Public Safety Drones: A Global Perspective

Chief Charles L. Werner, (Emeritus-Ret.)
Director, DRONERESPONDERS Public Safety Alliance
DRONERESPONDERS.org
COVID-19 Missions

Applications of Drones During Covid-19 Pandemic

- Drone Delivery and Spraying
  - Delivery of Medical or Essential Supplies
  - Spraying Disinfectants

- Security and Surveillance
  - Preventing Theft & Unlawful Activities
  - Communication Through Speakers
  - Improving Situational Awareness

- Crowd Monitoring
  - Conducting Headcount
  - Social Distancing
  - Lockdown/Curfew Enforcement
  - Body Temperature Scanning
Training Standardization Initiative


NIST Standard Test Methods for Small Unmanned Aircraft Systems (Practical Proficiency)
SPRING 2020
PUBLIC SAFETY UAS SURVEY RESULTS

Presented by Christopher Todd CEM, FPEM and Chief Charles Werner (Ret.)
How Long Team Operational?

- Exploratory phase, have ...
- Less than 1 year
- 1 year
- 2 years
- 3 or more years
Mission Types Flown to Date

<table>
<thead>
<tr>
<th>Mission Type</th>
<th>Percentage</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crime Scene Investigation / Forensic Analysis</td>
<td>47.98%</td>
<td>119</td>
</tr>
<tr>
<td>COVID-19 Support</td>
<td>23.39%</td>
<td>58</td>
</tr>
<tr>
<td>Damage Assessment</td>
<td>45.97%</td>
<td>114</td>
</tr>
<tr>
<td>Incident Command and Control (Live Streaming)</td>
<td>52.42%</td>
<td>130</td>
</tr>
<tr>
<td>Hazardous Materials (HAZMAT) Response</td>
<td>20.97%</td>
<td>52</td>
</tr>
<tr>
<td>Mapping (non-forensic related)</td>
<td>45.97%</td>
<td>114</td>
</tr>
<tr>
<td>Public Information</td>
<td>41.13%</td>
<td>102</td>
</tr>
<tr>
<td>Target Search (including Search and Rescue)</td>
<td>56.05%</td>
<td>139</td>
</tr>
<tr>
<td>Security Overwatch (Surveillance)</td>
<td>41.53%</td>
<td>103</td>
</tr>
<tr>
<td>Structure Fire Response</td>
<td>39.52%</td>
<td>98</td>
</tr>
<tr>
<td>Special Event Planning</td>
<td>32.66%</td>
<td>81</td>
</tr>
<tr>
<td>SWAT-related</td>
<td>36.69%</td>
<td>91</td>
</tr>
<tr>
<td>Swift Water Rescue</td>
<td>12.10%</td>
<td>30</td>
</tr>
<tr>
<td>Training / Exercises</td>
<td>82.26%</td>
<td>204</td>
</tr>
<tr>
<td>Transportation of Cargo / Equipment</td>
<td>2.42%</td>
<td>6</td>
</tr>
<tr>
<td>Wildfire Response</td>
<td>18.95%</td>
<td>47</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>14.92%</td>
<td>37</td>
</tr>
</tbody>
</table>

Total Respondents: 248
Number of Remote Pilots

- 1-2
- 3-5
- 6-9
- 10-15
- More than 15

AIRT-DRONERESPONDERS Spring 2020 Research Study Report
https://www.droneresponders.org/research
State of Public Safety Drone Programs 2020

- Drone Programs are more mature
- Flying more missions and more types of missions
  - Increase types of aircraft
  - Increase types of payloads
- Increase in number of remote pilots
- **Drones have become Mission Critical**
How Drones Make a Difference in Public Safety

- Safety – Civilians & Responders
- Operational Effectiveness
- Situational Awareness
- Disaster Recovery

AIRT-DRONERESPONDERS Spring 2020 Research Study Report
https://www.droneresponders.org/research
Guidelines & Considerations for Implementing a Public Safety Drone Program

Available as a downloadable document
USE CASE VIDEOS
Please register on the website (it’s FREE)

JOIN and access the largest online collection of Public Safety UAS documents (SOPs, Best Practices, Lessons Learned, Training Info and more)

droneresponders.org
Contact Information

Chief Charles L. Werner (Emeritus - Ret.)
Director, DRONERESPONDERS
Charles@DRONERESPONDERS.org

Mobile: 434.825.5402