Small Unmanned Aircraft Systems

Discussion of Public Safety Operational Use

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Potential Operational Mission Profiles

- Emergency Response and Recovery / Disaster Management

- Post disaster assessment (Huntington flooding, Snowmageddon, Earthquake)

- Search and Rescue (land and water)

- Highway / traffic management coordination (traffic congestion, crash management)

- Fire incident management (structure, outdoor, commercial fires, fire investigations, hazardous materials response)

- Aerial photography of critical infrastructure and capital projects (Levee)

- Public relations (golf and park tour video, special events and concerts)

- Wildlife population estimates / Terrain mapping / Movement corridors)

Natural Disasters
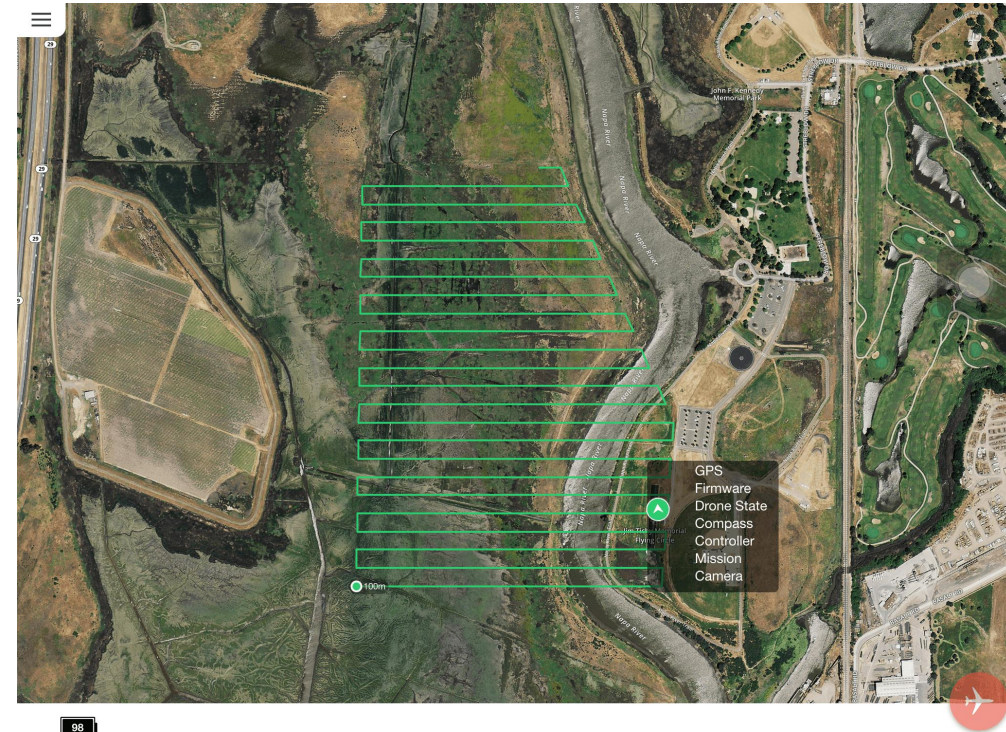
Why implement a sUAS program

- UAS has been adopted around the United States as a new platform to take cutting edge flight and visual technology and integrate into daily operations by local and state agencies to support and gain advanced real-time situational awareness.

- Purchase and operating costs versus the cost of fixed wing or rotary aircraft operations is much less.

- Safety of County personnel and the public.

- Live high definition video and photographic capability with post flight analysis on site.

- UAS can be tasked quickly, and re-tasked as needed. Coordination between the Incident Commander and the UAS team is direct/face-to-face.

- Provide an enhanced level of documentation for use in recovery reimbursement efforts.

- UAS is a force multiplier for existing resources.

sUAS – Small Unmanned Aircraft Systems

- UAS Program workgroup formed in May 2017
  - Focus: How to effectively and safely implement a sUAS program in Fairfax County.
  - Membership: Emergency Management, County Attorney, Risk Management, Public Affairs, Park Authority, Fire & Rescue, Police (Dive team and Search and Rescue), Sheriff's Office and the Urban Search and Rescue Team (VA-TF1).
  - Best practices
  - Site visits / Conference:
    - Federal Aviation Administration Potomac Terminal Radar Approach Control (Potomac TRACON)
    - Existing regional programs (Loudoun, Stafford County)
    - Dulles Airport Operations
    - FAA Symposium
    - Virginia Department of Emergency Management Workshop
    - FAA Airspace management program

Program Elements

- Standard Operating Procedures
- Operator training and certification – Part 107
- Flight and Maintenance logs
- Transparency
- Data Management
- Privacy Protection
- Legislation Review / Police Department Use
  - Va. Code Ann. §19.2-60.1 (2015). This section provides that a local government agency having jurisdiction over criminal law enforcement or regulatory violations may not use an unmanned aircraft system except during the execution of a search warrant or an administrative or inspection warrant, unless certain exceptions apply
- Public information
  - Web presence
  - Fairfax Alerts

Upon Approval – Next Steps

- Program Launch – May 1
- Policy and procedure development
- Purchase equipment
- Flight training and proficiency
- Website development
- Complete federal paperwork – Certificate of Authorization (COA)
- Seek state grant funding for additional equipment
- Public / Media Awareness

Public / Media Awareness

- Media event (program overview, talk with officials, equipment)
- Fairfax Alerts sUAS group for notifications
- County web page for sUAS (video clips, equipment information, Q&A)
- UAS Summit – ½ day
  - Board Auditorium
  - Focus on public and commercial users
  - Presentations by County officials, FAA, airport operations
  - Training, certifications
  - Places to fly (Park Authority, airspace restrictions)