2013 Aerial Surveillance Project

Persistent Surveillance Systems
• Tech Town is designed to support the application, commercialization, and convergence of cutting-edge technologies

• Creation of a national sensor test bed for surveillance: **Trusted Situational Awareness**
Why is it important?

- Top 7 DOD Priority
- Can be utilized to prevent and minimize acts of terrorism, crime and murder
- Improve operational effectiveness
- Global Demand
Supporting Law Enforcement

- Technological advancements help police departments maintain its public safety mission with reduced resources

Enhances identification and interruption of illegal activity while providing valuable forensic intelligence
PILOT FLIGHT DURING SUMMER
2012
DPD Pilot Project: Summer 2012

- Pilot operation was conducted from Jun. 21 – Jun. 29

- PSS flights occurred during daylight hours and were centered over Sinclair Community College
  - Imagery transmitted to a fixed location at Sinclair

- DPD selected 18 incidents for aerial surveillance
  - A detailed report of two incidents was completed during post-operational analysis
    - Burglary In-Progress at 530 Leo St.
    - Robbery Spree involving multiple commercial locations
• Report of Burglary In-Progress at 530 Leo St.
  • Suspect tracked from the burglary location to another location a few miles away. Officers were directed to that location and confirmed the vehicle and the suspect.

• This event was solved in real-time

• The following is actual imagery from the event
Activity is observed that looks like goods being loaded in back of truck at 11:43:07.
Officer returns to scene, retrieves witness, goes to suspect’s location where witness positively IDs vehicle & suspect.

Location of Burglary

Location where moving truck brought stolen items
• Robbery Spree involving three commercial locations on the same day (Book Store, Subway, and Family Dollar)

• Analysts were able to track the primary suspect to all of these locations as well as to a Clark gas station prior to the robberies.

• The following is actual imagery from the event
Suspect observed running from Subway after attempted robbery
Suspect tracked to all robbery locations and possible area of residence.
• Lessons learned during test operation:
  • Operational priorities must be decided in advance
  • Imagery analysts will require some training by system users
  • Flight times should correspond with identified crime patterns or public safety vulnerabilities

• Opportunities for crime reduction / public safety:
  • System is ideal for obtaining investigative information on crime sprees
  • Increase solvability of crimes if occur during operational flight hours
  • Excellent support of live operations involving large disturbances, SWAT operations, or warrant service
PATTERN ALERT

Burglary & B&E Sector 506, 508

Focus Hours

<table>
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<tr>
<th>Start</th>
<th>Stop</th>
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<tbody>
<tr>
<td>1200</td>
<td>2300</td>
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Focus Dates

<table>
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<tr>
<th>Start</th>
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<tbody>
<tr>
<td>11/17</td>
<td>12/5</td>
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Pattern: Since 11/17/12, there have been (8) Burglaries and (1) B&E, most occurring along Deeds Ave and Maryland Ave.

1. Keep an eye out for suspects
2. If a suspect is located, contact EPOD detectives
3. FIC’s are always appreciated as they give us an idea who hangs out in the area and at what times.

<table>
<thead>
<tr>
<th>Crime</th>
<th>Date</th>
<th>Time</th>
<th>Address</th>
<th>Incident#</th>
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Serial robber attempted to rob 3 different stores in Dayton. #A: At 1517 hours he went to the Annex Book Store @ 429 E. Fifth St. Told clerk to get away from register, she pressed alarm button he fled out back door. D#1206280216. #B At 1527 same suspect entered SUBWAY @ 2731 E. Third St. displayed a yellow utility knife and demanded cash. The owner pulled his gun out and shot into the ground, suspect fled out the rear door. D#120628-0218. #C: At 1936 hours, same suspect entered the FAMILY DOLLAR @ 745 Troy St. whispered to clerk that he wanted the money he has a gun. Clerk told robber I can’t understand what you said told robber I’ll get the manager, suspect immediately fled. D#120628-0339.

- Green Plain T-Shirt, Writing on Front, Dk. Gray Cammo Shorts, Blk/White Tennis Shoes
- Shoulder Length Sandy Blonde Hair, Mustache
- Displayed an orange box cutter, or implied he had a gun
• Highly mobile system allows deployment across a large geographical area

• Integration with:
  • Dispatch records (CAD)
  • Arrest Records
  • Warrants
  • Field Interview Contacts
  • Crime mapping & analysis tools

• Enables surveillance to monitor crime patterns as they emerge
Questions?