

## 2024 Sole Source Letter for Flock Safety® Public Safety Solutions

### Flock Safety® ALPR Cameras

Flock Safety® is the sole manufacturer, developer, and distributor of Flock Safety Falcon®, Flock Safety Falcon® LR, Flock Safety Falcon® SR, Flock Safety Falcon® Flex, Flock Safety Sparrow®, and Flock Safety Wing® automated license plate recognition (“ALPR”) cameras.

#### **Flock Safety Falcon®**

- Fixed, infrastructure-free license plate recognition (“LPR”) cameras suitable for capturing two (2+) lanes of traffic simultaneously with a single camera from a vertical mass
- Includes Solar Falcon® option (next-gen platform standard range), which may cover up to three (3) lanes of traffic simultaneously

#### **Flock Safety Falcon® LR**

- Fixed, infrastructure-free long-range (“LR”) LPR, suitable for capturing three (3+) lanes of traffic simultaneously with a single camera from a vertical mass
- Includes Solar Falcon® LR option (next-gen platform LR)

#### **Flock Safety Falcon® SR**

- Fixed, infrastructure-free short-range (“SR”) LPR with solar power capability, suitable for wide angle capture (*i.e.*, parking lots or garages)

#### **Flock Safety Falcon® Flex**

- Location-flexible, infrastructure-free self-installation LPR camera with solar power option
- Ties seamlessly into the Flock Safety® ecosystem with a small and lightweight camera
- Ability to read up to 30,000 license plates and vehicle attributes on a single battery charge

#### **Flock Safety Sparrow® LPR**

- Infrastructure- and maintenance-free LPR for 24/7 neighborhood security

#### **Flock Safety Wing® LPR**

- Integrates third-party LPR and video cameras into FlockOS® utilizing existing camera infrastructures

The Flock Safety® ALPR cameras listed above are the only Law Enforcement Grade ALPR cameras to offer the following combination of proprietary features:

- **Vehicle Fingerprint Technology®**
  - Patented proprietary machine vision to analyze vehicle license plate, state recognition, and vehicle attributes such as color, type, make and objects (roof rack, bumper stickers, etc.) based on image analytics (not car registration data)

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- Machine vision to capture and identify characteristics of vehicles with a paper license plate and vehicles with the absence of a license plate
- Ability to “Save Search” based on description of vehicles using Flock’s patented Vehicle Fingerprint Technology® without the need for a license plate, and set up alerts based on vehicle description
- Only LPR provider with “Visual Search,” which can transform digital images from any source into an investigative lead by finding matching vehicles based on the vehicle attributes in the uploaded photo
- **Integrated Cloud-Software & Hardware Platform**
  - Best in class ability to capture and process up to 30,000 vehicles per day with a single camera powered exclusively by solar power
  - Wireless deployment of solar powered license plate reading cameras with integrated cellular communication weighing less than 5lbs and able to be powered solely by a solar panel of 65W or less
  - Web based footage retrieval tool with filtering capabilities such as vehicle color, vehicle type, vehicle manufacturer, partial or full license plate, state of license plate, and object detection
  - Utilizes motion trigger to start and stop recording without the need for a reflective plate
  - Motion detection allows for unique vehicle cases such as bicycle capture, ATV, motorcycle, etc.
  - On device machine processing to limit LTE bandwidth consumption
  - All images and metadata is encrypted throughout its entire lifecycle from on-device to storage in Flock’s US-based CJIS-compliant cloud
  - Covert industrial design for minimizing visual pollution
- **Transparency & Ethical Product Design**
  - One-of-a-kind “Transparency Portal,” a public-facing dashboard that details the customer’s policies, as well as automatically updates metrics from the Flock Safety® system
  - Built-in integration with National Center for Missing & Exploited Children (“NCMEC”) to receive AMBER Alerts to find missing children
  - Privacy controls to enable certain vehicles to “opt-out” of being captured
- **Integrated Audio & Gunshot Detection**
  - Ability to pair with Flock Safety Raven® audio detection device, which has natively integrated audio detection capabilities utilizing machine learning to recognize audio signatures typical of crimes in progress (e.g., gunshots)
- **Live Video Integration**
  - Ability to apply computer vision to third-party cameras using the Flock Safety Wing® LPR, transforming them into evidence capture devices using the same



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Vehicle Fingerprint® technology offered on the Flock Safety Falcon® ALPR cameras

- Flock Safety Wing® livestream integrates live stream traffic cameras, publicly or privately owned livestream security cameras into one cloud-based situational awareness dashboard to increase response time in mission-critical incidents
- Manage various government intelligence including ALPR, livestream cameras, computer-aided dispatch (“CAD”), automatic vehicle location (“AVL”) on Flock Safety Wing® suite

- **Situational Awareness**

- FlockOS® is the world’s first and only public safety operating system compatible with Flock Safety® LPR video cameras, including Flock Safety Condor™ live streaming fixed and Flock Safety Condor™ pan-tilt-zoom (“PTZ”) video cameras, and the Flock Safety Raven® audio detection device, while seamlessly integrating first and third-party data across video, LPR, and audio to deliver real-time intelligence and retroactive crime solving in a single-pane real-time crime center
- Ability to enhance situational awareness capacity by layering all intelligence streams onto the FlockOS® ESRI-based map
- FlockOS® features Flock Safety® unique Real-Time Routing feature that analyzes various data sources to determine where a suspect vehicle has been and its direction of travel, providing users with possible outcomes based on a confidence threshold

- **Warranty & Service**

- Lifetime maintenance and support included in subscription price
- Flock Safety® is the only fully integrated ALPR one-stop solution from production of the devices to delivery and installation
- Performance monitoring software to predict potential failures, obstructions, tilts, and other critical or minor issues

- **Partnerships**

- Flock Safety® is the only LPR provider to officially partner with Axon® to be natively and directly integrated into Evidence.com®
- Flock Safety® is the only LPR provider to be fully integrated into a dynamic network of Axon Fleet® 3 mobile ALPR cameras for patrol cars and Flock Safety’s Falcon® cameras
- Flock Safety® is the only LPR provider to officially partner with Prepared911 to distribute 911 call audio and transcripts to law enforcement agencies
- Through FlockOS®, Flock Safety® is the only LPR provider to officially partner with FirstTwo to enable clicking anywhere on a display map to display the relevant information from FirstTwo



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- Access to additional cameras purchased by Flock's HOA and private business partners, means an ever-increasing amount of cameras and data at no additional cost



## Flock Safety® Video Cameras

Flock Safety® is the sole manufacturer, developer, and distributor of the Flock Safety Condor™ video cameras and Flock Safety Wing® video integration.

### **Flock Safety Condor™ Fixed**

- Fixed, live, and record video ideal for building exteriors and city streets
- Available with AC or solar power
- Subscription-based live and recorded video solution, including hardware, cellular, installation, ongoing maintenance, and a cloud-based video management system, which allows officers to remotely view instant replay of downloadable live on-scene video with pan-tilt-zoom (“PTZ”) controls and 25X optical zoom without the need for additional camera network set-up, installation, or up-keep
- Improves safety with live and recorded video for enhanced situational awareness and case clearance

### **Flock Safety Condor™ PTZ**

- Live and recorded video with remote PTZ controls ideal for open areas such as intersections or parks
- Subscription-based live and recorded video solution, including hardware, cellular, installation, ongoing maintenance, and a cloud-based video management system, which allows officers to remotely view instant replay of downloadable live on-scene video with PTZ controls and 25X optical zoom without the need for additional camera network set-up, installation, or up-keep
- Improves safety with live and recorded video for enhanced situational awareness and case clearance
- Ability to “bundle” the Condor™ PTZ to create a multi-directional application for clear, comprehensive monitoring of urban environments like intersections and parking lots.

### **Flock Safety Wing®**

- Allows customers to easily integrate video cameras into FlockOS® for a seamless workflow
- Ability to apply computer vision to third-party cameras, transforming them into evidence capture devices using the same Vehicle Fingerprint® technology offered on the Flock Safety Falcon® automated license plate recognition (“ALPR”) cameras
- Flock Safety Wing® livestream integrates live stream traffic cameras, publicly or privately owned livestream security cameras into one cloud-based situational awareness dashboard to increase response time in mission-critical incidents
- Manage various government intelligence, including ALPR and livestream cameras, on Flock Safety Wing® suite
- Ability to access live and recorded video using Flock Safety Condor™



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The Flock Safety® video cameras listed above are the only Law Enforcement Grade video cameras to offer the following combination of proprietary features:

- **Vehicle Fingerprint Technology®**
  - Patented proprietary machine vision to analyze vehicle license plate, state recognition, and vehicle attributes such as color, type, make and objects (roof rack, bumper stickers, etc.) based on image analytics (not car registration data)
  - Machine vision to capture and identify characteristics of vehicles with a paper license plate and vehicles with the absence of a license plate
  - Ability to “Save Search” based on description of vehicles using Flock’s patented Vehicle Fingerprint Technology® without the need for a license plate, and set up alerts based on vehicle description
  - Only LPR provider with “Visual Search,” which can transform digital images from any source into an investigative lead by finding matching vehicles based on the vehicle attributes in the uploaded photo
- **Integrated Cloud-Software & Hardware Platform**
  - Best in class ability to capture and process up to 30,000 vehicles per day with a single device powered exclusively by solar power
  - Wireless deployment of solar powered license plate reading cameras with integrated cellular communication weighing less than 5lbs and able to be powered solely by a solar panel of 60W or less
  - Web based footage retrieval tool with filtering capabilities such as vehicle color, vehicle type, vehicle manufacturer, partial or full license plate, state of license plate, and object detection
  - Utilizes motion capture to start and stop recording without the need for a reflective plate
  - Motion detection allows for unique cases such as bicycle capture, ATV, motorcycle, etc.
  - On device machine processing to limit LTE bandwidth consumption
  - All images and metadata is encrypted throughout its entire lifecycle from on-device to storage in Flock’s US-based CJIS-compliant cloud
  - Covert industrial design for minimizing visual pollution
- **Transparency & Ethical Product Design**
  - One-of-a-kind “Transparency Portal,” a public-facing dashboard that details the policies in place by the purchaser, as well as automatically updated metrics from the Flock Safety® system
  - Built-in integration with National Center for Missing & Exploited Children (“NCMEC”) to receive AMBER Alerts to find missing children
  - Privacy controls to enable certain vehicles to “opt-out” of being captured
- **Integrated Audio & Gunshot Detection**





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- Ability to pair with Flock Safety Raven® audio detection device, which has natively integrated audio detection capabilities utilizing machine learning to recognize audio signatures typical of crimes in progress (e.g., gunshots)
- **Live Video Integration**
  - Ability to apply computer vision to third-party cameras using the Flock Safety Wing® LPR video camera, transforming them into evidence capture devices using the same Vehicle Fingerprint® technology offered on the Flock Safety Falcon® ALPR cameras
  - Flock Safety Wing® Livestream integrates live stream traffic cameras, publicly or privately owned livestream security cameras into one cloud-based situational awareness dashboard to increase response time in mission-critical incidents
  - Manage various government intelligence including ALPR, livestream cameras, CAD, automatic vehicle location (“AVL”) on Flock Safety Wing® suite
  - Ability to access live and recorded video using Flock Safety Condor™, a subscription video solution which allows officers to remotely view instant replay of downloadable live on-scene video with PTZ controls and 25X optical zoom without the need for additional camera network set-up, installation, or up-keep.
- **Situational Awareness**
  - FlockOS® is the world’s first and only public safety operating system compatible with Flock Safety® LPR video cameras, including Flock Safety Condor™ live streaming fixed and Flock Safety Condor™ PTZ video cameras, and the Flock Safety Raven® audio detection device, while seamlessly integrating first and third-party data across video, LPR, and audio to deliver real-time intelligence and retroactive crime solving in a single-pane real-time crime center
  - Ability to enhance situational awareness capacity by layering all intelligence streams onto the FlockOS® ESRI-based map
  - FlockOS® features Flock Safety® unique Real-Time Routing feature that analyzes various data sources to determine where a suspect vehicle has been and its’ direction of travel providing users with possible outcomes based on a confidence threshold
- **Warranty & Service**
  - Lifetime maintenance and support included in subscription price
  - Flock Safety® is the only fully integrated ALPR one-stop solution from production of the device to delivery and installation
  - Performance monitoring software to predict potential failures, obstructions, tilts, and other critical or minor issues
- **Partnerships**



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- Flock Safety® is the only LPR provider to officially partner with Axon® to be natively and directly integrated into Evidence.com®
- Flock Safety® is the only LPR provider to be fully integrated into a dynamic network of Axon Fleet® 3 mobile ALPR cameras for patrol cars and Flock Safety's Falcon® cameras
- Flock Safety® is the only LPR provider to officially partner with Prepared911 to distribute 911 call audio and transcripts to law enforcement agencies
- Through FlockOS, Flock Safety® is the only LPR provider to officially partner with FirstTwo to enable clicking anywhere on a display map to display the relevant information from FirstTwo
- Access to additional cameras purchased by Flock's HOA and private business partners, means an ever-increasing amount of cameras and data at no additional cost





## **Flock Safety® Audio Detection Device**

Flock Safety® is the sole manufacturer, developer, and distributor of the Flock Safety Raven® audio detection device.

**The Flock Safety Raven® is the only Law Enforcement Grade audio detection device to offer the following combination of proprietary features:**

- Proprietary machine learning to analyze audio crime indicators such as gunshot detection
- Natively integrated audio and gunshot detection capabilities
- Covert industrial design for minimizing visual pollution
- Lifetime maintenance and support included in subscription price
- Wireless deployment with integrated cellular communication and able to be powered solely by a solar panel of 60W or less
- On device machine processing to limit LTE bandwidth consumption
- All images and metadata is encrypted throughout its entire lifecycle from on-device to storage in Flock's US-based CJIS-compliant cloud
- Direct integration with Axon Evidence.com® (Flock is the only Axon® LPR integration partner)
- Share data across Law Enforcement Departments on a national level
- Performance monitoring software to predict potential failures and critical or minor issues
- Flock Safety® is the only fully integrated ALPR and audio detection one-stop solution from production of the audio devices or cameras to delivery and installation
- Flock Safety Raven® utilizes machine learning algorithms to analyze audio to determine if a gunshot has occurred, and the number of shots, helping officers determine if a single shot or multiple shots were fired. Flock Safety Raven® can detect the audio signature of fireworks using a proprietary machine learning system and identify the location that the fireworks occurred
- Direct integration with Flock Safety® ALPR cameras and Flock Safety® video cameras, which utilize patented proprietary machine vision to analyze vehicle license plate, state recognition, vehicle color, vehicle type, vehicle make and objects (roof rack, unique hubcap, etc.) based on image analytics (not car registration data)

### **Partnerships:**

- Flock Safety® is the only LPR provider to officially partner with Axon® to be natively and directly integrated into Evidence.com®



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- Flock Safety® is the only LPR provider to be fully integrated into a dynamic network of Axon Fleet® 3 mobile ALPR cameras for patrol cars and Flock Safety's Falcon® cameras
- Flock Safety® is the only LPR provider to officially partner with Prepared911 to distribute 911 call audio and transcripts to law enforcement agencies
- Through FlockOS®, Flock Safety® is the only LPR provider to officially partner with FirstTwo to enable clicking anywhere on a display map to display the relevant information from FirstTwo
- Access to additional cameras purchased by Flock's HOA and private business partners, means an ever-increasing amount of cameras and data at no additional cost



## **Flock Safety® Drone-as-First Responder (“DFR”)**

Flock Safety® is the sole manufacturer, developer, and distributor of the Flock Safety® Drone-as-First Responder and the Flock Safety® Drone Dock.

**The Flock Safety® Drone-as-First Responder and the Flock Safety® Drone Dock are the only Law Enforcement Grade drone-as-a-first response and docking devices to offer the following combination of proprietary features:**

- A fully remote, fully automated, multi-station, multi-drone, DFR platform capable of providing air support
- Improves safety by enabling a tele-operator to deploy a strategically positioned drone that can travel and arrive anywhere in the operational area within three (3) minutes
- Video live feed enables quick observation to a wide variety of issues and provides enhanced situational awareness for case clearance
- Designed to arrive on scene before patrol resources, which allows for a rapid response to high priority calls for service rendering it one of the most effective de-escalation tools
- All flight details are logged and any pictures/recordings during the flight can be viewed and downloaded for proper chain of evidence procedures
- Autonomous return and landing to Flock Safety® Drone IP55-rated docking station, which can withstand heat up to 120°F and cold down to -5°F, as well as heavy rainfall and snow
- Best-in-class 1880p video range and connectivity to ensure safe operations anywhere in a 3.5 NM radius from each station
- Offers live and recorded video solutions, including hardware, ongoing maintenance, and a cloud-based video management system, which allows officers to remotely view instant replay of downloadable live on-scene video
- Fifty-five (55) minute maximum flight time, 400 ft maximum ceiling, a fifty-three (53) MPH maximum horizontal speed, 400X Blended optical zoom, a 640 x 512 radiometric thermal camera allowing for 32X thermal zoom, a 1.86 mile laser rangefinder, and night vision
- Use data from all integrated interfaces, including computer-aided dispatch (“CAD”), gunshot detection systems, and automated license plate recognition (“ALPR”) systems.
- An all-in-one solution that includes all hardware (drone, payload), software, pilot, and permitting/waiver support
- Performance monitoring software to predict potential failures and critical or minor issues
- Enables the use of the existing Real Time Crime Center (“RTCC”) team with no additional staffing
- Ability to enhance situational awareness capacity by layering the Flock Safety® Drone feed onto the FlockOS® ESRI-based map and FlockOS®, the Flock Safety® public safety platform that unifies first and third-party data across LPR, video, and audio to deliver real-time intelligence
- Flight logs are automatically updated in the system, ensuring transparency by providing accessible, redacted flight data for community members



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- Success metrics of the DFR program are displayed in real time on a public dashboard, illustrating its positive community impact through quantifiable results

## Partnerships:

- Flock Safety® is the only LPR provider to officially partner with Axon® to be natively and directly integrated into Evidence.com®
- Flock Safety® is the only LPR provider to be fully integrated into a dynamic network of Axon Fleet® 3 mobile ALPR cameras for patrol cars and Flock Safety's Falcon® cameras
- Flock Safety® is the only LPR provider to officially partner with Prepared911 to distribute 911 call audio and transcripts to law enforcement agencies
- Through FlockOS®, Flock Safety® is the only LPR provider to officially partner with FirstTwo to enable clicking anywhere on a display map to display the relevant information from FirstTwo
- Access to additional cameras purchased by Flock's HOA and private business partners, means an ever-increasing amount of cameras and data at no additional cost



## **Flock Safety® Software**

Flock Safety® is the sole provider of the comprehensive monitoring, processing, and machine vision services, including FlockOS®, FlockOS® 911, Flock Safety® Traffic Analytics for Businesses, Flock Safety® Advanced Investigations Analytics, and Flock Safety® Traffic Analytics for Government, which integrate with the Flock Safety® ALPR cameras, Flock Safety® LPR video cameras, and the Flock Safety Raven® audio detection device,

### **FlockOS®**

- Public safety platform that unifies first and third-party data across LPR, video, and audio to deliver real-time intelligence
- FlockOS® is the world's first and only public safety operating system compatible with Flock Safety® license plate recognition ("LPR") video cameras, including Flock Safety Condor™ live streaming fixed and Flock Safety Condor™ pan-tilt-zoom ("PTZ") video cameras, and the Flock Safety Raven® audio detection device, while seamlessly integrating first and third-party data across video, LPR, and audio to deliver real-time intelligence and retroactive crime solving in a single-pane real-time crime center
- Ability to enhance situational awareness capacity by layering all intelligence streams onto the FlockOS® ESRI-based map
- FlockOS® features Flock Safety™ unique Real-Time Routing feature that analyzes various data sources to determine where a suspect vehicle has been and its' direction of travel providing users with possible outcomes based on a confidence threshold
- Through FlockOS, Flock Safety® is the only LPR provider to officially partner with FirstTwo to enable clicking anywhere on a display map to display relevant information from FirstTwo

### **FlockOS® 911**

- Real-time 911 calls and caller-sourced media for enhanced situational clarity in MDTs and Real Time Crime Centers ("RTCCs")
- FlockOS® is the only product on the market that works with Prepared911 to distribute 911 call audio and transcripts to law enforcement agencies directly

### **Flock Safety® Traffic Analytics for Businesses**

- Provides customers with actionable visitor insights from their LPR network to enhance marketing and operations efforts

### **Flock Safety® Advanced Investigations Analytics**

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- Allows customers to leverage their LPR network to expand theft and organized crime cases

## **Flock Safety® Traffic Analytics for Government**

- Allows customers to unlock the potential of their LPR network for critical traffic management insights

Thank you,

Garrett Langley CEO, Flock Safety®

