



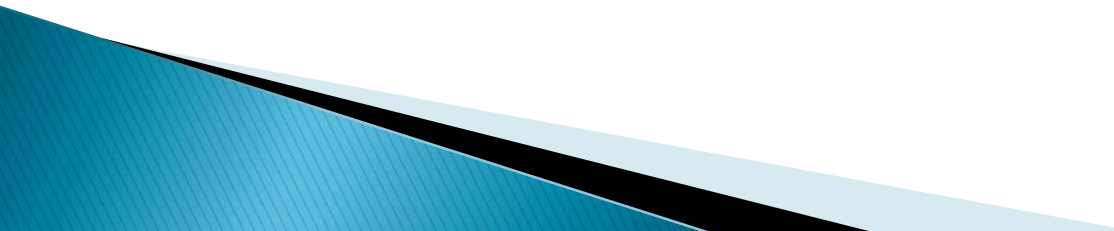
City of Seattle



Seattle Police Department Unmanned Aerial Systems

Public Safety, Civil Rights & Technology
Committee

FAA Modernization & Reform Act of 2012

- ▶ Includes provisions for integration of Unmanned Aerial Systems (UAS) within the United States by 2015.
 - ▶ Small UAS allowed within 27 months
 - ▶ Requiring expedited access for public users, Law Enforcement/Fire/Emergency Response
 - ▶ Allowing First Responders very small (4.4 lbs or less) to fly w/in 90 days, if meet criteria
 - ▶ Model aircraft less 55 lbs
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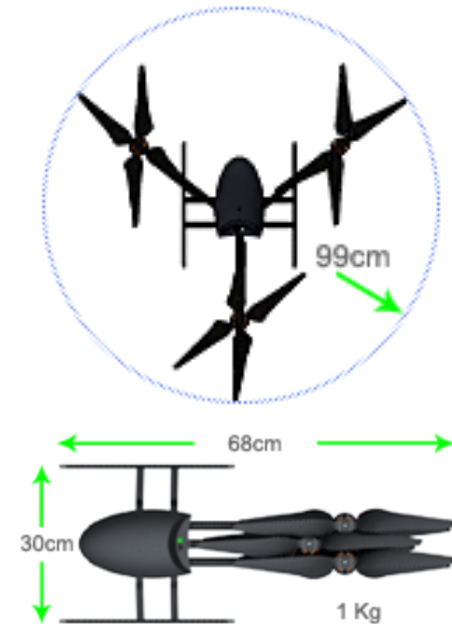
Past Actions

- ▶ Need for increased safety and situational awareness for law enforcement & other first responders, and the community.
- ▶ To provide better information to commanders to make a decision, surrounding
 - Life Safety,
 - Incident Stabilization,
 - and Property Conservation.
- ▶ 2008 HLS Grant, planning for the future, selected a lightweight, quick deployment, safe platform
 - We have ongoing conversations with FAA ensuring compliance, with a commitment to safety
- ▶ Received two UAVs in 2010 – One each for SPD & King County Sheriff,
 - Received a Training Certificate of Authorization for specific locations within region
 - Training SPD/KCSO personnel to meet current regulations of FAA

Equipment Purchased

DraganFlyer X6

- ▶ Unmanned Aerial System (UAS)
- ▶ Remote controlled
- ▶ Miniature helicopter (small UAS)
- ▶ Multiple safety features
(aircraft navigation lights)
- ▶ Multiple navigation sensors (GPS, barometers)
- ▶ Airframe Weight 2.2 lbs
 - Maximum total weight of 53oz 3lbs, 5ozs
- ▶ Battery powered
- ▶ Carbon fiber construction
- ▶ Wireless video streaming
- ▶ On board flight recorder, built in
- ▶ Currently flown by LE in US & Canada



Present



- ▶ Policy development to include operations & deployment

Working with ACLU for protocols prior to finalizing.

Proposed deployment guidelines for aerial camera use or situational awareness include;

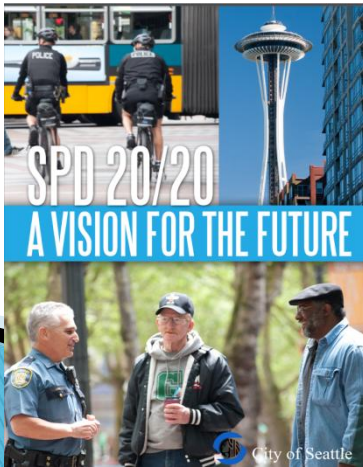
- Incidents involving – Robbery, Barricade, Terrorism, Lost Person, Crime Scenes, etc.
 - Requires approval from on-scene Lieutenant
 - Verification of perimeter & safety conditions by the UAS pilot
 - Trained and qualified Pilot and Observer (FAA regulations)
 - Follow visual flight rules, flight less than 400 feet, maintain direct visual observation, (FAA Regulations)
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- ▶ NOTE: Currently FAA regulations do not allow for a UAS to fly over mass gatherings such as parades or demonstrations.

Present – Video Evidence & Operator Certification

- ▶ Video from deployments will be reviewed by the case detectives or incident commander, if needed for evidence, it will be retained in accordance with currently approved department policy and procedures, if deemed not necessary, a recommendation for destruction will be made and destroyed in accordance with State Law.
- ▶ Video from training missions within training locations, maybe retained to provide information to the UAS teams to increase learning.
- ▶ Staff assigned to operate the UAS per FAA rules will be required to have a pilot certification, and maintain a flight log – documenting deployment of the UAS. These manuals will be required to be presented upon command by an SPD Commander
- ▶ UAS Logbook will be maintained.

The UAS Program & 20/20 program initiatives

<u>Initiative</u>	<u>Title</u>	<u>Statement</u>
19	Community Outreach	Utilize Community Living room & Pct meetings to discuss UAS, Officer Recruiting, etc.
18/17	Transparency Info to Public	Will continue to be highly visible on UAS program via; meetings, SPD Blotter/Twitter, and media
15	Best Practices	We are developing best practices with the FAA, and continue to research emerging technologies to improve police service



Future

- ▶ We are working with the FAA to receive City–Wide Certificate to fly the X6 throughout the city, with the same guidelines mentioned above.
- ▶ Continue our ongoing research into emerging technologies, including UAS to increase safety and , efficiencies, UAS – increased stability & flight times

As a department we realize the responsibility to ensure public safety without abuse of personal rights. This concept has been part of the design of this capability from the beginning.

We will maintain that commitment.

Thank You

