Chula Vista Police Department
Drone as First Responder (DFR)

Integrating UAS Air Support into Routine Operations

Speaker: Sergeant Dustin Bruzee
UAS / DFR Supervisor
Chula Vista Police Department
Chula Vista, California

- Suburb of San Diego
- 2nd largest City in San Diego County
- 285,511 population
- 52 Square Miles
- 281 sworn officers
- No helicopter unit
- Class G Airspace
Deployment Methods:

- Tactical
- Indoor
- Mapping & Scene Diagramming
- Nesting (DFR)
Drone as First Responder (DFR)
IN THE BEGINNING...

- October 2017, President Trump signed a directive to establish the UAS IPP
- May 2018, Chula Vista Police was selected as a member of 10 UAS testing sites nationally
- October 2018, the Chula Vista Police launched first DFR mission
San Diego IPP Partners
PROGRESS

2018

▪ 1 launch location (CVPD HQ’s)
▪ Limited availability
▪ PIC’s staffed rooftop
▪ 1 Mile line-of-sight
▪ Video livestreamed via CAPE
▪ Flight data manually tracked
PROGRESS

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Today

- City-wide (4 locations) 7-days / week
- Pilots “teleoperate”
- Flying Lion provides PIC’s
- 3 Miles BVLOS Waiver
- 1-to-2 Waiver
- Video livestreamed via CAPE
- Flight data managed by AirData
**DFR IS PROACTIVE**

- Drone prepared to respond **immediately** to any emergency within geofenced flight area
- Drone operated remotely by Teleoperator (an experienced sworn officer)
- Flight Safety ensured by automation, geofencing and a Visual Observers (V.O.) in the field
- Teleoperator can choose launch site nearest to incident
- Teleoperator can assist with coordination via radio
According to surveys conducted by the Police Executive Research Forum, the most significant concern about drones expressed by community members is that of privacy.

Agencies should make strong efforts to educate the community about drone policies, especially those involving the use of cameras.
CHULA VISTA POLICE DEPARTMENT - DRONE AS FIRST RESPONDER (DFR)

TOP 10 CALLS RESPONDED WITH DFR ASSISTANCE

DFR ACTIVITY BY THE NUMBERS

<table>
<thead>
<tr>
<th>Description</th>
<th>Number</th>
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</thead>
<tbody>
<tr>
<td>TOTAL CALLS RESPONDED TO</td>
<td>10718</td>
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<tr>
<td>DFR ASSISTED ARRESTS</td>
<td>1240</td>
</tr>
<tr>
<td>DFR DEPLOYMENT AVOIDED</td>
<td>2708</td>
</tr>
<tr>
<td>DISPATCHING A PATROL UNIT</td>
<td></td>
</tr>
<tr>
<td>DFR FIRST ON SCENE COUNT</td>
<td>5951</td>
</tr>
</tbody>
</table>

AVG RESPONSE TIMES - FIRST ON SCENE (IN SECONDS) *

100.51

AVG RESPONSE TIMES - ALL CALLS (IN SECONDS) *

164.53

CHULA VISTA POLICE DEPARTMENT
DFR PROGRAM FACTS

* Selected as part of the IPP on October 2018
* First program in the nation using Drones as a First Responder (DFR). See FAA site
* Current status: DFR Pilot Program currently based from CVPD HQ with limited flight range of about 1 mile radius
* Common use of drones in Chula Vista: Drones as first responders, documenting crime and accident scenes, searching for missing or wanted persons, fires, and evaluating damage after a major incident or natural disasters
* Program envisioned December 2015

* Response times from dispatch to arrival.

EARLIEST RESPONSE DATE/TIME  10/22/2018 7:23:18 AM

LATEST RESPONSE DATE/TIME  4/20/2022 6:40:21 PM
CHULA VISTA POLICE DEPARTMENT - DRONE AS FIRST RESPONDER (DFR)

TOP 10 CALLS RESPONDED WITH DFR ASSISTANCE

Call Type
- Disturbance - Person
- Domestic Violence
- Traffic Collision
- Psychological Evaluation
- Assault
- Check a Person’s Well Being
- Person Down
- Suspicious Person
- Unknown Problem
- Check The Area

DFR ACTIVITY BY THE NUMBERS

- TOTAL CALLS RESPONDED TO 10,718
- DFR ASSISTED ARRESTS 1,240
- DFR DEPLOYMENT AVOIDED 2,708
- DISPATCHING A PATROL UNIT 5,951
- AVG RESPONSE TIMES - FIRST ON SCENE (IN SECONDS) * 100.51
- AVG RESPONSE TIMES - ALL CALLS (IN SECONDS) * 164.53

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average response times

Priority 1 and Priority 2 Average Response Times - in minutes
UAS vs 1st Patrol Unit on scene (same incident)
in minutes comparison*

* Response times are measured from the time the call is received to the time units arrived.
What DFR Does....

▪ Provides real-time, valuable intel to responding first responders
▪ De-Escalates rapidly evolving situations
▪ Confirms, dispels, or expands on the first information received
▪ Reallocates valuable resources
▪ Provides a “birds-eye view” to supervisors and command staff
▪ Makes our first responders and community safer!!!
What DFR Doesn’t do....

- Conduct random surveillance on the community
- Will *never* be weaponized
- Automated license plate readings
- Facial Recognition
- Put the community at risk
- Cost too much
- Share information with China or other outside governments
Closing the Gap

- First Responders can hear 911 call in “real-time”
- First Responders can hear updates while driving to the call
- Call location immediately identified
- First Responders can hear information not entered into CAD by the 911 call taker
DRONE AS FIRST RESPONDER
FLYING LION - A TRUSTED PARTNER

• Public/Private Partnership that manages professional pilots at a significantly reduced cost
• DFR support since April 2020
• Flying Lion also provides:
  • FAA consulting
  • UAS equipment
  • Software testing
  • Part 107, DFR & Flight Training

Barry Brennan
bb@flyinglioninc.com
(310)722-1550
Chula Vista in the Media
Chula Vista Drone Program Lauded For Accountability, Transparency

November 5, 2021  Smart Cities Connect  Uncategorized
Chula Vista PD Drone Program Uses AirData to Provide Full Transparency to Community

by DRONELIFE Staff Writer Ian M. Crosby

Chula Vista PD Drone Program Enlists AirData to Provide Community Transparency

Chula Vista Police Department’s nationally recognized drone program has enlisted the aid of drone fleet management industry leader AirData UAV in order to help provide drone flight transparency to the public. AirData now enables Chula Vista residents to view and understand the exact location, flight path, and purpose behind each police drone deployment.
Police in Chula Vista, California, are raising some privacy concerns from residents after getting an FAA clearance to surveil the city by using a drone. NBC News’ Simone Boyle reports.
Chula Vista in the Media

How Chula Vista became one of the most surveilled cities in the country

By Amita Sharma / Investigative Reporter
Contributors: Roland Lizarondo
Published December 5, 2021 at 8:24 PM PST

Police in Chula Vista, California, are raising some alarm over their use of drones. NBC News' Simone Boyce reports.

Chula Vista Police Department's newly recognized drone program has the aid of drone fleet management industry leader AirData to provide community oversight.

NELIFE Staff Writer Ian M.

The public. AirData now enables location, flight path, and purpose.
Police Drone Footage Is Off Limits – Unless This Legal Challenge Takes Flight

by Sofia Mejias Pascoe  May 5, 2021

A drone sits idle at the rooftop of the Chula Vista Police headquarters. / Photo by Adriana Hedliz
Chula Vista Police Drone as First Responder Program expands citywide
Posted: March 23, 2021 by KUSI Newsroom
What’s Next?
What’s Next?

▪ Stronger US drone presence
▪ Fully automated flights and self-docking/charging drones
▪ Remove the need for a PIC
▪ Drones integrated into all emergency responses
▪ Regulations keep pace with technology
TAKE HOME MESSAGE

▪ DFR de-escalates

▪ Transparency

▪ DFR will make EVERYONE safer
Thank You

Sergeant Dustin Bruzee

619-476-2461

dbruzee@chulavistapd.org