

Security and Control

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Overview

- ◆ Why do we need security?
- ◆ Needs assessment
- ◆ Elements to any security system
 - Protect, Detect, Alert, Response
 - Electronic Security System Criteria
 - Advantages and Limitations of Various Security Options
- ◆ Internal measures to protect against potentially harmful employees
- ◆ How can technology improve my business?

Why Do We Need Security?

- ◆ Protect explosives from ending up in the wrong hands...
- ◆ Meet regulations
- ◆ Due diligence
- ◆ Social responsibility
- ◆ Community relationship

What are Your Security Needs?

- ◆ Define criteria
 - Internal threats
 - External threats
- ◆ Determine what are the potential scenarios
 - What is the worst credible scenario?
- ◆ How to protect against them?

Threats Assessment

◆ Gather information

- What occurred in the past?
- Description of buildings, site plan, operational activities, personnel, contactors, visitors, etc.
- Existing security features

◆ Potential threats

- Identify adversary groups
- Weapon and equipment
- Number of participants
- Transport and accesses to site

Threats Assessment

◆ Additional info required to define the threats:

■ What kind of adversary?

- Outsides, insiders, insiders with outsiders
- Ex.: Insiders can be blackmailed, psychologically unstable, hostile, criminal without criminal record, union conflict
- Ex.: Outsiders can be involved with organized crime, terrorists, vandals

■ Their potential actions

- Destruction, violence, theft, bombing

Threats Assessment

- Their motivations
 - Hostile employee
 - Peer pressure
 - Financial
 - Ideological or political such as extremists
- Their capabilities and resources
 - # of adversary
 - Weapons, equipment and tools
 - Type of transportation
 - Technical skills and experience
 - Working in collusion with an insider?

Evaluation

- ◆ Determine vulnerabilities
 - Which element is the weakest (protect, detect, response)
 - Easiest features to defeat
 - Worst consequence
- ◆ Analyze risk levels
- ◆ Recommendations
- ◆ Implementation

The implementation of solutions after conducting the threats, vulnerabilities and risks assessments can prevent or mitigate criminal or terrorist actions

Elements to Any Security Systems

- ◆ Protection
 - Delay and Deter
- ◆ Detection
 - Sensors, Assessment, Alert
- ◆ Response
 - Prevents unauthorized individuals to access explosives

Protection

- ◆ Fences and Gates
- ◆ Structure
- ◆ Door
- ◆ Locks
- ◆ Dogs

Elements that Harden the Target

Detection

- ◆ Personnel, security guard
- ◆ Door switch
 - Magnetic or mechanical
- ◆ Video and cameras / DVR
- ◆ Remote electronic security system (E.S.S.)

Elements that alert and initiate a response

Response

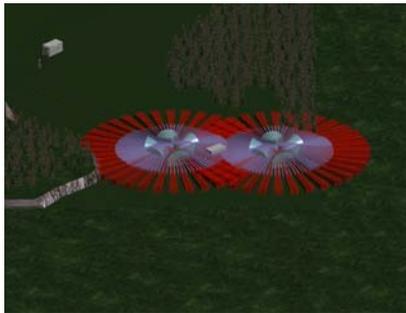
- ◆ By authorities
 - Local law enforcement officers
 - Site manager
- ◆ To increase their response time:
 - Police awareness
 - Reliable and timely communication
 - Site map and possible exits

Prevents criminals from reaching their goal

What to look for in an Electronic Security System?

- ◆ Infra Red Sensors
 - Heat Sensor
- ◆ Ultra Sonic Transmitter and Receiver
 - Motion Sensor
- ◆ Video Cameras
 - Record activity, provide valuable information
- ◆ Speakers
 - Inform unauthorized individuals to leave restricted area
 - Deter animals

Electronic Security System Criteria



- ◆ Power
 - What is the source?
 - How long can it work?
 - Reliability?
 - Cost involved
- ◆ Rugged Environment
- ◆ Installation
 - Easily deployed?
 - Need to significantly modify the site?

Electronic Security System Criteria

◆ Communication Systems

- Options
 - Phone line, cellular or satellite
 - Radio, Internet
- Reliability
 - Back up system in place?
- Security
 - Can it be easily spoofed?
 - Can someone very intelligent could compromise it?



Electronic Security System Criteria

- ◆ False alarm?
 - Animal? Differentiates from humans?
- ◆ What kind of information it provides?
 - Detects, assesses, communicates and alerts
 - Activity of authorized personnel
 - Activity of unauthorized individuals
 - ◆ # persons involved? Their description? Vehicles used? Exit?

Protection Options

Advantages

- ◆ Deter unpremeditated actions
- ◆ Slow down actions
- ◆ Might discourage them
- ◆ Positive for community relationship

Limitations

- ◆ Readily available portable tool
- ◆ Organized crime put some thoughts in their plan
- ◆ Alert & Response are not necessary occurring

Detection Options

Advantages – Guard

- ◆ Easily implemented
- ◆ Readily available
- ◆ Intimidating – deters
- ◆ Can alert authorities
- ◆ Has been used for years

Limitations – Guard

- ◆ Can be bribed or black mailed
- ◆ Might not be reliable
- ◆ Liability
- ◆ Expensive: 120K / yr

Detection Options

Camera / Door Switch Advantages

- ◆ Alerts
- ◆ Creates a report
- ◆ Information can be used after the fact to capture the criminal
- ◆ Affordable

Camera / Door Switch Limitations

- ◆ False alarm
- ◆ Need someone observing
- ◆ Might create a false sense of security

Electronic Security System

Advantages

- ◆ Covers many bases
- ◆ Alert before the criminal is in the magazine
- ◆ 24 hrs / 7 days
- ◆ Fraction of the price of a guard

Disadvantages

- ◆ More info to consider
- ◆ Subject to failure
 - Telemetry required
 - Contingency plan
 - Many layers of security required

Key Distinctions

An effective security system
needs a portion of each elements:
Protection, Detection and Response



Protection is NOT considered Detection
Slowing down the adversary does not Detect
Appropriate Response is Necessary

Internal Measures to Protect against Harmful Employees

- ◆ Identifying symptoms of employee theft
- ◆ Theft of merchandise
- ◆ Internal security check list
- ◆ Prevent employee theft

Identifying Symptoms that could lead to Employee Theft

- ◆ Screening process
- ◆ Identify financial or personal problems
- ◆ Employee that arrive early or leave late
- ◆ Employee that does not want to take vacation
- ◆ Employee that makes frequent error

Theft of Merchandise

- ◆ Stealing small quantity at a time
- ◆ Falsifying inventories to cover up shortage
- ◆ Hiding goods on the premises
 - Removal by a “friend worker”
- ◆ Access premises after business hours
- ◆ Complicity with security

Prevent Employee Theft

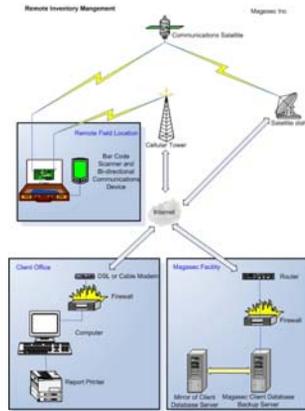
- ◆ Establish good relationship with employees
- ◆ Set reasonable rules and enforce them rigidly
- ◆ Internal security check list
- ◆ Audit frequently at irregular times
- ◆ Survey employees to get input on weaknesses
- ◆ Remove the temptation to steal

How technology can benefits your business on a day-to-day operations?

- ◆ Which technology can be used:
 - Electronic security system
 - Real-time inventory management system
 - Tracking system

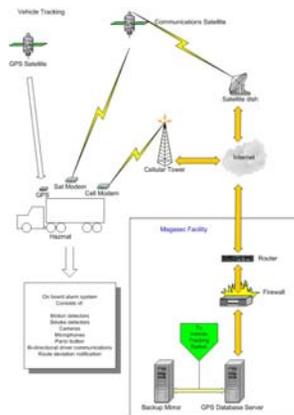
Real-time Inventory

- ◆ Increase efficiency
- ◆ Reduce risk of human error
- ◆ Rapid ROI
 - In/out inventory
 - Blaster report
 - Invoicing
 - Reports per site, magazine, product, date, etc.



Tracking System

- ◆ Communication
 - Bi-directional
 - Uni-directional
- ◆ Functionality:
 - GPS
 - Route deviation
 - Security system
 - Shut off fuel supply
 - Video camera
 - Door switch
 - Motion detector



How can technology be used?

- Management tool
 - Additional information allows better decision-making
 - Increase efficiency and reduce risk of human error
 - Identify employees requiring re-training
 - Identify good practice
- Documentation tool
 - Keep track of the inventory even in remote location
 - Create all necessary information for invoicing
 - Generate blaster report in the field
- Audit process tool
 - Internal and external
 - Save time and increase due diligence

To Keep in Mind

- ◆ An adequate electronic security system gives constant protection
- ◆ Security, safety and operational objectives must be accomplished at all times
- ◆ Before selecting your option, make sure it is not giving you a false sense of security
- ◆ Very strict measures for inventory of ALL items is the basic answer to the reduction of theft.



Questions ?



Thank you!

For more information

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