Building Airspace Awareness for Large-Scale Campus Events

The Overview

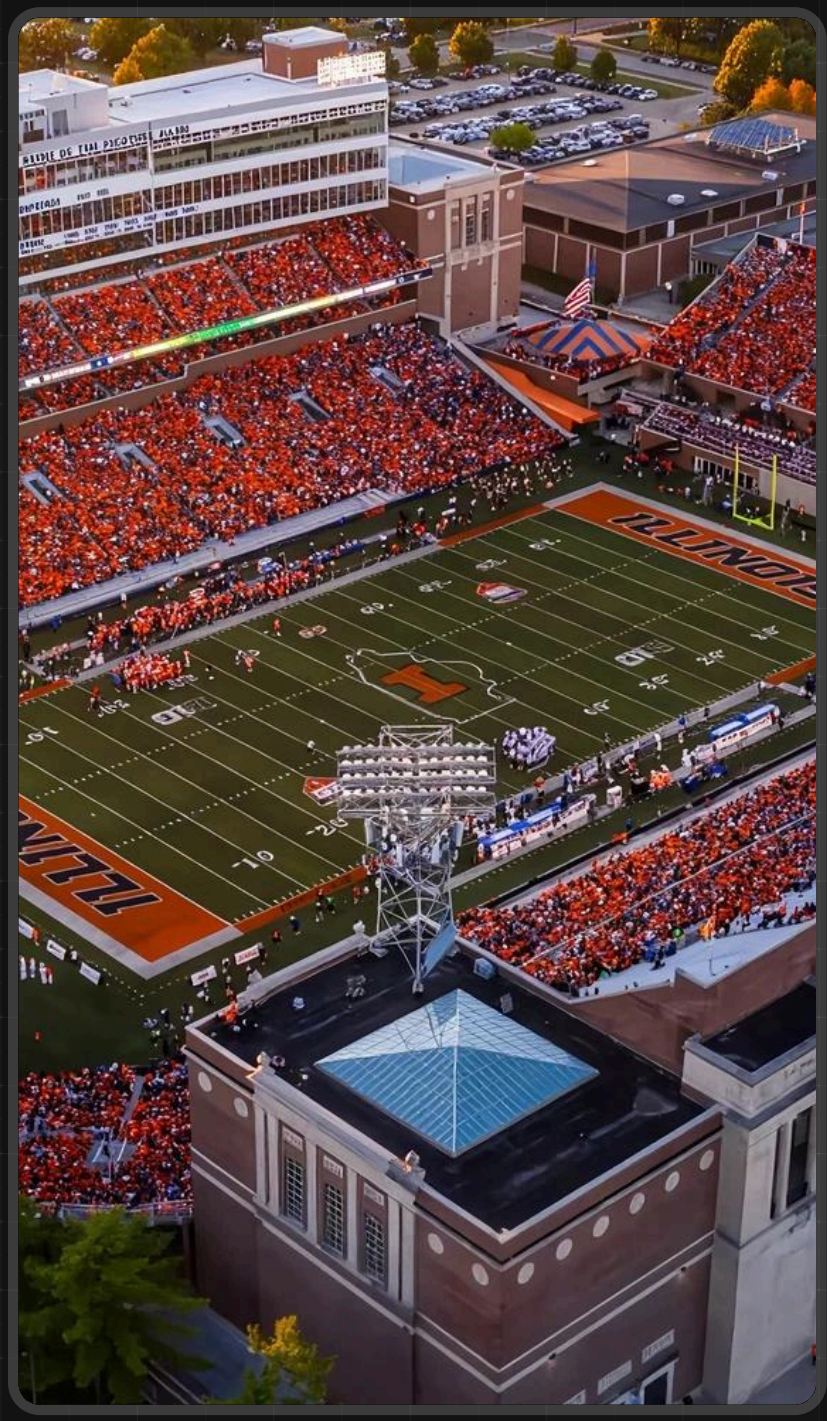
The University of Illinois Police Department (UIPD) oversees one of the most complex public safety environments in higher education. With sold-out football games, nationally recognized marathon events, protected research facilities, a commercial airport, and large public celebrations, the department needed a more effective way to monitor and respond to drone activity across campus.

The Problem

UIPD faced a rapidly growing drone activity problem across campus and during major public events. As attendance increased at football games, basketball games, graduation ceremonies, marathons, and community celebrations, unauthorized drone activity became more frequent and more difficult to manage. Officers relied heavily on visual observation and radio reports to track drones during live events.

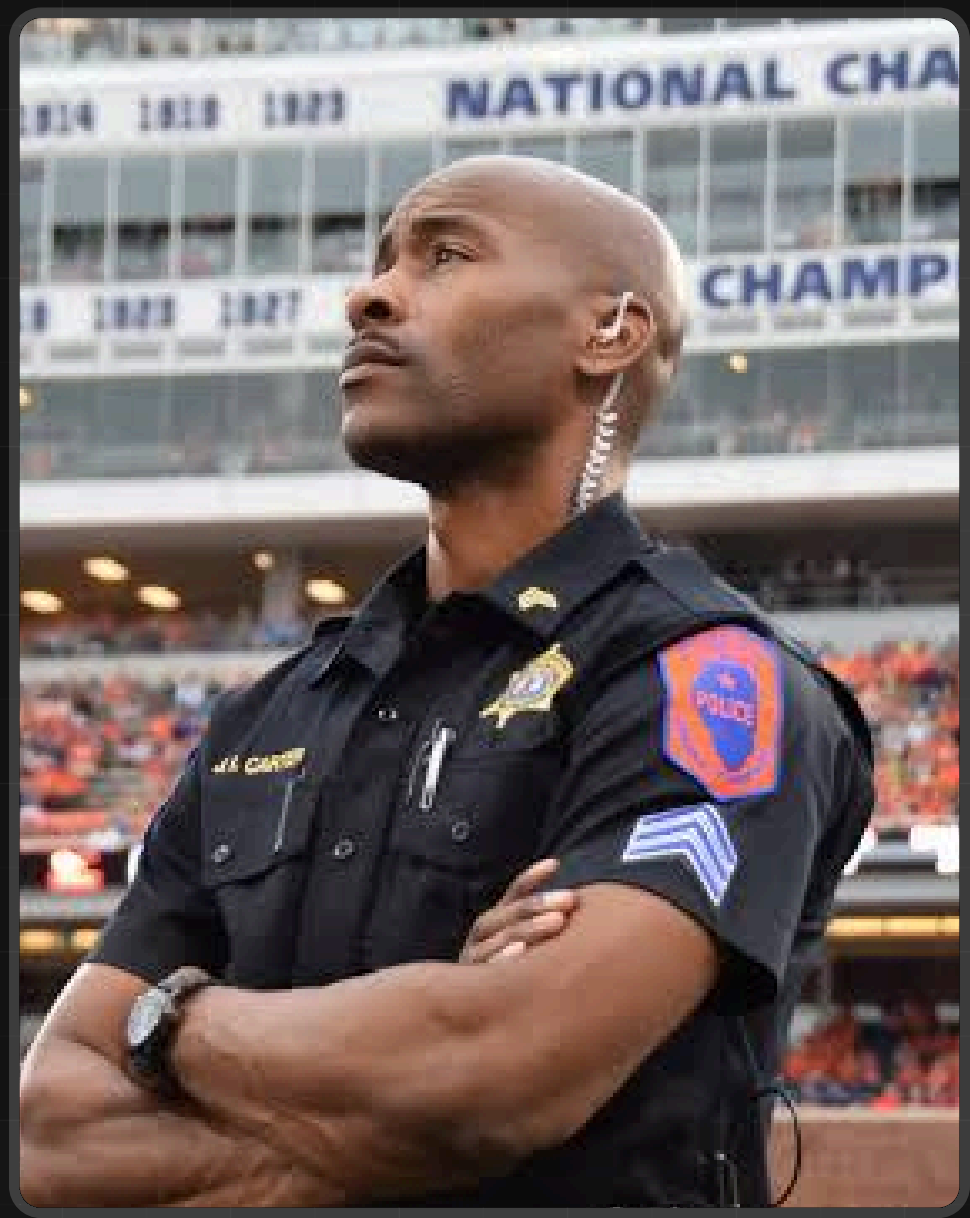
Before implementing a drone detection platform, drone response efforts were largely reactive and inefficient. Officers depended on eyewitness reports and visual spotting from command posts, while teams struggled to determine whether a drone was authorized or unauthorized. Operators were often difficult to locate in crowded environments, and drone incursions created potential safety risks over large gatherings. Staff resources were repeatedly diverted away from other security operations as personnel attempted to track and respond to airborne activity with limited visibility and coordination tools.

Lieutenant Laura Tyson described game day operations before deployment as chaotic and highly manual, with personnel trying to visually track drones from windows and observation points while coordinating responses over radio. The issue escalated during a football game when a drone entered the stadium bowl and hovered near a sniper observation post during gameplay. Officers were unable to locate the operator despite deploying 10 to 15 officers to search the surrounding area. That incident became a turning point for the department.



The Solution

UIPD implemented the SkySafe drone detection platform to establish real-time airspace awareness across campus and major event venues. The department selected a solution capable of covering multiple operational priorities simultaneously, including Memorial Stadium, campus research facilities, high-density student areas, athletic venues, the university airport, and large outdoor event spaces.



Using the platform, UIPD built a structured drone monitoring program focused on real-time drone detection and operator identification. The system enabled command staff to detect drones entering protected areas, monitor flight paths in real time, identify launch locations, locate drone operators during live incidents, and access historical flight data for investigations and reporting purposes.

During the 2024 Kansas football game, the platform detected a drone entering the stadium airspace and hovering above the 50-yard line during gameplay. Officers were directed to the operator, who was located inside a nearby apartment complex several blocks away from the stadium. UIPD was able to track the drone flight in real time, coordinate officers directly to the operator, confirm the drone serial number on scene, and document the operator's historical flight activity for prosecution support.

UIPD also integrated its existing drone authorization process into operational workflows. The department created a registry system that tracked approved drone operators, verified authorized media and athletics flights, identified department-owned drones, and used color coding to distinguish friendly, approved, and unauthorized aircraft. This allowed officers to quickly determine whether a drone required intervention or was operating legally under approved conditions.

The drone detection program became part of UIPD's broader command center modernization effort. The department integrated body-worn camera feeds, weather monitoring, real-time communications, AI-assisted operational tools, and encrypted radio communications for sensitive drone response coordination. The platform also enabled staff to receive automated alerts by text and email whenever drones entered designated event zones.

> "The first time a drone hovered over our stadium during a live game and we couldn't locate the operator, we knew we could never go unmonitored again."

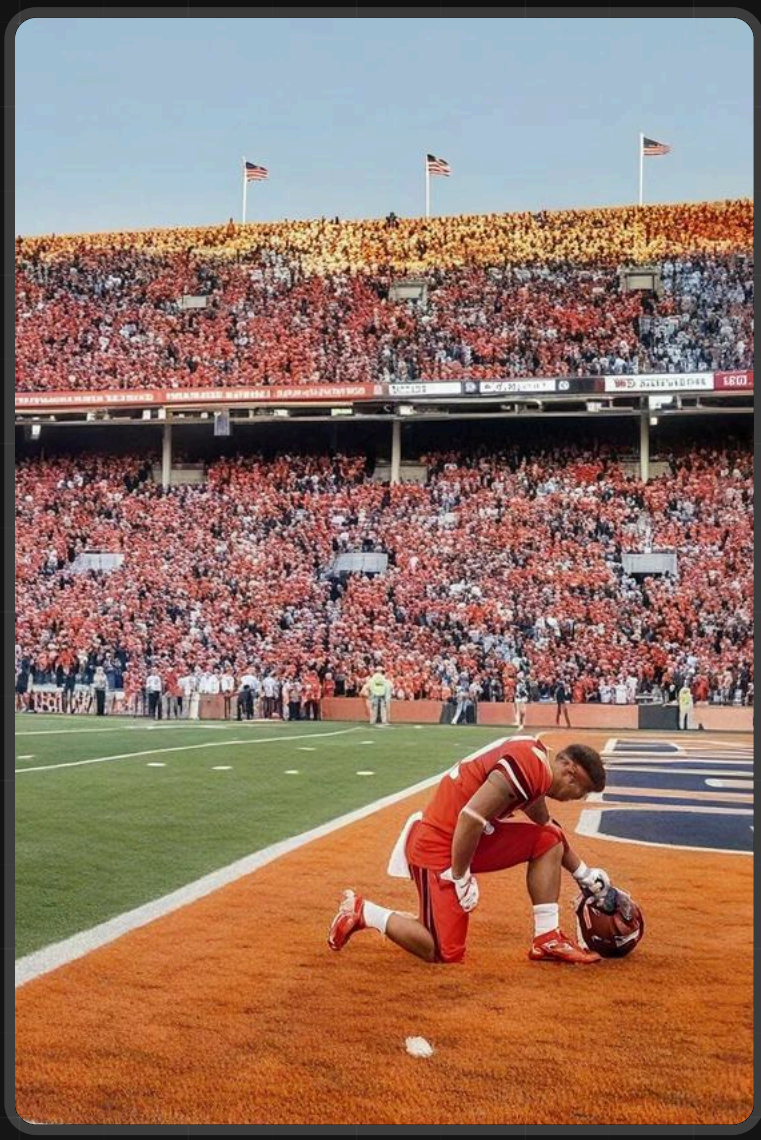
Joseph McCullough
Deputy Chief, University of IL

UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN

The Benefits

One of the most measurable outcomes was a dramatic reduction in unauthorized drone activity during football games. When the program first launched, UIPD regularly responded to four to six drone incursions per game, often managing multiple incidents simultaneously and repeatedly deploying officers during live events. After implementing detection technology and publicly communicating enforcement efforts, the department reduced incidents to a single operator intervention during an entire football season. UIPD credits this reduction largely to deterrence and public awareness, as operators became increasingly aware that drone activity around events was being actively monitored.

The platform transformed drone response operations from manual visual searches into coordinated, intelligence-driven enforcement. Instead of searching blindly for operators, officers could now receive precise operator location data, access live flight information, coordinate directly from the command post, and resolve incidents in minutes rather than conducting prolonged searches. Lieutenant Tyson noted that drone operations, which initially consumed significant command post resources, now require far less time and attention because workflows have become streamlined and efficient. The system also helped UIPD reduce the risk of drones operating over stadium crowds exceeding 60,000+ attendees, fireworks events, marathon routes, graduation ceremonies, and critical infrastructure and research facilities.



Beyond event security, the department gained the ability to monitor historical drone activity around sensitive facilities and support partner agencies with investigative requests. The platform provided command staff with real-time visibility into campus airspace and helped transform drone monitoring into a proactive security capability rather than a reactive challenge.

The Results

01 20 Mins to 2–3 Mins

Before SkySafe, locating a drone operator could take roughly 20 minutes, assuming the operator could be found at all. That left a significant window for an unauthorized actor to complete surveillance or disrupt operations. With SkySafe, the company reduced average response time to pilot location to approximately 2–3 minutes.

This gave the security team the ability to act quickly, decisively, and with greater confidence.

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02 Airspace Awareness Improved Exponentially

SkySafe gave the company real-time insight into airspace activity surrounding its facilities. What was previously a major blind spot becoming a visible, actionable operational picture.

The platform also helped the company identify patterns of repeated interest across sites, supporting broader intelligence and investigations work.

03 Unauthorized Drone Activity Decreased Significantly

After implementing flight restrictions and SkySafe's drone detection capability, unauthorized drone activity dropped from approximately 3–4 illicit flights per day to approximately 1–2 per week.

This created a safer, more controlled operating environment around sensitive facilities and launch activities.

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04 Launch Operations Became More Coordinated

SkySafe became a launch-day operational tool, not just a security platform. Security, Range, Recovery, and Media teams gained shared visibility into airspace activity. This enabled better deconfliction of authorized UASs, manned aircraft, and unauthorized drones during high tempo launch operations.

The result was more efficient coordination and reduced uncertainty during critical mission windows.

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05 Executive Confidence Increased

The ability to detect, locate, and respond to unauthorized drone activity in minutes gave leadership greater confidence that the organization could protect its people, infrastructure, and mission-critical operations.

SkySafe helped turn drone response from a reactive, manual process into a repeatable operational capability.

Looking Ahead

By implementing SkySafe, the University of Illinois Police Department built a scalable airspace awareness program capable of supporting major athletic events, public gatherings, and critical campus infrastructure.

The program enabled UIPD to detect and investigate unauthorized drone activity, reduce operational strain on officers, improve event security, deter unsafe drone operations, and establish long-term airspace awareness across campus. Today, the department uses drone detection as a core component of its broader public safety and command center operations strategy.