

Critical Area Protection System

United States Marine Corps in Camp Fallujah, Iraq

The Challenge

Marines at Camp Fallujah — located in a large, high-risk area in Iraq — had been the targets of insurgents, who had a history of driving by the camp and firing mortar shells at military personnel. Significant manpower was required to detect and prevent the drive-by attacks. The primary goal was to help stop insurgents from hurting Marines at the military compound.

The Solution

3eTI provided the core element of a Critical Area Protection System (CAPS) solution — a four-channel wireless video network system — which networked a variety of sensors and secure wireless communication capabilities designed to increase situational awareness and to improve force protection in a highly volatile environment.

Wireless video cameras were installed throughout the camp and were connected to the Command Control Center (CCC) via a 3eTI wireless community. Shipping containers equipped with a wired computer network are used as the CCC. Ultimately, all the sensors and nodes were linked together to provide real-time information to the CCC, sometimes covering distances of up to two and a half miles. These surveillance cameras provided live video feed from around the perimeter of the base to the CCC in the center of the camp. The CAPS on-screen monitoring system could also show the location of equipment and video cameras using a visual “dot” on a map of the camp.

The Benefits

The CAPS solution provided for better protection of the camp and its personnel. Having real-time situational awareness from the center of camp made it possible for staff to watch the activities of insurgents without placing Marines in harm’s way. If circumstances became threatening, staff could alert troops before they were in danger and help prevent Marines from getting fired on by insurgents.

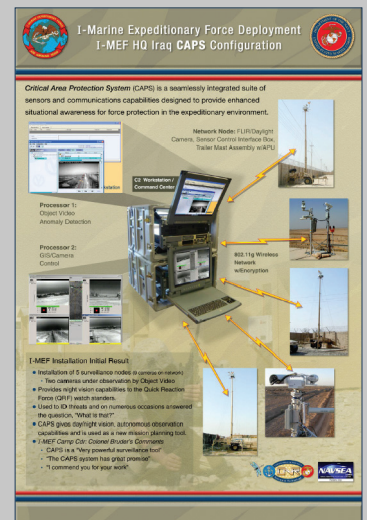
The on-screen map of Camp Fallujah made it possible for troops to know at all times where their assets and potential threats were located. Before the CAPS solution was installed, a larger number of Marines were needed for patrol and protection. With the 3eTI wireless surveillance system in place, fewer personnel are needed to patrol for insurgents, freeing Marines to be redirected to other tasks.

Products Used

- Multi-Port Wireless Video Server (3e-528)
- Four-Channel Wireless Video Network System (3e-528Q)
- Wireless Sensor Nodes (primarily video cameras)
- CAPS Console



Marines at Camp Fallujah



Wireless sensor node deployment in Camp Fallujah (left and upper left) and CAPS configuration illustration (above)