

Case Study



Seamless situational awareness connects Ventura's diverse terrain

Introduction

Ventura County, located in California, is known for its coastline, bustling urban centers, and remote, mountainous regions including the Los Padres National Forest. Its diverse geography presents unique challenges for public safety agencies tasked with ensuring the safety of over 800,000 residents. The Ventura County Sheriff's Office plays a critical role in safeguarding this community, managing law enforcement across both densely populated areas and remote regions. However, maintaining seamless communication and situational awareness in such a varied environment had always been a significant obstacle. Recognizing these challenges, the Sheriff's Office partnered with Motorola Solutions to enhance their situational awareness.

Customer: Ventura County Sheriff's Office

Industry: Public Safety

Number of residents: 800,000+

Number of sworn deputies: 800

Solutions:

- APX NEXT Radios
- SmartConnect
- SmartMapping
- CommandCentral Aware

Outcomes:

- **Enhanced Communication Capabilities:** Reliable communication across all terrains via automatic network switching.
- **Improved Situational Awareness:** Integrated mapping provides dispatch and Emergency Operations Center (EOC) with a shared common operating picture.
- **Faster, Safer Responses:** Precise deputy location and identification enable faster emergency aid.
- **Unified Coordination Across Agencies:** Communication interoperability facilitates more cohesive response to multi-agency incidents.



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Challenges

This varied landscape, combined with unpredictable and sometimes extreme weather patterns, creates significant communication and situational awareness hurdles for dispatchers, deputies and the Emergency Operations Center (EOC).

Unreliable service in remote areas

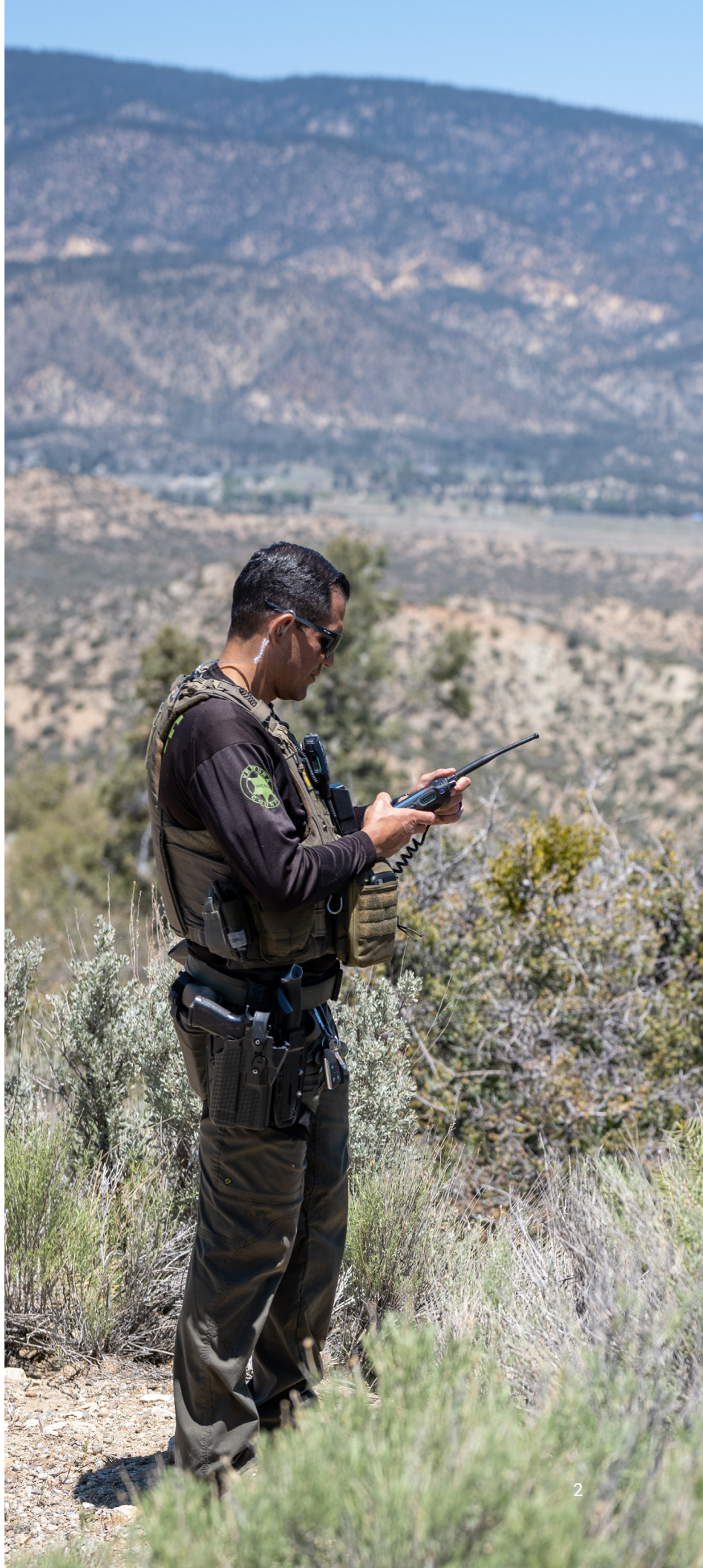
Ventura County Sheriff's Office relied on a VHF simulcast radio system that was unreliable in remote areas, making it difficult for deputies to stay connected with dispatch. Deputies often found themselves in situations where fallback communication methods, such as analog local channels or multi-step relayed phone calls, were necessary. These processes were cumbersome and time-consuming, delaying critical resource deployment during emergencies.

Geographical constraints

The county's diverse terrain, including coastal stretches and mountain ranges, created significant radio coverage gaps in certain areas, such as the Pacific Coast Highway (PCH) and mountainous areas in the Los Padres National Forest. These coverage gaps not only endangered deputies in the field but also prevented them from efficiently coordinating with other agencies, especially when crossing into neighboring counties.

Limited situational awareness

During fast-moving incidents like wildfires, the Sheriff's Office lacked the tools to maintain a comprehensive view of active resources and events across the county. Dispatchers struggled to locate deputies when they were on foot or in heavily forested areas, relying solely on last-known positions. Meanwhile, the EOC operated without an overarching common operating picture, complicating coordination among multiple agencies and slowing decision-making.





The solution

Motorola Solutions deployed a comprehensive system tailored to address Ventura County's unique public safety challenges. The solution combined the APX NEXT radios with SmartConnect and SmartMapping smart applications and CommandCentral Aware software to transform the Sheriff's Office's operational capabilities.

Enhanced communication with APX NEXT and SmartConnect

The APX NEXT radio, combined with SmartConnect, delivered groundbreaking improvements in connectivity. Using SmartConnect, the radios automatically transition between radio frequency (RF), cellular, and Starlink satellite via Wi-Fi connection, providing clear communication regardless of location. Deputies now can communicate even in the most remote areas of the county and neighboring jurisdictions. This continuous radio traffic without interruption is a stark contrast to the previous relay system.

Enhanced situational awareness with CommandCentral Aware and SmartMapping

CommandCentral Aware provides a common operating picture, integrating various data layers on a single map to enhance situational awareness for dispatchers and the Emergency Operations Center. With SmartMapping on their APX NEXT radios, deputies can see their location, their partners, and perimeters for evacuations and fires on their screens, even outside their vehicles. This portability is crucial for deputies operating in areas without cell service or when engaged in foot pursuits, when deputies need critical information outside of their patrol vehicle in a rapidly changing situation. With CommandCentral Aware, dispatchers can also pinpoint their exact location in real time and guide them or send immediate assistance.

Virtual backup for deputies with emergency button press

The emergency button on the APX NEXT radio automatically sends an alert to dispatch, displaying the deputy's location in CommandCentral Aware and triggering an alert tone. This significantly reduces the time it takes to identify and locate a deputy in distress, from several minutes to seconds. Furthermore, CommandCentral Aware's ability to identify who is transmitting on the radio, even without verbal identification, provides an added layer of safety, especially during critical incidents.



Outcomes

The implementation of Motorola Solutions' integrated technologies delivered measurable improvements across multiple dimensions of public safety operations for the Ventura County Sheriff's Office.

Enhanced communication capabilities

Connectivity issues in remote areas along the Pacific Coast Highway (PCH) and beyond were resolved. The APX NEXT radios provided deputies with a reliable communication channel in all terrains, allowing them to communicate directly with dispatch without relying on relayed phone calls. "Being able to communicate with our dispatch in real-time, real life, is obviously a peace of mind," said Senior Deputy Oscar Bautista. "If I need help, I can connect, I can communicate directly with my dispatch, and they're going to send that as soon as possible."

Improved situational awareness

CommandCentral Aware gave dispatchers and the Emergency Operations Center a comprehensive, real-time visibility of deputy locations, fire perimeters, evacuation zones, and other critical components during emergencies. The platform streamlined information sharing across the Sheriff's Office, significantly reducing response times and improving operational effectiveness.

Faster, safer responses

The Sheriff's Office reported reduced response times for resource deployment, particularly during high-priority situations like officer emergencies or wildfire evacuations. The improved ability to visualize deputy and resource positions in real time made it easier to direct backups and medical aid precisely where they were needed, enhancing officer safety and community trust.

Unified coordination across agencies

The Sheriff's Office benefited from improved interoperability with neighboring agencies thanks to Motorola Solutions' integrated system. Deputies can communicate and collaborate seamlessly, facilitating a more cohesive response to multi-agency incidents such as wildfires and joint law enforcement operations.

To learn more, visit:

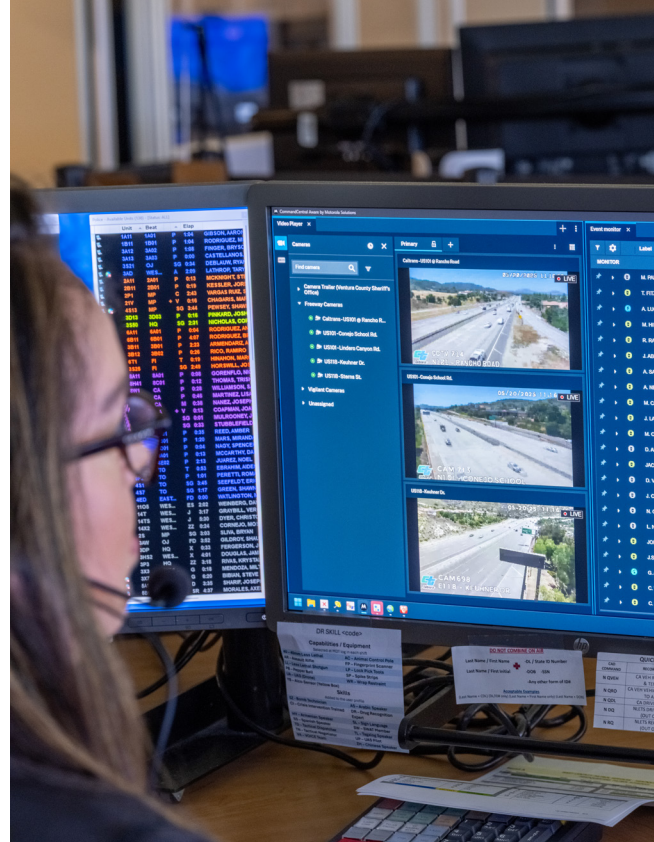
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“We’ve maintained a fantastic partnership with Motorola [Solutions] as an organization. When it came time to upgrade our radio system from an analog system to digital, it just provided the best solutions for us to be able to navigate here in Ventura County. And they’ve been a fantastic partner for us.”

– Ventura County Sheriff
James Fryhoff