

## RESPOND WITH A NEW POINT OF VIEW

CAPE DRONE VIDEO & FLIGHT CONTROL SOFTWARE





# MAKE LIFE-SAVING DECISIONS WITH ACTIONABLE INTELLIGENCE

In emergency situations, every second counts. That's why public safety agencies worldwide are incorporating drone technology into their standard operating procedures. With increased visibility and real-time actionable intelligence, drones provide unparalleled insight and situational awareness. Whether it's evaluating an active crime scene or fire event or searching for missing persons, drones help teams make informed decisions and ultimately save lives.

In addition to drone hardware, investing in purpose-built software to support your drone operations strategy is necessary to realize the full potential of this technology. Agencies have different goals, budgets and team bandwidth that determine which type of drone operation is right for them, from tactical to drone as first responder (DFR). Each approach offers valuable benefits such as real-time aerial intelligence, remote viewing of incidents and faster response times.

By choosing the right drone operation and the software to support it, agencies can improve their response times and achieve success in critical situations.

### 1,500+ AGENCIES

Over 1,500 public safety agencies in the U.S. have acquired drones.<sup>1</sup>

## SITUATIONS WHEN DRONES CAN HELP

- De-escalation
- Search and rescue
- Traffic crash site reconstruction
- Maintaining visual on suspect
- Fighting wildfires
- SWAT operations
- Crisis and hostage situations
- City mapping
- Event safety and security
- Disaster response and relief
- Hazmat incidents
- Tactical rapid deployment
- Wildlife management
- Border patrol
- Traffic management and monitoring
- Crime scene photography and reconstruction
- Firefighting risk assessment
- Monitoring and fighting wildfires

# VIDEO LIVESTREAM AND FLIGHT CONTROL SOFTWARE

CAPE is a subscription-based software that enables livestreaming video, local and remote piloting and evidence-grade video management. Integrating CAPE-equipped drones into daily workflows allows agencies to respond to and de-escalate active situations faster, make informed decisions on scene and even clear calls when assistance isn't needed, saving valuable time and resources.



## GAIN SITUATIONAL AWARENESS

Equip your team with real-time, high-quality video that provides aerial visibility and enables faster, more informed decision making, leading to better outcomes. If necessary, remotely operate drones over a secure internet connection, with a second individual managing drone operations so you can capture the intelligence needed to assist the response while letting officers on the ground focus on the developing situation.

## EQUIP PROSECUTORS WITH QUALITY EVIDENCE

Capture high-quality images and videos for use as evidence in court. Content from a drone's SD card is automatically uploaded and stored in a stored in our secure cloud. This immediate upload eliminates the need to remove and inventory SD cards after each flight. By utilizing this advanced technology, you can streamline your evidence-collection process, enhance the accuracy of your cases, and achieve successful legal outcomes.

## LEVERAGE DRONES AS FIRST RESPONDERS

By integrating drones into emergency response workflows, your agency can effectively leverage drones as force multipliers, providing an additional layer of situational awareness and intelligence gathering that can help to enhance officer safety, reduce response times and improve the overall effectiveness of emergency response operations. In some cases, drones can even clear calls without the need to dispatch officers, thereby reducing the risk to personnel and saving valuable resources.

## THE RIGHT SUPPORT FOR ALL **DRONE OPERATIONS**

Whether you're just getting started with your first tactical drone or pursuing an advanced DFR program, CAPE has the right tools and features to match your unique needs.

#### **TACTICAL OPERATIONS**

Drones are a must-have for tactical operations, often carried in a car's trunk, a saddlebag or a backpack for rapid deployment on scene. In these situations, drones provide real-time, high-quality video that's streamed to responding officers' phones or to watch commanders in the command center, giving complete aerial visibility for faster, more informed decisions.

#### **GAIN SITUATIONAL AWARENESS FASTER**



#### **LAUNCH ON SCENE**

Launch drones on scene and maintain pilot status at all times.



#### **STAY IN CONTROL**

Safely pilot drones with a tablet or smart controller using preflight safety checklist, geofences and obstacle avoidance.



#### **LIVESTREAM VIDEO**

Securely livestream HD drone video from the scene to the Android or iOS devices of responding teams and multiple agencies.

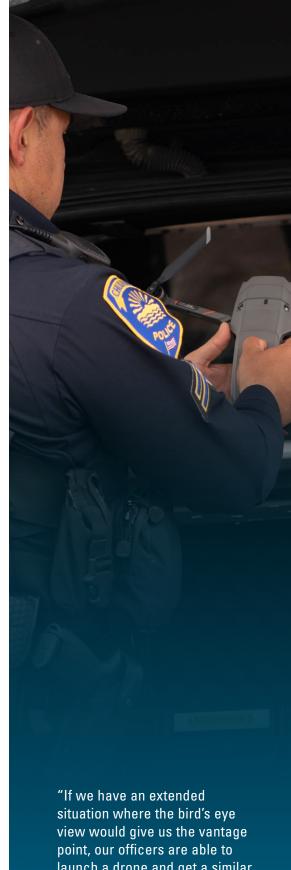


#### **CAPTURE EVIDENCE**

Store drone video and images in our secure cloud for easy management and transparency.

#### **GET STARTED TODAY: STREAM FROM ANY DRONE**

CAPE's Stream From any Drone capability livestreams real-time HD video from the drone of your choice. Livestreamed video can be securely viewed simultaneously by multiple responding teams and visiting agencies, located anywhere, from an internet-enabled device. Whether supplementing a DFR operation with tactical drones or investing in a drone with unique capabilities, Stream from any Drone provides what you need to securely livestream HD video to your team for real-time situational awareness — no matter what drone you choose.



launch a drone and get a similar view that a helicopter would provide."

- Lieutenant Todd Withers, **Beverly Hills Police Department** 

#### **TELEPRESENCE OPERATIONS**

Remote telepresence technology is revolutionizing field-launched drone operations. By dividing drone responsibility between an on-scene pilot in command and a remote teleoperator, this advanced technology offers precise control of the drone's movements and camera angles while providing expert eyes on the scene. Remote telepresence is particularly useful for missions involving fleeing suspects and search and rescue operations, where the teleoperator can monitor the camera constantly, pan in different directions, and capture vital evidence.

#### REMOTE ASSISTANCE WHEN YOU NEED IT



#### **LAUNCH ON SCENE**

Your agency receives a call for emergency service.



#### HAND OFF CONTROL

Pilot hands off control to remote teleoperator while keeping drone within their line of sight.



#### **TELEOPERATOR IN CONTROL**

Remote teleoperator controls the drone from anywhere with a keyboard, mouse and CAPE Command desktop app while capturing crucial information.



#### **LIVESTREAM VIDEO**

Securely livestream HD drone video from the scene to the Android or iOS devices of responding teams and multiple agencies.



#### **CAPTURE EVIDENCE**

Store drone video and images in our secure cloud for easy management and transparency.

#### **CAPE EXCLUSIVE: TELEPRESENCE LINE OF SIGHT**

CAPE's Telepresence Line of Sight (TLOS) mode, an industry first invented by Motorola Solutions, integrates drones into daily operations right away while your agency develops a complete DFR program. With TLOS mode, the pilot in command can launch a drone from anywhere without a beyond visual line of sight (BVLOS) certification and give the command center — located anywhere — control as long as the drone remains within the pilot's line of sight.



"Aerial intelligence provided by drone livestream gives us more latitude to really form a plan rather than react to an exigent circumstance that requires an immediate response."

- Officer Peter Lashley, Santa Monica Police Department

#### **DRONE AS FIRST RESPONDER OPERATIONS**

Drone as first responder (DFR) requires a prepositioned pilot who launches the drone as soon as an emergency call is received. The drone quickly takes flight and the remote teleoperator takes control and guides it to the scene using a mouse, keyboard and CAPE Command desktop app, often beating ground-based units to the incident location by minutes. The teleoperator can communicate critical information in real time, and responding officers can stream the drone's video from their smartphones.

By integrating DFR drone technology into emergency response workflows, command centers can identify and dispatch resources more effectively, even clearing calls without dispatching services.

#### LEVERAGE DRONES AS FIRST RESPONDERS



#### RECEIVE CALL FOR SERVICE

Your agency receives a call for emergency service.



#### **LAUNCH PREPOSITIONED DRONE**

Launch drones from strategic locations within your community, and hand off control to a teleoperator.



#### **REMOTELY OPERATE**

Remote teleoperator controls the drone — **beyond pilot's visual line of sight** — from any location with a keyboard, mouse and CAPE Command desktop app.



#### **LIVESTREAM VIDEO**

Securely livestream HD drone video from the scene - typically well in advance of responding ground units - to the Android or iOS devices of responding teams and multiple agencies.



#### **CAPTURE EVIDENCE**

Store drone video and images in our secure cloud for easy management and transparency.

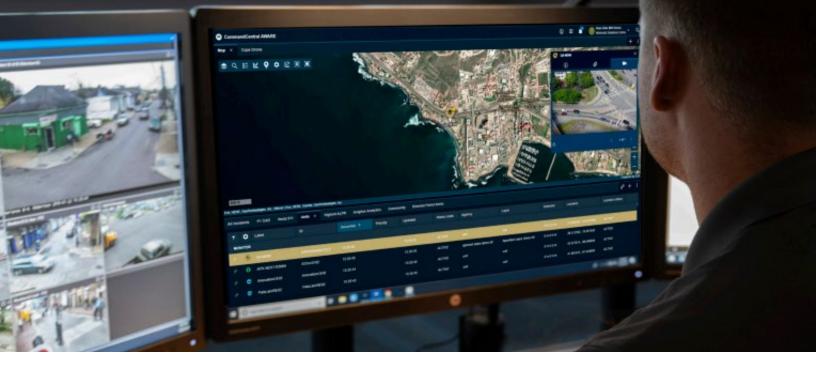
#### SIMPLIFY FAA AUTHORIZATION

Simplify the FAA certification process for DFR operations and ensure compliance with built-in safeguards, including obstacle avoidance and safety geofences that easily handle complex flights with operations in restricted airspaces. Many CAPE customers have successfully received full FAA approval for DFR operations by incorporating these safeguards into their Risk & Mitigation and Emergency Procedure policies.



"Drone as first responder is a game changer for law enforcement. We can quickly respond to a call, gather crucial information, ensure the right resources are responding and provide real-time information to officers before they arrive on scene."

- Captain Miriam Foxx, Chula Vista Police Department



# TAKE SITUATIONAL AWARENESS TO NEW HEIGHTS WITH COMMANDCENTRAL AWARE

By combining the power of CAPE with CommandCentral Aware, your agency can visualize drone locations and access livestreams alongside other critical resources and incident data on a single map. Additionally, from within CommandCentral Aware, video from CAPE-equipped drones can be supplemented by real-time feeds from a mix of fixed video systems as well as body-worn cameras on officers. And when critical insights are uncovered, they can be immediately shared directly from within CommandCentral Aware.

#### **EXTEND ACCESS TO REAL-TIME DRONE VIDEO**

Magnify the impact of your drone video by livestreaming into an integrated operational view of resources, events and video — available across your entire agency. Provide virtual reinforcement from the Provide virtual reinforcement from the public safety answering point (PSAP), real-time crime center (RTCC) or incident command by seeing what your officers can't.

#### **GIVE YOUR ANALYSTS NEW EYES IN THE SKY**

Equip your analysts with a new source of video that supplements fixed, body-worn and in-car camera feeds. This comprehensive perspective of an incident enables critical insights that can be communicated to officers on the ground.

#### CONDUCT COMPREHENSIVE INCIDENT REVIEW

Review your incident response through a complete lens that includes drone location, mapped alerts and other resource movements as well as fixed video. Replay the incident as it unfolded for investigation, training and future workflow enhancement.

#### **CAPE + COMMANDCENTRAL AWARE**



#### TRACK DRONE LOCATION

Track live drone location on CommandCentral Aware map.



#### **VIEW DRONE LIVESTREAM**

View drone details and open drone video livestream.



#### TRIGGER WORKFLOWS

Trigger workflows from drone events such as takeoff.

## **HOW IT WORKS**

CAPE is powered by three software applications designed to safely pilot a local drone, take command of an inflight drone from anywhere and watch livestreaming video.



#### **CAPE PILOT**

Pilots in the field can conduct drone operations with safety and confidence.



#### **CAPE WATCH**

Enables viewing in real time from any mobile device for up to 50 viewers and multiple agencies.

### **REQUIRED FOR USE**

#### **DRONE HARDWARE**

CAPE supports a growing list of Autel, DJI and Parrot drones allowing your agency to select the hardware that best fits your unique needs and budget.

Visit motorolasolutions.com/cape for the most recent list of supported hardware and firmware.

#### **MOBILE APPLICATIONS**

#### **Apple Devices Android Devices PILOT APP Autel Smart Controller** iPad Pro 2019 (2nd Ultimate control of drone with manual Gen)+ DJI Smart Controller override iPad Air 2020 (4th DJI Smart Controller Gen)+ Geofencing for Enterprise obstacle avoidance iPhone 10+ DJI RC Pro (livestream/free flight Automatic return to DJI RC Plus only) home when needed Parrot Smart Automatic flight data Controller upload to cloud

### **Apple Devices**

#### **Android Devices**

#### **WATCH APP**

- View live video from anywhere with subsecond latency
- Receive alerts regarding live flights
- View drone location updates
- Securely manage viewers and livestream access

- Any iOS device running v15.0+
- Any Android device running v9.0+

# HOW IT WORKS

CAPE is powered by three software applications designed to safely pilot a local drone, take command of an inflight drone from anywhere and watch livestreaming video.



**CAPE COMMAND** 

Handover user control to an expert in your command center.

### **REQUIRED FOR USE**

### COMMAND CENTER APPLICATIONS

#### **COMMAND APP**

- Remote operation of drone, cameras and sensors
- Predefine locations and routes
- Stream and manage video
- Manage fleet and user information
- Downloading the CAPE Command desktop app is recommended for use.
- Any keyboard or mouse compatible with your computer

### PROVIDE PUBLIC TRANSPARENCY

#### FLIGHT HISTORY WEB PAGE

Building trust and gaining community support for your drone program is top priority. That's why we offer all CAPE customers the opportunity to share a public-facing Flight History web page. Providing access to your CAPE Flight History page from your agency's website allows residents to see precisely where drones deployed and the reasons behind it. A concerned community member can quickly review flight paths, dates, durations and times, providing a transparent view of your agency's day-to-day UAS operations.

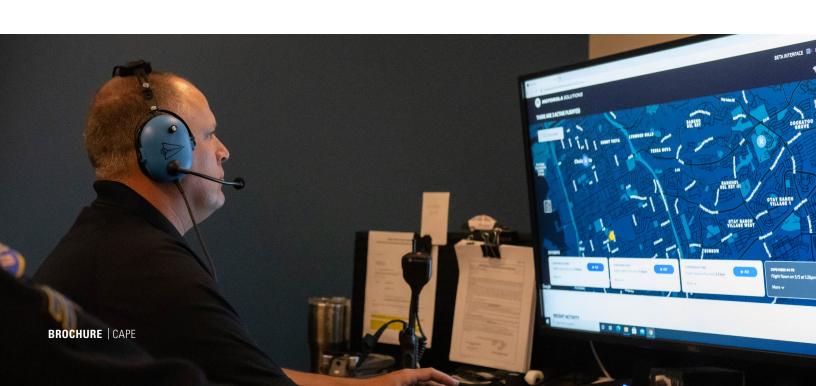
You have full control over whether or not to share the Flight History page per your operations. Additionally, you can personalize the page with your agency logo, and determine the duration of flight availability for viewing, as well as the delay before flights are displayed.



# SCALABLE SUBSCRIPTIONS DESIGNED FOR ANY OPERATION

CAPE offers scalable software subscriptions that align with your agency's objectives — from tactical to DFR. With our walk-run-fly approach, you can start small and build up to more advanced operations that take your drone program to new heights.

	Tactical Operations		Remote Operations	DFR Operations
	STARTER	STANDARD	PLUS	PREMIUM
Basic user and equipment management	✓	<b>√</b>	<b>√</b>	<b>✓</b>
Secure, cloud-based drone video management	✓	<b>✓</b>	$\checkmark$	<b>✓</b>
Livestream access management	✓	<b>✓</b>	✓	<b>✓</b>
HD video livestream from any drone to anywhere	✓	<b>√</b>	<b>√</b>	<b>√</b>
On-scene drone pilot flight control		<b>✓</b>	✓	✓
Built-in pre-flight safety checklist		<b>✓</b>	$\checkmark$	<b>✓</b>
Predefined or ad hoc geofences		<b>✓</b>	✓	✓
3D obstacle and collision avoidance		<b>✓</b>	$\checkmark$	✓
Multi-waypoint mission planning		<b>✓</b>	✓	<b>✓</b>
Visual line of sight telepresence (<400m)			$\checkmark$	<b>✓</b>
Beyond visual line of sight telepresence (>400m)				<b>√</b>



# CONSULTATION AND DEPLOYMENT SERVICES

Motorola Solutions has partnered with leading public safety DFR consultants to help you launch and maximize the potential of your drone program with confidence. Our professional consultation services cover every aspect of your program, from creating standard operating procedures (SOPs) to meeting FAA compliance and engaging with your community. With our experienced team, you can achieve your operational goals and ensure the success of your drone program.

Together, we have helped law enforcement agencies throughout the U.S. successfully launch a DFR program. Let us guide you through every step of your agency's program and ensure you launch with success.

### Consultation services are tailored to your agency's specific needs and include:

- DFR SOP development
- FAA COA and waiver filing
- Site evaluation, networking and EMI testing
- DFR pilot and teleoperator training
- Installation and configuration
- Geofence and obstacle avoidance creation
- 30-day post-go-live onsite and remote support

#### **30-DAY PAID DFR PILOT PROGRAM**

This four-week pilot program is designed to take the guesswork out of launching a successful DFR program and is an ideal way to test and collect program data specific to your needs. We'll run a true DFR program at your agency with experienced P107 pilots on site. After the four weeks, you will have a clear understanding of what it takes to run a successful DFR operation at your agency, giving you the confidence to move forward with your program.





<sup>&</sup>lt;sup>1</sup> https://dronecenter.bard.edu/files/2020/04/CSD-Public-Safety-Drones-3rd-edition.pdf

Learn more about CAPE drone software at www.motorolasolutions.com/cape



#### Book Your Flight Today! Ready to see CAPE in action? Scan the QR code and sign up to fly a drone remotely as a Teleoperator from your own computer.



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