Remote Security Solutions

Case Study - Perimeter Protection System

This study details the implementation of security systems & services provided by Remote Security Solutions, LLC at a logistics terminal owned and managed by a Fortune 500 client in the retail space.

General Information & Project Goals

The property is a regional distribution center approximately 300,000 square feet located on an 8-acre site in the Southwest United States. The local neighborhood has relatively high crime, with a number of thefts having been documented by the client. Their primary goals in implementing remote security services are:

1. **Deterring Criminal Trespass & Theft of Company Property:** A significant number of trailers loaded with client freight are spotted in the yard areas. Additionally, bulk materials such as lumber and roofing are stored in open air sheds close to the perimeter of the property. These have historically been attractive targets for thieves.

2. **Reducing Annual Security Spend:** The site is staffed with after-hours onsite security guards. The approximate annual spend for these services was $85,000.00.

Challenges

The property offers several challenges:

1. The yard is large and has a number of structures located within. Further, a large amount of materiel is stored in the open yard areas. This material would block cameras mounted on the buildings looking outward across the yards.

2. There is a significant client activity onsite 24 x 7.

3. The lighting varies across the property from good to poor.

System Design

In response to the client's goals and in light of the challenges above RSS chose to implement three Remote Surveillance Units (RSUs) that view the perimeter of the 8-acre site. These RSUs feature thermal and infrared cameras equipped with analytic appliances as well as local public address speakers. Each RSU requires 110v local power as well as 4G wireless cellular service.

The RSUs incorporated 5 thermal cameras and 7 infrared cameras for a total of twelve cameras. Each RSU was mounted either on the terminal façade or existing light standards in the yard area.
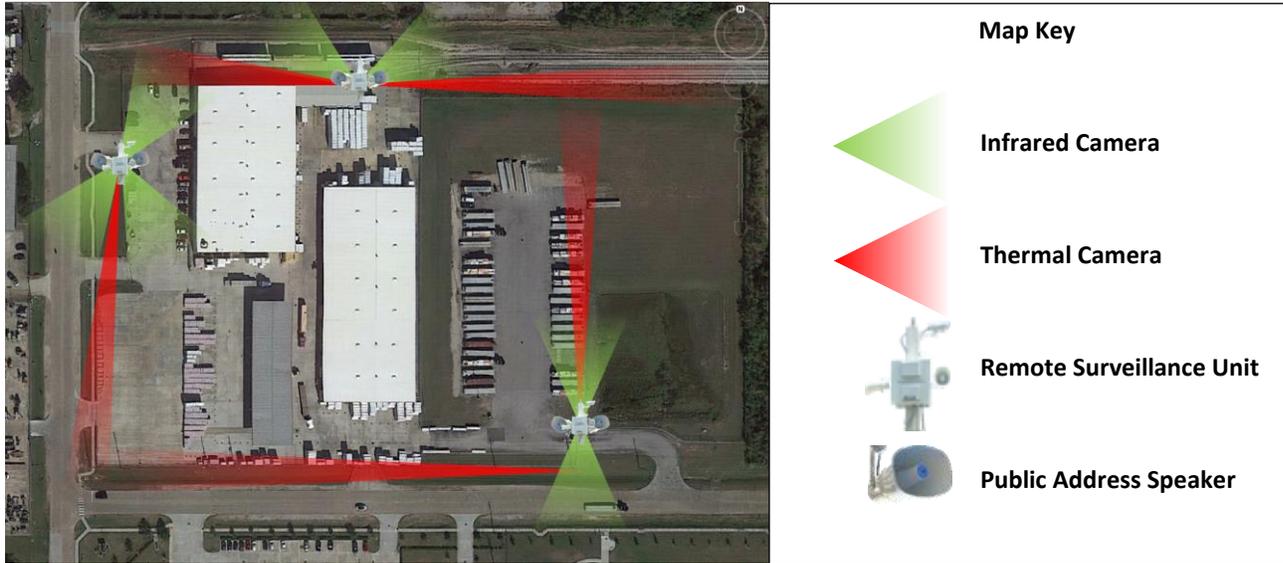

Remote Security Services Provided

During security hours, the system automatically arms and will detect persons or vehicles entering a camera view. This will trigger a real-time alert to Officers at the RSS Command Center. Officers receive the alert, assess the situation, and challenge suspicious persons using the local public address speakers, directing the intruder to leave the property. Officers can also escalate suspicious events to local law enforcement and client leadership.

System Layout

Map Key

Infrared Camera

Thermal Camera

Remote Surveillance Unit

Public Address Speaker

Benefit Analysis

1. Several incidents involving criminal trespass with intent to steal client property were detected and deterred since implementation, with two arrests made by responding law enforcement.

2. The client realizes significant savings in their annual reoccurring security expense.

Cost Comparison - Remote Security vs. On-Site Security

Annual Spend Onsite Security:	$85,000.00
Annual Spend Remote Security:	$16,800.00
Annual Savings with Remote Security:	**$68,200.00**

Cost Analysis

The remote security recommendation is priced in two parts, the initial systems expense and ongoing monthly services as follows:

Initial Security Systems Expense:	**$33,000.00 installed; turn-key**
Ongoing Monthly Services Pricing:	**$1,400.00**
ROI on System Expense:	**6 months**

Conclusion

The client's goals were effectively realized with no impact to the ongoing operations of the business. The joining of technology with a professional security team in a Command Center setting proved to be effective in deterring criminal activity at this challenging client site.