

Security Force Operations

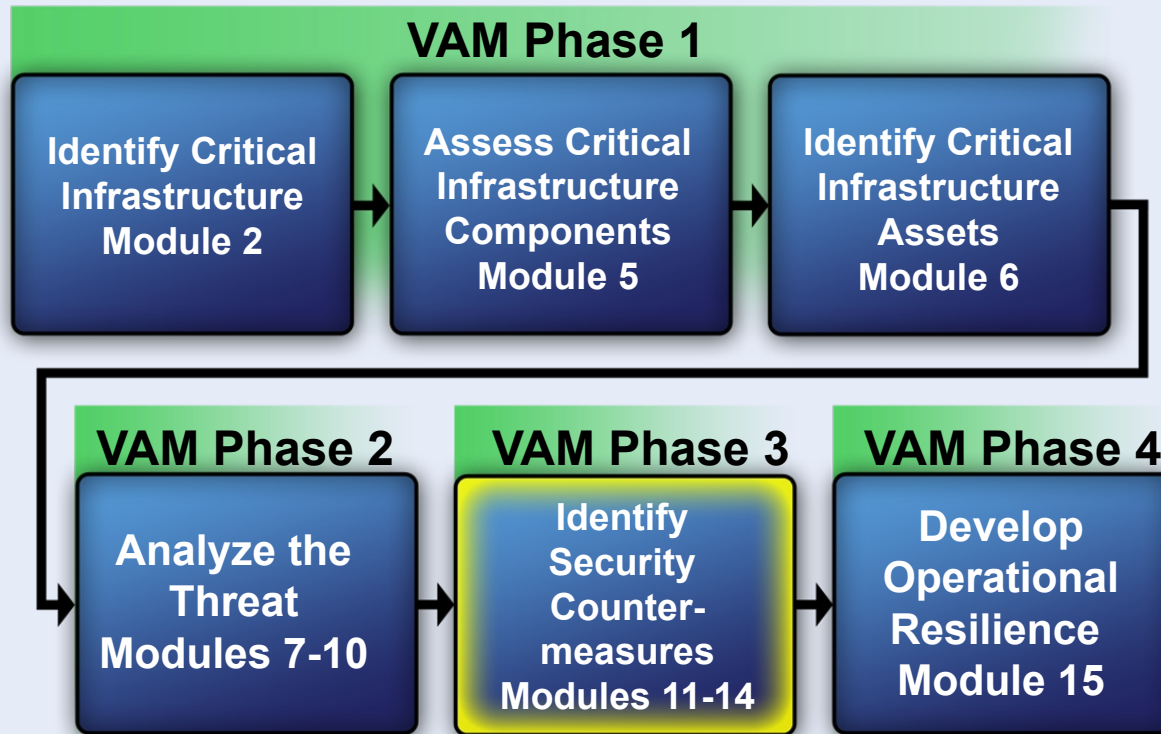


Module Objective

- **By the end of this module, you will be able to develop a security force response plan for the protection of critical infrastructure**



Physical Protection System



Physical Protection System — Functional Relationships

- **Detection and assessment — a successful detection of an intruder would result in sending in a response force**
- **Delay — once detected, the intruder must be delayed to allow time for the response force to arrive**
- **Response — the response force will neutralize the intruder**



Intruder Action Timeline Activity

Refer To:

Workbook 12.1



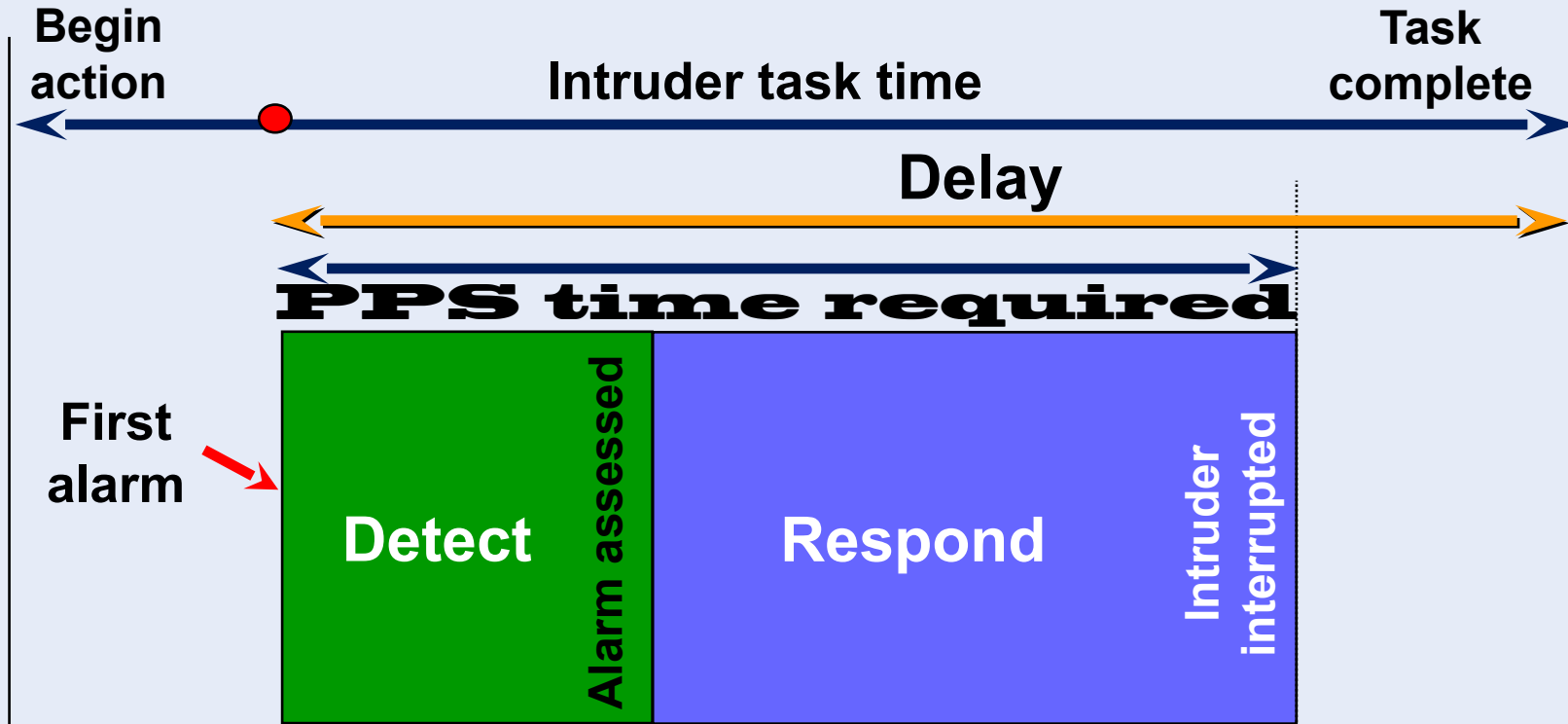
- **Purpose: to organize intruder actions in the correct order**
 - **Duration: 10 minutes (5-activity; 5-debrief)**
 - **Group composition: individuals**
 - **Debrief: large-group discussion**



Relationships between Functions (1 of 2)

Refer To:

Workbook 12.1



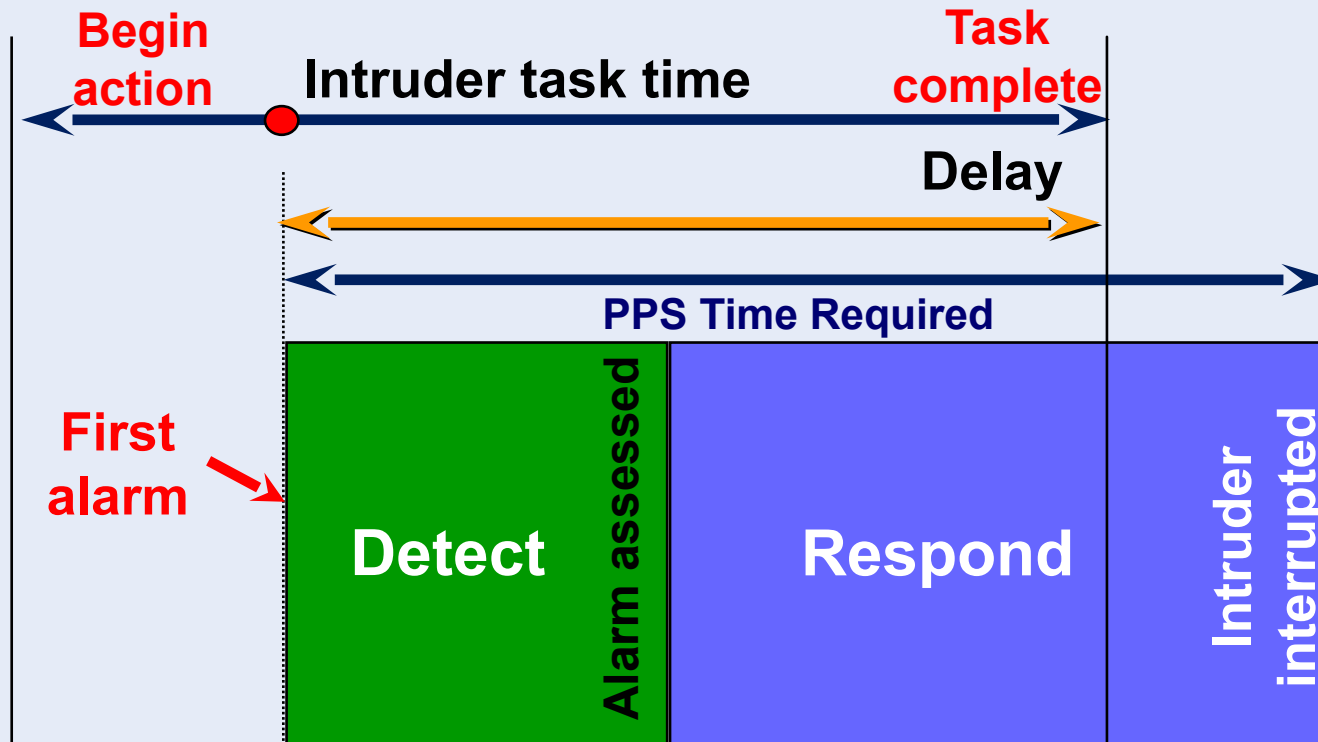
**Comparison:
Intruder timeline to PPS**



Relationships between Functions (2 of 2)

Refer To:

Workbook 12.1



No interruption diagram



Detection and Assessment Function (1 of 2)

- Detection and assessment — the first function of the physical protection system
- Detection without assessment is not detection



Detection and Assessment Function (2 of 2)

- This section will cover:
 - Detection with electronic sensors
 - Detection with entry control
 - Detection with security force personnel



Detection with Electronic Sensors (1 of 2)

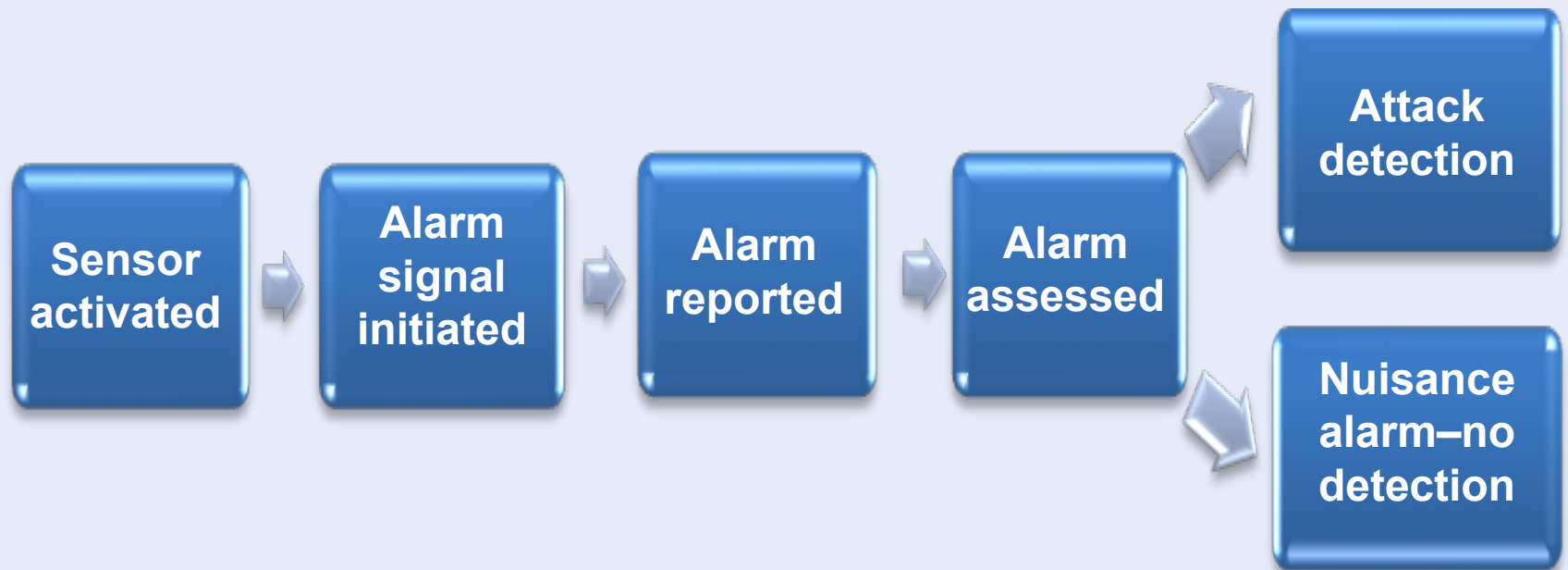
- A sensor reacts to a stimulus and initiates an alarm
- Sensor information is reported and displayed
- A qualified person assesses information and judges the alarm to be either an attack, a nuisance alarm, or a false alarm



Source: Getty Images



Detection with Electronic Sensors (2 of 2)



Detection with Electronic Sensors Example (1 of 2)

- An intruder scales a fence that has a sensor attached
- The sensor activation communicates electronically to the security control center



Detection with Electronic Sensors Example (2 of 2)

- Closed-circuit television on the fence line transmits an image of the intruder to the security control center monitors
- The security control center operator assesses the situation
- The response is to send security force members to the area



Detection with Entry Control (1 of 2)

- **Entry control:**

- Allows authorized personnel and materials to enter the facility
- Detects and prevents attempted entry of unauthorized personnel and material
- Often conducted through use of technology



Detection with Entry Control (2 of 2)

- **Effectiveness measured by:**
 - **Throughput:** number of authorized entries per time unit
 - **False acceptance rate:** frequency of unauthorized persons allowed entry
 - **False rejection rate:** frequency of authorized persons denied entry



Detection with Security Force

- **Personnel at fixed posts or on patrol may sense an intrusion**
- **Using an effective assessment system, security personnel provide:**
 - **Information about whether the alarm is valid**
 - **Details about the cause of the alarm**

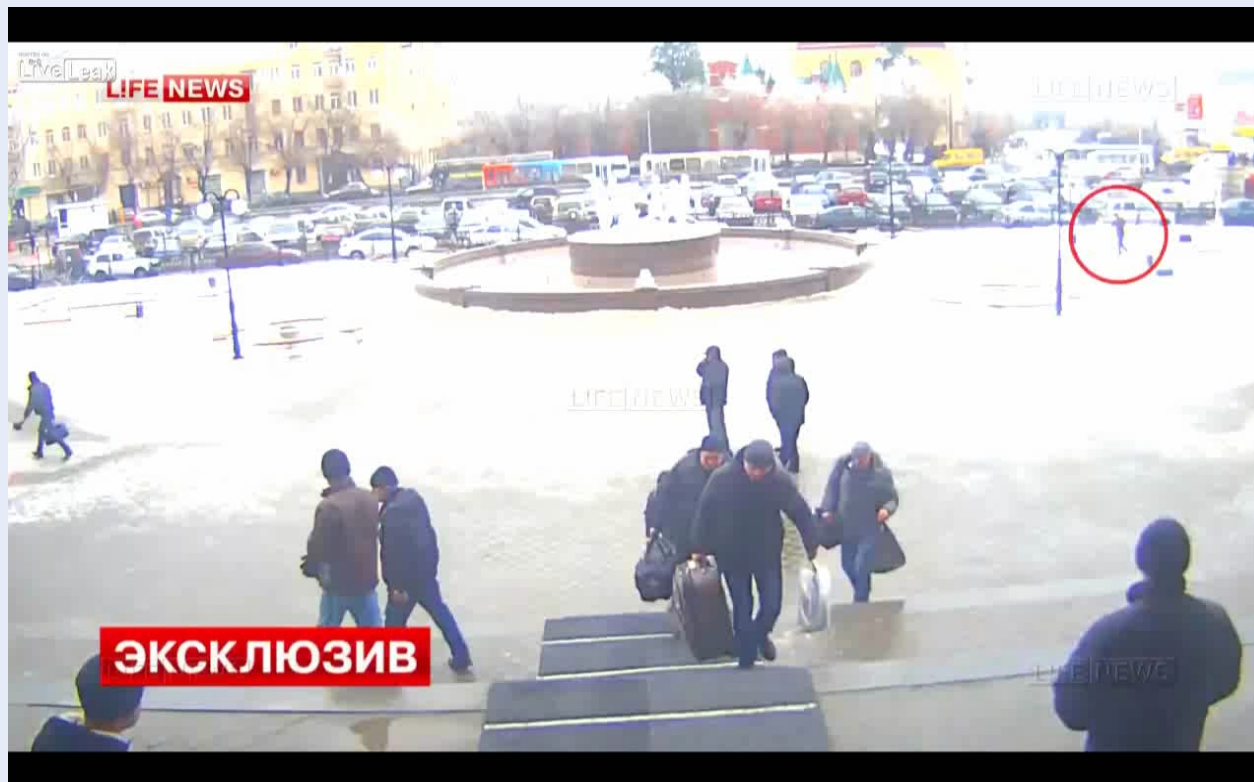


Detection Function Effectiveness (1 of 2)

- **Three elements:**
 - Probability of sensing an alarm activation
 - Time required for reporting and assessing an alarm
 - Nuisance or false alarm rate
- **The shorter the time between sensor activation and alarm assessment the more the probability of detection increases**

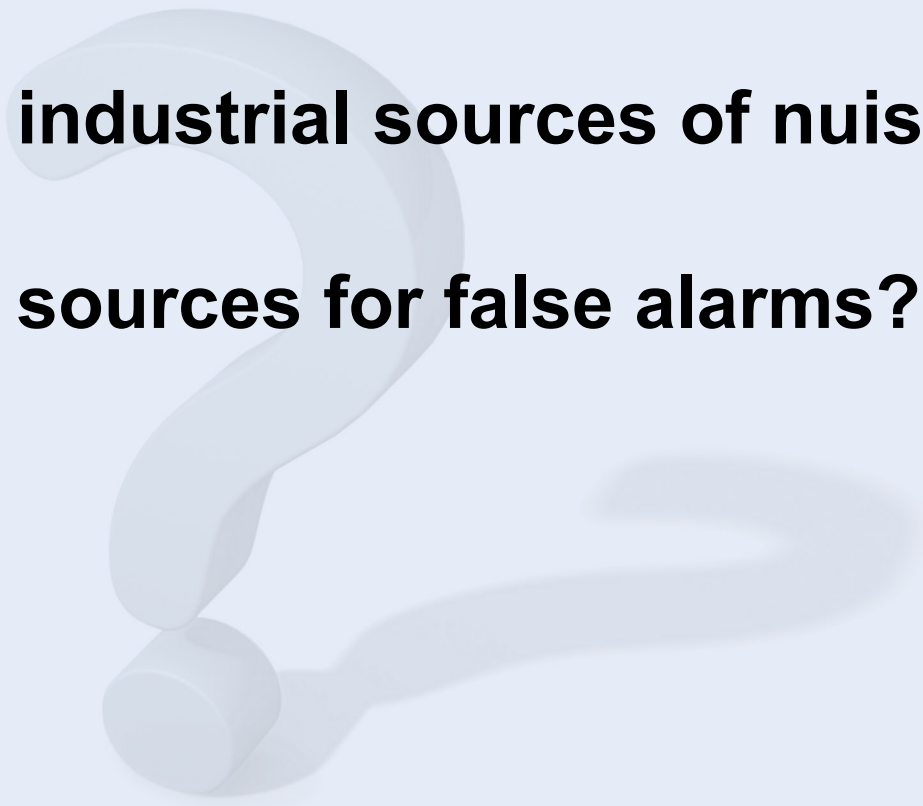


Detection Function Effectiveness (2 of 2)



Discussion Questions

- **What are some natural sources of nuisance alarms?**
- **What are some industrial sources of nuisance alarms?**
- **What are some sources for false alarms?**



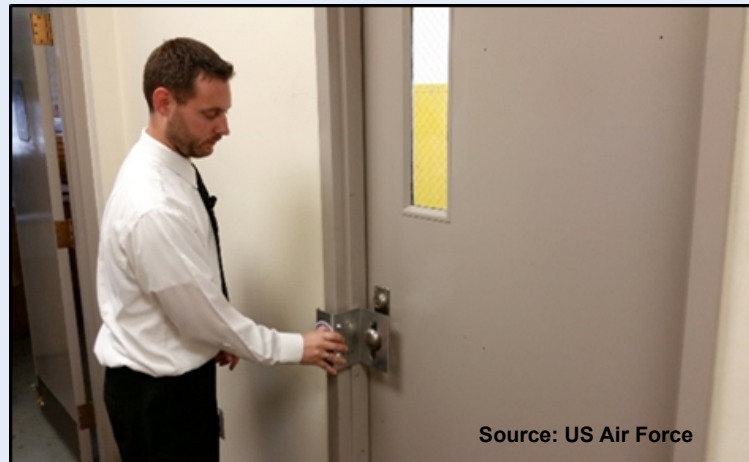
Delay Function

- **Definition:** the process of slowing down intruders' progress by increasing the time it will take intruders to achieve their goal
- **Purpose:** increase the time it takes intruders to achieve their goal



Delay Function Elements (1 of 2)

- **Barriers — walls, doors, and other solid structures between adversary and target**
- **Locks — delay mechanisms within a barrier**



Delay Function Elements (2 of 2)

- **Activated delays** — introduction of chemical elements as a delay (pepper spray, gas, or smoke)
- **Personnel** — security force members in fixed and well-protected positions



Delay Prior to Detection

- **Deterrent — barriers placed before detection**
- **Forces intruders to consider another method**
- **No value to the effectiveness of the physical protection system**



Delay Function with Physical Protection System

Delay — provide obstacles to increase intruder task time

Barriers

Locks

**Activated
delays**

**Security
force**



Delay Function Example (1 of 2)

Refer To:

Workbook 12.1



- **An intruder scales a 2.5-meter fence and runs to the door of a critical infrastructure facility (2 minutes)**
- **Once at the door, the intruder breaks into the facility and goes down a hallway to an asset storage area (2 minutes)**



Delay Function Example (2 of 2)

Refer To:

Workbook 12.1



- The intruder breaks into the asset storage area and steals critical information from the room (1.5 minutes)
- The intruder proceeds out of the facility using the same entrance path (4 minutes)
- Total time for intruder to complete task was 9.5 minutes



Discussion Questions

- **What would happen if the intrusion sensor did not activate until the intruder reached the exterior door of the facility?**
- **As Chief of Security, what actions could you implement to lengthen the delay time to allow your security force more time to respond?**



Response Function Section

- **This section will cover:**
 - **Definition and success**
 - **Responding personnel**
 - **Contingency planning**
 - **Communication**
 - **Interruption**
 - **Neutralization**



Response Function Definition

- **The actions taken by the security force to prevent intruder success**



Response Function Success

- **Established components:**
 - **Prearranged tactical plans**
 - **Communication devices**
 - **Realistic training**
- **Communication of accurate information and deployment of security force**



Responding Personnel

- **Depending on magnitude of attack, other responding personnel may include:**
 - **Contract security force members**
 - **Local and regional law enforcement, fire protection, and medical responders**
 - **Government agencies, in some cases**



Contingency Planning Definition

- **A method to develop well-documented procedures for:**
 - **Identifying potential targets**
 - **Responding to potential threats**
 - **Interacting with external agencies**
 - **Determining level of use-of-force for various situations**



Contingency Planning Purpose

- **Provides procedures for responding personnel to evaluate the situation**
- **Allows:**
 - Identification and evaluation of potential threats and intruder routes
 - Creation of tactical plans for response
 - Planning for training exercises



Communication (1 of 3)

- **Critical component of response function**
- **Information must be transferred with speed and accuracy**
- **Messages to security force must include:**
 - Information on intruder actions
 - Instructions for deployment



Source: Getty Images



Communication (2 of 3)

- **Effectiveness is measured on time and accuracy**
- **Time varies based on method of communication**
- **Probability of correct and current data being transmitted increases after the initial response**



Communication (3 of 3)

- Most commonly used method is a two-way or frequency modulation clear-voice radio
- Two-way radios can be heard or jammed by intruders
- To guard against intruder communication attacks, plan for the use of alternative communication methods or technologies



Source: Civil Air Patrol



Interruption Response

- **Interruption: the successful arrival of the security force at an appropriate location and in sufficient numbers to confront intruder(s)**
- **Using protected paths increases chances of successful interruption**

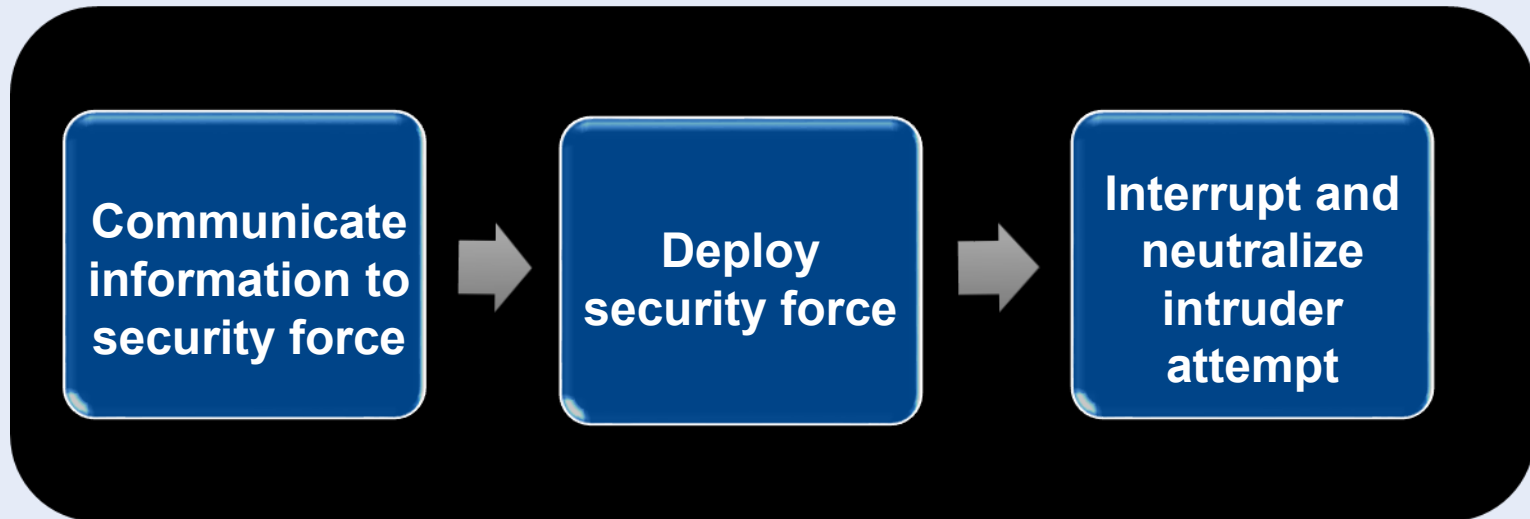


Neutralization Response

- **Neutralization: the point at which intruders' actions are stopped and intruders are no longer able to fight against the security force**
- **Force-on-force training beneficial but not typically necessary at industrial facilities**



Response Function of the Physical Protection System



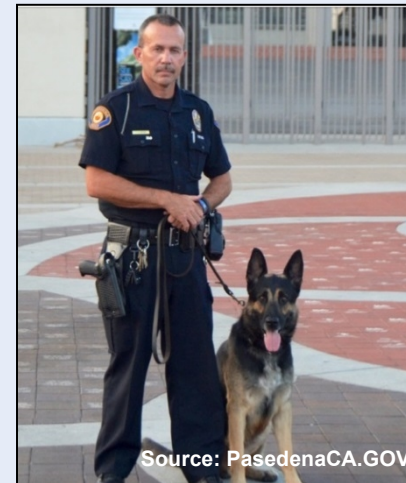
Response Function Example (1 of 2)

- The security control center operator receives notice of an alarm activation and transmits the location over the radio to a responding security force member



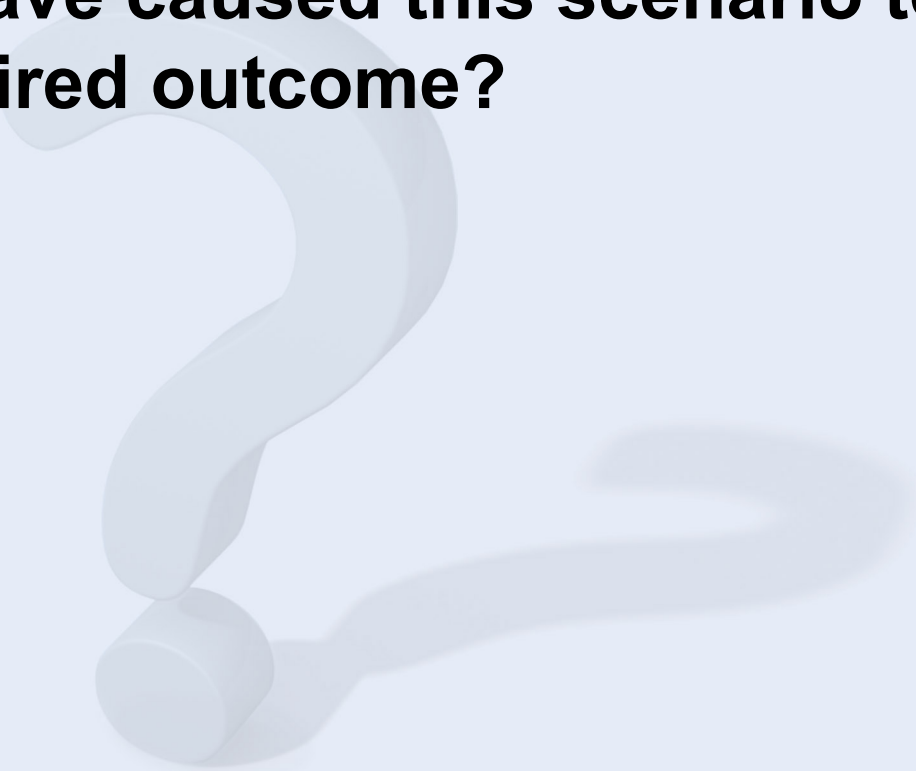
Response Function Example (2 of 2)

- The member responds to the designated area and stands by in a defensive posture to wait for the intruder
- The intruder arrives and is interrupted and neutralized by the security force member



Discussion Question

- Based on this response example, what type of events could have caused this scenario to be less than a desired outcome?



TeachBack Moment



- **What are the functional relationships between detection and assessment, delay, and response?**
- **How do the terms interruption and neutralization apply to security force effect?**



Primary Elements of Security Force Effectiveness

- **This section will cover:**
 - **Selection of security force members**
 - **Initial and continuous training**
 - **Deployment of equipment**
 - **Appropriate supervision**



Selection of Security Force Members — Pre-Employment

- **Background checks**
- **Medical exams**
- **Candidate testing and oral interview**



Selection of Security Force Members — Desirable Qualities

Refer To:

Workbook 12.2



- Integrity and honesty
- Alertness
- Judgment
- Confidence
- Physical fitness
- Tactfulness
- Self-control



Selection of Security Force Members — Important Considerations

- **Mental attitude and quality of job performance are critical**
- **Assign only the most reliable, responsible, and trustworthy members to the assignments requiring access to sensitive information**
- **Conduct follow-up investigations to ensure behavior is above reproach**



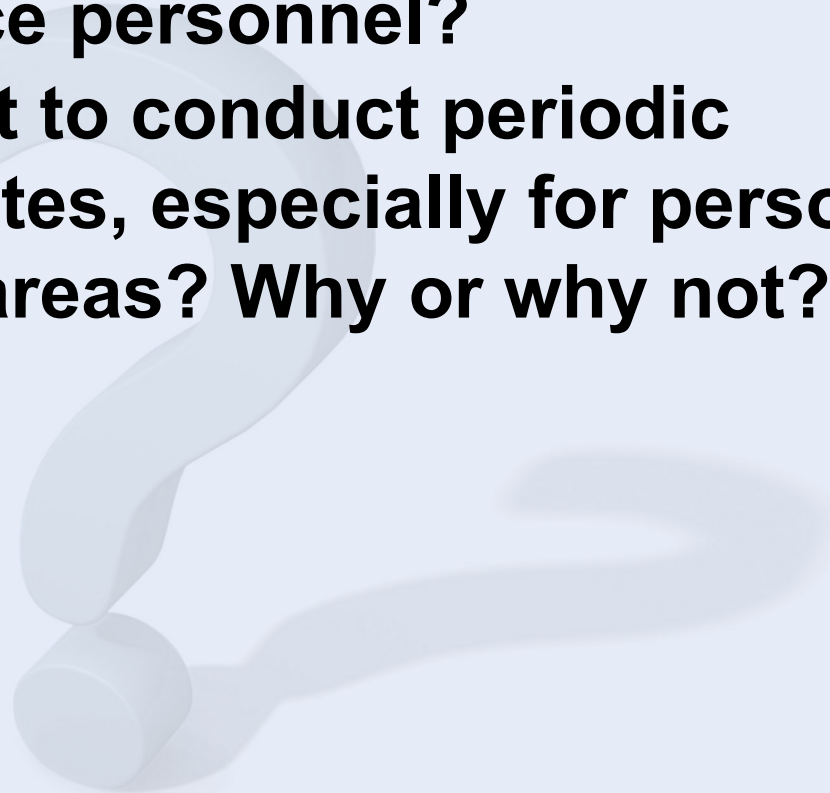
Discussion Questions (1 of 2)

- **What provisions do you have in place to ensure that your critical infrastructure security force or security force remains in good physical condition?**
- **What are the advantages of periodic physical-conditioning assessments and the benefits of a strong, healthy security force? Are there any disadvantages?**



Discussion Questions (2 of 2)

- **What background checks are performed on your security force personnel?**
- **Is it a requirement to conduct periodic background updates, especially for personnel securing critical areas? Why or why not?**



Initial and Continuous Training

- **Entry-level skills training — various skills**
- **Assignment of coach — ensures recruits gain insight from veteran members**
- **Annual update training — legal updates, new policies, and procedures**
- **Specialized training — dependent upon security force placement**



Deployment of Equipment

- **Equipment requirements must address security force needs**
- **Inadequate equipment can be detrimental to protecting critical infrastructure**



Appropriate Supervision

- **Competent in security force job skills**
- **Experienced in the field**
- **Sufficient number of supervisors**
- **Supervisor development and training**



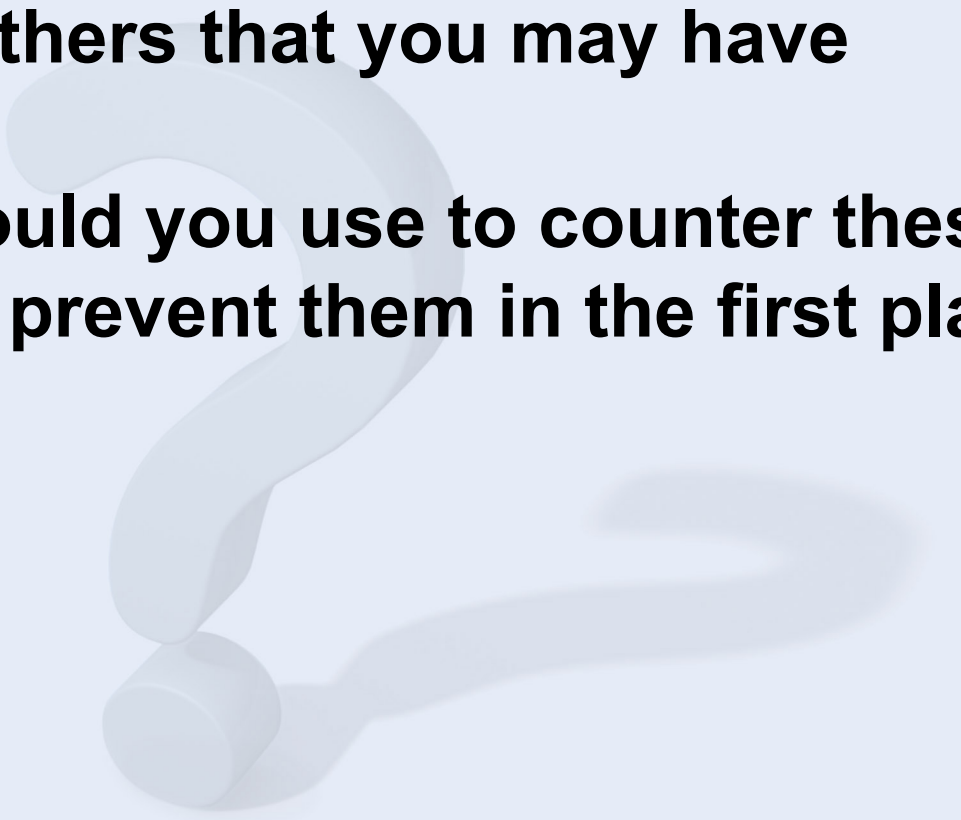
Inappropriate Supervision

- **Common causes:**
 - Lack of qualified, trained, experienced personnel
 - Poor documentation
- **Common deficiencies:**
 - Overworked or inattentive supervisors
 - Lack of coordination with others
 - Failure to develop emergency tactical skills



Discussion Questions

- In addition to the supervision issues identified, are there any others that you may have experienced?
- What tactics could you use to counter these deficiencies or prevent them in the first place?



Develop a Security Force Response Plan

- **Purpose: to define the processes necessary to enable the security force to successfully accomplish its mission**
- **Content is primarily for emergency response procedures**
- **Plan should be clear, concise, and current**



Security Force Response Plan Format

Refer To:

Workbook 12.3



- **Title**
- **References**
- **Definitions and abbreviations**
- **Purpose**
- **Guidance**
- **Reporting requirements**



TeachBack Moment



- **What are the primary elements that contribute to the effectiveness of a security force?**
- **What are the components that should be included in a security force response plan?**



Threaded Exercise Part 5 — National Ministries Building

Refer To:

Workbook Part 5



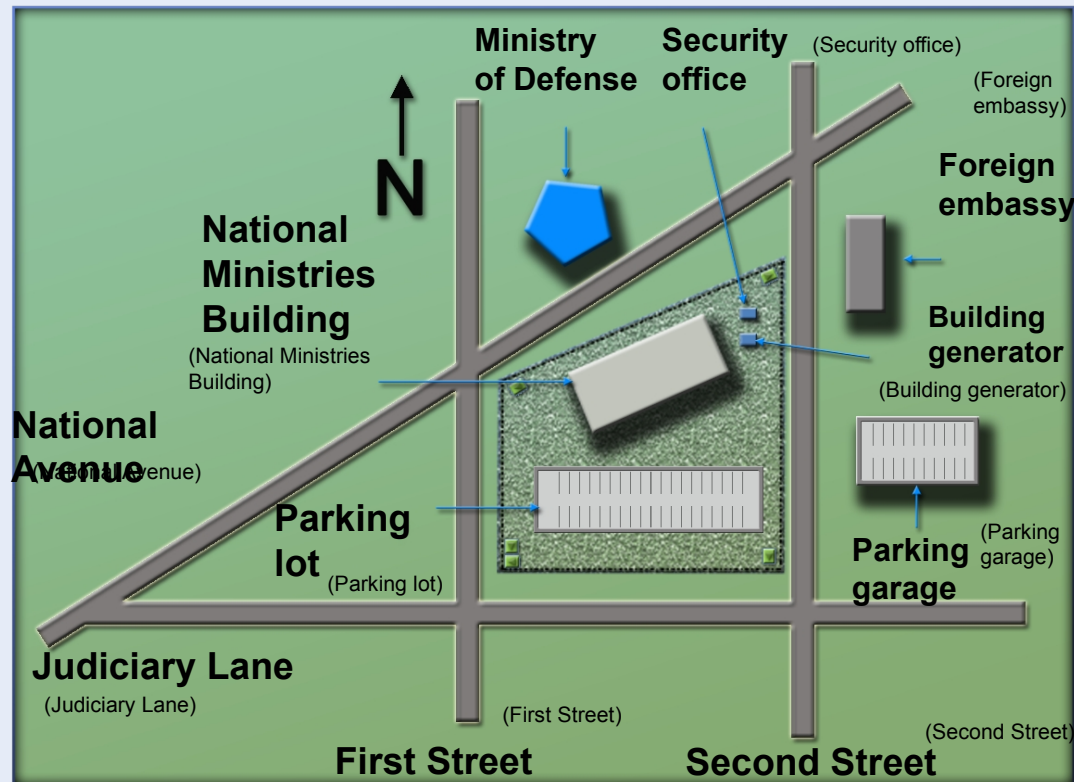
- **Purpose: to develop a security force response plan**
 - **Duration: 60 minutes (30-exercise; 20-presentations; 10-debrief)**
 - **Group composition: table groups**
 - **Debrief: team presentations; facilitator feedback**



National Ministries Building Complex Map

Refer To:

Workbook Part 4



Module Summary

- **Relationships between functions**
- **Primary elements of security force effectiveness**
- **Develop a security force response plan**

