Homeland Security

IPRO 373

IPRO 373 Homeland Security Project

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Introduction

- 9/11/2001
- Develop a product for prevention purposes
- A computer program that assess
 - Risk
 - Vulnerability
 - Provide suggestions

Work Done This Semester

- Created 4 subdivisions for homeland security
 - Technological
 - Structural/Utilities
 - Criminal/Terrorist Attacks
 - Environmental
- Developed initial website: www.iit.edu/~ipro373f03
- Developed survey that can be used to help
 - Prevent terrorist attacks
 - Reduce vulnerability to terrorist attacks/threats
 - Minimize damage from attacks/natural disasters

Planned Work For Next Semester

- Convert survey to a program
- Attempt to find buyers for the program

Technological

- Electronic Security
- Computers/Network
- Communications

Electronic Security

- Control access to vital areas
- Authenticate identification
- Monitor security systems at all times
- Automatic warning for security breach
- Recognize suspicious activity
- Save visual record

Computers/Networks

- Passwords
- Firewalls
- Viruses



Communication

- Telephone
- Emergency response system
- Wireless system

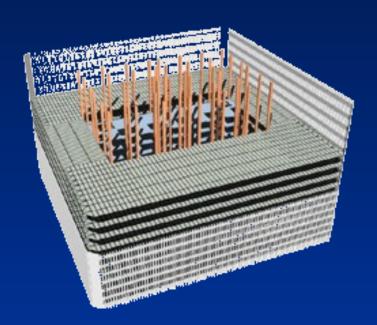


Structural/Utilities

- Structural
- Natural Gas
- Electric Power

Structural

- Utilize existing structure
- Identify high risk hazards
- Implementation of safeguards



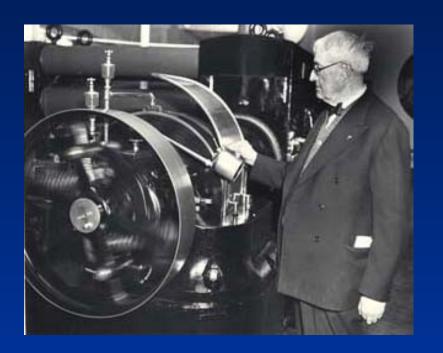
Natural Gas (NG)

- NG vital energy source
- Explosive nature
- NG system awareness



Electric Power

- Back-up electric generator
 - does facility have, require one
- Restricted access to critical utility areas
- Emergency battery back-up
 - periodic battery check policy



Criminal/Terrorist

- Facility Location
- Security Guards
- Weapons

Facility Location

- Urban or non-urban setting
- Amount of traffic around facility
- Facility entrances and exits
- Proximity to high risk facilities



Security Guards

- Onsite security
- Preventative plans, procedures
- Training
 - Drills
 - New threats, attack methods



Contact with local emergency service



Weapons

- Secure access
 - employee, visitor searches
 - metal detectors
 - exit locations
 - security
- Multiple types
 - Thermal
 - Radiological
 - Asphyxiation
 - Chemical
 - Mechanical
- Recognition



Environmental

- Natural Disasters
- Ventilation / Air
- Food
- Water

Natural Disasters

- Appear in many forms
- Hard to predict
- Cause massive damage
- Possible large life loss
- Needs:
 - Evacuation plan
 - Emergency response team
 - Designated safe area
 - Monitoring system



Ventilation / Air

- Safeguard against attacks
 - chemical
 - biological
- HVAC filtration system
- Internal/external safe zones
- Air intakes secure
- Response procedures



Food



- Definition
- Used as attack method
- Vulnerable to attack
- Potential effects of food terrorism

Water

- Guard against terrorism
- Detection of containments
- Purification / filtration
- Education



Conclusion



Protecting Our Future

B-NICE Symptoms Matrix

Nuclear, Incendiary, Chemical, Explosive Agents/Materials

B-NICE Symptoms Matrix
Nuclear, Incendiary, Chemical, and Explosive Agents/Materials

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B-NICE Symptoms Matrix

Biological Agents

B-NICE Symptoms Matrix Biological Agents

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