J.I. auto function to periodically store user flights
- Will cut off outside internet connection while flying
- Will handle data securely when delivering footage to the Port of San Francisco
- Will not keep copies of raw or edited footage

The Port is advised not to maintain archives of raw, unprocessed drone data once the business purpose is accomplished. The Port will restrict access to any raw drone footage it retains to authorized staff. All data will be stored on a shared drive for authorized staff only.

Distribution of raw drone data is restricted to authorized departments for the purpose of cleansing and processing data only. In all other circumstances, the Port may not exchange raw, unprocessed drone-collected data between departments or disclose such data to the public except for exigent public safety needs or as required by law.

The Port may store raw data up to a maximum of one year. Exceptions to this standard must be supported with documentation and a clear rationale, and maintained by department staff to be reviewed by COIT and the Drone Oversight Committee.

All data collected by Port employees or Contractors is the property of the Port and will follow the above guidelines. Any contractor must turn over all raw and processed data to the Port.

## Contractor Provisions:

If entering into a contract with a third party to operate drones, the contract shall include the following requirements:

**Ownership and handling of City Data:** "City Data" includes without limitation all data collected, used, maintained, processed, stored, or generated by or on behalf of the City, including as the result of the use of the services provided by a contractor. The City retains ownership and rights to City Data, including derivative works made from City Data and the licensing applied to the data. Contractors must treat City Data using the same Privacy and Data Security requirements that apply to CCSF employees.

**Unauthorized use prohibited** - Engaging in the unauthorized use of drones or activities that are inconsistent with this Policy may be grounds for termination of the relevant contract, as well as applicable monetary fines and penalties.

**Signatures** – This Drone Policy must be reviewed and signed by all drone operators, including contractors

**Insurance required** – Contractor drone operators must provide proof of liability insurance commensurate with current Port insurance requirements for contractors.

## Compliance:

All Port drone operators must submit flight information to the Open Data portal here: <https://sfgov1.sharepoint.com/sites/ADM-Drone/SitePages/Home.aspx>



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## ROLES AND RESPONSIBILITIES

1. **Development:** The Port drone policy must be reviewed and signed by all drone operators and any individuals with access to drone data that may contain Personal Identifiable Information.
2. **Drone Advisory Committee** will be composed of representatives from the Mayor's Office, the City Administrator, and COIT and will review and evaluate Port authorized use cases and provide recommendations to COIT on the continued use of drones.

## DEFINITIONS

**Personal Identifiable Information:** Information that can be used to distinguish or trace an individual's identity, either alone or when combined with other personal or identifying information that is linked or linkable to a specific individual.

**Raw Drone Data:** Information collected by a City drone that has not been processed and cleaned of all personal identifiable information. The distribution and use of raw drone data is tightly restricted.

## QUESTIONS

All questions regarding this policy should be directed to the employee's supervisor or to the director. Similarly, questions about other applicable laws governing the use of drones or the issues related to privacy should be directed to the employee's supervisor or the director, although the supervisor or director may determine that the question must be addressed to the COIT Drone Oversight Committee. Employees may also contact their unions for advice or information about their rights and responsibilities under these and other laws.

## REFERENCE

The FAA has developed regulations on the use of drones. For more information, please refer to their website at: <https://www.faa.gov/uas/>

## AUTHORIZATION

SEC. 22A.3 of the City's Administrative Code states, "COIT shall review and approve the recommendations of the City CIO for information communication technology (ICT) standards, policies and procedures to enable successful development, operation, maintenance, and support of the City's ICT."



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## Appendix B: CCSF Drone Reporting Forms

All specific information regarding the City & County of San Francisco's authorized use of drones will be available on the Open Data Portal (<https://datasf.org/opendata/>). The following forms preview information collected on each Department's authorized uses and flight summary information.

CCSF Drone Policy - Department Authorized Uses	
Drone Descriptive Title (max 50 characters)	<input type="text"/>
Department:	<input type="text" value="v"/>
In the following section, please fill out this form and the following questions for EACH PROPOSED AUTHORIZED USE.	
<b>-- AUTHORIZED USE CASE</b>	
Please describe the specific operation how your department will use drones. <i>Please focus your answer on the operational details – who will use drones and for what purpose.</i>	
<input type="text"/>	
In what locations will you use drones? <i>Please provide specific details on anticipated locations. Within the City, please describe typical flight locations (e.g. neighborhoods, parks, etc.). Outside the City, please list the counties where flights will be conducted.</i>	
<input type="text"/>	
In a given month, how frequently do you anticipate using drones?	
<input type="text"/>	
Please describe how your department will use data to support a clear business objective.	
<input type="text"/>	
What are all the types of data drones will collect? <i>Please list all types of data any drone might collect, including data collected for a specific business purpose and any other data your drones will collect as part of normal operations.</i>	
<input type="text"/>	
In any scenario, will personal identifiable information be collected?	<input type="text"/>
What privacy risks do you anticipate by using drones?	
<input type="text"/>	



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**Please provide additional details on your data policies regarding information collected by drones:**

<i>Please identify your business practices for the type of data collected</i>	Type of Data	Data Retention Policy <i>Please cite the location for your policy and authorization source.</i>	Please describe business process to protect privacy and filter out un-needed data.
<b>Business Use Data</b> <i>This data is intentionally collected to support a specific operations</i>			
<b>All Other Data</b> <i>Please identify and describe your practices to for unintended data.</i>			

At the end of the one-year evaluation period, COIT will conduct a Return-on-Investment analysis on the City's use of drones.

How will your department evaluate impact drone data will have in improving your business? Please be specific.

What alternative options are available instead of using drones?

Save & Close

Submit



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## Flight Summary Form

Department \*

Authorized Use new \*

Drone Make & Model \*

FAA provided drone registration number \*

Street Address (Area Surveyed)   
Please enter the address with the full number, name and type, for example: 1 South Van Ness Avenue

FAA provided commercial pilot certificate number \*

City (Area Surveyed)

County (Area Surveyed) \*

Zip Code (Area Surveyed)

Location [Specify location](#) Or [Use my location](#)  
Location data will be sent to Bing Maps. [Learn More](#)

Start Time \*

End Time \*

Type of Data Collected \*  
 Images  
 Video  
 Sound  
 Infrared  
 LIDAR  
 Specify your own value:

Privacy Risks \*   
Please summarize privacy risks associated with this flight.

Privacy Risks - Mitigation \*   
What actions will be taken to mitigate privacy risks?