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Security Risk Versus Compliance: A Cultural, Technical, and Budgetary Shift

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Security Evolves with Organizational Growth

As an organization is formed, security evolves over time

- Initially they may have:
 - Key locks on the doors – front doors may be open during business hours
 - An alarm system which is monitored by a commercial monitoring company
- Over time, as the organization grows and/or threats arise they may add:
 - CCTV (which is likely not monitored, but may be recorded)
 - Electronic access control which allows front doors to remain locked during business hours (depends on the number of visitors to the facility)
 - If warranted, they may add a guard during business hours



Security Evolves with Organizational Growth

If the organization grows to multiple locations they may eventually develop standard security criteria

- Provides some level of consistency across the organization
 - May require security criteria for different types of locations (i.e., retail, manufacturing, offices, etc.)
 - May allow adjustments to security based on site conditions/history of events
- Makes it easier to assess compliance if each location follows the same criteria



No.	Standard	Yes	No	Comments
B-3.3.1	Glazed Doors		X	Glazing in exterior doors does not meet blast standard 10 above.
B-3.3.2	Alternative Designs		X	No alternate blast mitigation measures are present.
B-3.4	Standard 13. Mail Rooms			
B-3.4.1	Location			N/A as mail is screened prior to being delivered to the site.
B-3.4.2	Proximity			N/A as mail is screened prior to being delivered to the site.
B-3.4.3	Sealing	X		Mailroom has emergency shut-off button for ventilation systems. Button also seals the mailroom. The mailroom also has two hoods for opening suspicious packages.
B-3.5	Standard 14. Roof Access			
B-3.5.1	New Buildings			N/A
B-3.5.2	Existing Buildings	X		No external access to the roof. Internal access controlled.
B-3.6	Standard 15. Overhead Mounted Architectural Features		X	Standard overhead mounted architectural features with no special mountings to resist forces other than gravity.
B-4	ELECTRICAL AND MECHANICAL DESIGN			
B-4.1	Standard 16. Air Intakes			
B-4.1.1	New Buildings			N/A
B-4.1.2	Existing Buildings	X		Air intakes are above the 3 meter level.
B-4.2	Standard 17. Mail Room Ventilation	X		Mailroom has separate air handling equipment which can be shut down quickly in the event of a contaminant release in the mailroom. Mailroom can

Compliance Reviews

- Compliance reviews generally follow the set of minimum standards
- Auditors generally complete a checklist of those minimum standards
- If a location does not meet a specific criteria then the recommendation is to implement that criteria – unless it can be shown it is not applicable
- The premise of the compliance review is: if each location meets the criteria, then the level of security at that location is acceptable
- Is this a valid assumption - if the location has all of the countermeasures on the list do they have low or no security risk?

Number	Criteria	In Place?
2.2.2	Key control system in place and well maintained	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
2.2.3	No areas of concealment for devices around exits	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
2.2.4	Restrooms provided with emergency lighting	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
2.2.5	Under-building access to crawl spaces and utility tunnels restricted	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
2.2.6	Circulation routes have unobstructed views of people approaching controlled access points	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
2.2.7	Signs advising of video surveillance posted	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
3.2.1	High-risk and low-risk offices housed separately	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
3.2.2	Public access areas separated from high-risk offices	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
3.2.3	Mailroom is at the perimeter of the building	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
3.2.4	Screening of mail (for weapons, explosives and CBR material) performed at offsite location	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
3.2.5	Distance of at least 25 ft is used to separate mailroom from facility main entrances, utilities, areas containing critical services, distribution systems, and important assets	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
3.2.6	Entrances have been designed to avoid significant queuing	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
3.2.7	Automated access control implemented at all public/staff separation points	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
4.2.1	The following are located in secure areas behind security screening points: public toilets, service spaces, elevators and stairs	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
4.2.2	Distance of at least 50 ft separates main entrance, loading docks, shipping/receiving areas, vehicle circulation, and parking from utility mains, utility rooms, and other critical components and important assets	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
4.2.3	Automated access control requires two inputs to verify ID (i.e., proximity card and PIN) for restricted areas	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
4.2.4	Manifest check and visual screening of packages and deliveries (for weapons, explosives and CBR material) performed at loading docks and shipping/receiving areas	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A

Compliance Reviews vs Risk Assessment

From an implementation standpoint, compliance reviews are easier to perform than a full risk assessment

- Auditors only need to understand the items on the checklist
- They are not required to make many judgement decisions, if any
- They are not required to justify their decisions because compliance is basically a “yes” or “no” situation

Building Element	Security Countermeasure	Applied <input checked="" type="checkbox"/>
3.A. Offices	1. Locate vulnerable offices out of public view. (ISC-3.1.1)	<input type="checkbox"/>
	2. Separate high- and low-risk tenants. (ISC-3.1.2)	<input type="checkbox"/>
3.B. Public Service Areas	1. Do not place public toilets and service areas in unsecured locations. (ISC-3.1.3)	<input type="checkbox"/>
3.C. Interior Space	1. Provide areas of refuge. (ISC-3.1.4)	<input type="checkbox"/>
3.D. Service Docks	1. Separate loading docks and shipping and receiving from utilities. (ISC-3.1.5)	<input type="checkbox"/>
3.E. Retail Space	1. Design for retail and mixed uses, where appropriate. (ISC-3.1.6)	<input type="checkbox"/>
3.F. Stairwells	1. Locate emergency stairwells away from high-risk areas. (ISC-3.1.7)	<input type="checkbox"/>
3.G. Mailroom	1. Locate mailroom away from critical components; provide space for disposal container and/or other equipment. (ISC-3.1.8)	<input type="checkbox"/>
3.H. Interior Construction	1. Strengthen doors and walls at security screening. (ISC-3.2.1)	<input type="checkbox"/>
	2. Separate critical building components from high-risk areas. (ISC-3.2.2)	<input type="checkbox"/>
3.I. Entrances	1. Protect against forced entry. (ISC-3.3.1)	<input type="checkbox"/>
	2. Provide space for security functions. (ISC-3.3.2)	<input type="checkbox"/>
	3. Co-locate public and employee entrances. (ISC-3.3.3)	<input type="checkbox"/>
	4. Stop unauthorized vehicles at garage and service entrances. (ISC-3.3.4)	<input type="checkbox"/>
3.J. Interior Features	1. Do not install features that could conceal devices in unsecured areas. (ISC-3.4.1)	<input type="checkbox"/>
3.K. Roof	1. Specify roof access design requirements. (ISC-3.4.2)	<input type="checkbox"/>

Risk assessments involve different types of information

Risk Based Security

Risk based security involves determining:

- Threats – applicable threats and the level of each threat
- Consequence – potential impact from a successful event
- Vulnerability – effectiveness of existing countermeasures to detect, deter, defend and/or deny the threat/adversary

Risk based security also involves:

- Justifying the threat, consequence and/or vulnerability ratings
- Recommending mitigation measures to address vulnerabilities
- Determining potential risk reduction associated with implementation of recommended mitigation measures

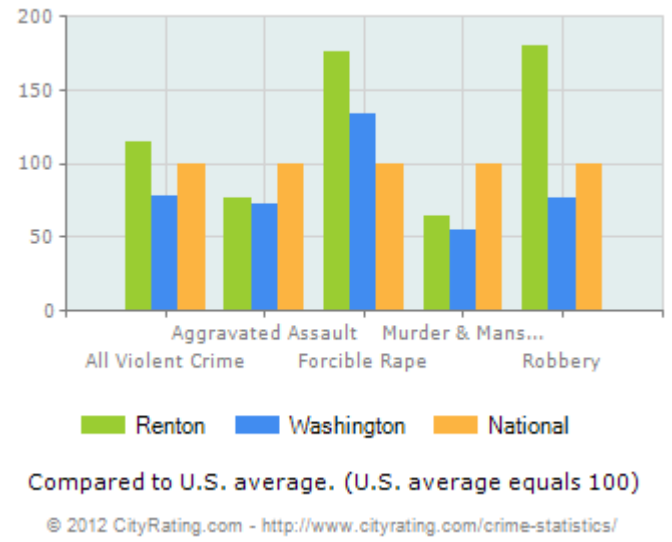
Threats

During a risk assessment, assessors are required to:

- Understand the mission(s) of the entities occupying the facility(s)
- Identify what aggressors may target these entities
- Determine the type of tactics the aggressors may utilize
- Scope out the surrounding area to locate:
 - Other facilities which may draw specific types of threats
 - Locations which could provide concealment/targeting opportunities for adversaries
 - Criminal/gang related activities
 - Etc.,

Typical Threats	
Arson	Explosive Device Mailed or Delivered
Assault	Explosive Device Vehicle Borne
Assault w/ a Deadly Weapon	Kidnapping
Bomb Threat	Larceny/Theft
Burglary	Robbery
CBR Airborne	Sabotage
CBR Mailed or Delivered	Vandalism
CBR Water Supply	Vehicle Ramming

Violent Crime Comparison



Threats

To determine threat levels, assessors must ask more questions and conduct more research.

- Speak with onsite security personnel about current issues
- Speak with local law enforcement, if possible
- Look up crime statistics in the FBI's Uniform Crime Reporting Program (Local Law Enforcement contributes this data)
- Observe the surrounding environment
 - Does the dynamic change at night?
 - Is there a vagrant issue?
 - Are the surroundings well maintained?
- Conduct internet research for news reports related to the site and the community.
- Talk to employees and managers about their security concerns and any threats they have experienced. These events often go unreported.



FBI Uniform Crime Reporting

FBI Uniform Crime Reporting (UCR) Program

	City	Population	Violent crime	Murder and nonnegligent manslaughter	Rape (revised definition)1	Rape (legacy definition)2	Robbery	Aggravated assault	Property Crime	Burglary	Larceny-theft	Motor vehicle theft	Arson
2016	Johnston	29,322	43	1	7		7	28	451	64	340	47	2
2015	Johnston	29,247	41	0	3		9	29	393	83	278	32	3
2014	Johnston	29,216	42	0	4		3	35	382	82	260	40	2
2013	Johnston	29,068	25	2	8		4	12	564	119	399	46	7
2012	Johnston	28,743	38	1		3	7	27	531	109	363	59	7
2011	Johnston	28,734	38	0		6	9	23	589	150	389	50	8
2010	Johnston	28,623	39	0		3	10	26	587	125	412	50	5

In 2013, the FBI UCR Program initiated the collection of rape data under a revised definition and removed the term "forcible" from the offense name. The UCR Program now defines rape as follows:

(1) Rape (revised definition): Penetration, no matter how slight, of the vagina or anus with any body part or object, or oral penetration by a sex organ of another person, without the consent of the victim. (This includes the offenses of rape, sodomy, and sexual assault with an object as converted from data submitted via the National Incident-Based Reporting System [NIBRS]).

(2) Rape (legacy definition): The carnal knowledge of a female forcibly and against her will.



NEW ORLEANS METRO CRIME AND COURTS NEWS

Why does New Orleans have more murders than similar cities? Experts search for answers

Updated Nov 2, 2017; Posted May 11, 2016

nola.com

Consequence (Impact of Loss)

During a risk assessment, assessors are required to:

- Quantify potential impact of loss of assets (people, buildings, information, equipment and operations) from successful threat events
 - Loss of life
 - Destruction of property/equipment
 - Loss of information through physical thefts – not hacking
 - Loss of operations - downtime
- Remember you are speaking to the experts

April 13, 2016 | Mark Santamaría Categories: Encryption, Breaches, Best Practices

45% of Healthcare Breaches Occur on Stolen Laptops

Stolen devices such as a laptop or a USB thumb drive rarely come up when most people think of data breaches, but breaches caused by stolen devices are a very real threat organizations face. [Verizon's 2015 Data Breach Investigation Report \(DBIR\)](#) revealed that this type of data breach is common for healthcare organizations, making up almost half (45%) of healthcare data breaches.



Fire at FAA facility deals blow to air-traffic system, shuts down Chicago airports



All flights in and out of O'Hare International and Midway airports were halted Sept. 26, 2014, after a fire broke out at a radar facility in Aurora.

Vulnerability

During a risk assessment, assessors are required to:

- Determine vulnerability of assets to each specific threat
- Vulnerability is based on the adequacy of the existing countermeasures
- Adequacy of countermeasures is determined by the level of deterrence, delay, defense, and/or denial.
- This determination is made by the assessor based on experience.



Risk Assessments

Risk = Threat X Consequence X Vulnerability

Threat	Threat Level	Impact of Loss	Vulnerability	Risk
	Rating	Rating	Rating	Rating
Arson	Potential	Severe	Medium	Medium
Assault	Credible	Minor	Very High	Medium
Assault with a Deadly Weapon	Potential	Severe	Very High	High
Bomb Threat	Minimal	Noticeable	Very High	Medium
Burglary	Potential	Severe	Medium	Medium
CBR Airborne	Potential	Devastating	High	High
CBR Release – Mailed or Delivered	Credible	Severe	Very High	Very High
CBR Release - Water Supply	Minimal	Devastating	Medium	Medium
Explosive Device – Mailed or Delivered	Potential	Severe	Very High	High
Explosive Device – Vehicle Borne IED	Minimal	Devastating	High	Medium
Kidnapping/Hostage Taking	Minimal	Noticeable	Medium	Low
Larceny/Theft	Credible	Severe	High	High
Robbery	Minimal	Severe	Low	Low
Sabotage	Potential	Devastating	High	High
Vandalism	Minimal	Minor	High	Low
Vehicle Ramming	Minimal	Severe	High	Medium

Risk Matrix

Risk = Threat X Consequence X Vulnerability

Minimal Threat				
	Vulnerability			
Impact of Loss	Low	Medium	High	Very High
Minor	Blue	Blue	Blue	Blue
Noticeable	Blue	Blue	Blue	Green
Severe	Blue	Blue	Green	Green
Devastating	Blue	Green	Green	Green
Potential Threat				
	Vulnerability			
Impact of Loss	Low	Medium	High	Very High
Minor	Blue	Blue	Blue	Green
Noticeable	Blue	Green	Green	Green
Severe	Blue	Green	Yellow	Yellow
Devastating	Green	Green	Yellow	Yellow
Credible Threat				
	Vulnerability			
Impact of Loss	Low	Medium	High	Very High
Minor	Blue	Blue	Green	Green
Noticeable	Blue	Green	Yellow	Yellow
Severe	Green	Yellow	Yellow	Red
Devastating	Green	Yellow	Red	Red
Defined Threat				
	Vulnerability			
Impact of Loss	Low	Medium	High	Very High
Minor	Blue	Green	Green	Green
Noticeable	Green	Green	Yellow	Yellow
Severe	Green	Yellow	Red	Red
Devastating	Green	Yellow	Red	Red

Cultural Issues

Cultural issues with risk based security

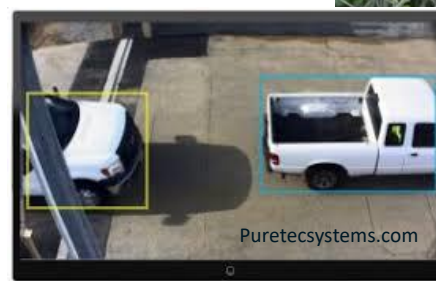
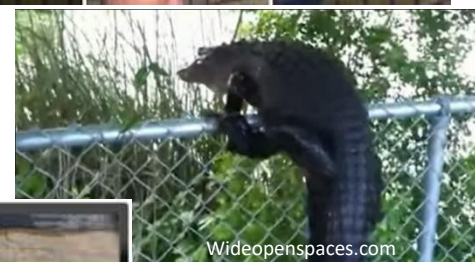
- Senior management must support the risk management process
- Identifying security risks will upset some people
- The organization must decide what level of risk they are willing to accept
- Identifying unacceptable levels of risk will require additional security measures to reduce risks
- Future security measures may be inconsistent from site to site
- Additional security training for employees may be required

Threat	Threat Level	Impact of Loss	Vulnerability	Risk
	Rating	Rating	Rating	Rating
Arson	Potential	Severe	Low	Low
Assault	Credible	Minor	Medium	Low
Assault with a Deadly Weapon	Potential	Severe	Medium	Medium
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Explosive Device – Vehicle Borne IED	Minimal	Devastating	Very High	Medium
Kidnapping/Hostage Taking	Potential	Noticeable	Medium	Medium
Larceny/Theft	Minimal	Severe	Low	Low
Robbery	Credible	Severe	Very High	Very High
Sabotage	Potential	Devastating	Medium	Medium
Vandalism	Minimal	Minor	High	Low
Vehicle Ramming	Minimal	Severe	Very High	Medium

Technical Issues

Risk management is more complicated than compliance

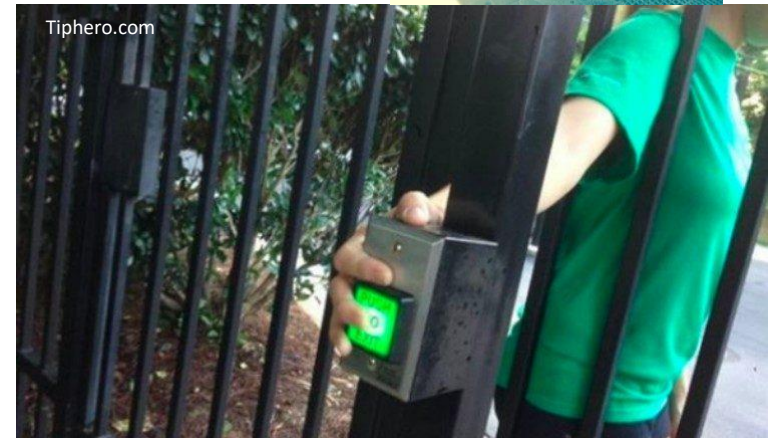
- Assessors require confidence and experience to apply threat, consequence, and vulnerability ratings
- Assessors must understand what countermeasures actually impact vulnerability from specific threats
 - Blast walls very seldom reduce vulnerability to blast
 - Fences only keep honest people honest
 - CCTV cameras are good for evidence, but seldom help in detection and response
- You have to think more like an aggressor than a security person
- Your own employees may be increasing your risks
 - Employees will circumvent security for convenience and not understand the impact of their actions
 - Sometimes employees are just too nice



Budgetary Issues

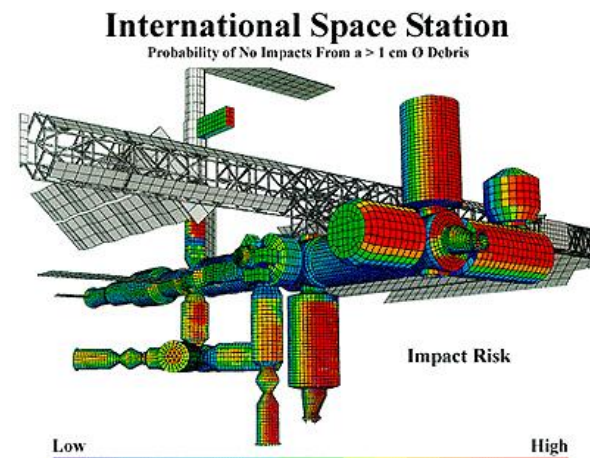
Findings from the risk assessments may differ from the current security approach

- Existing countermeasures may not be adequate
 - Explaining why existing security was previously acceptable (but not longer is) may be difficult
 - Additional employee training will likely be needed
 - New countermeasure requirements may be costly and will need to go into the budget cycle
- Some existing countermeasures may no longer be justifiable if they address threats which do not pose unacceptable risks
- Additional operational measures may be required to provide temporary risk reduction until more permanent solutions can be installed



Why Implement Risk Management?

- Risk-based decision making is understood by lines of business
- Tying countermeasure upgrades to risk reduction should improve the ability to get funding for upgrades
- Once security risk management is accepted by the organization, you can utilize risk management to support all of your security requirements



Example of risk assessment: A NASA model showing areas at high risk from impact for the International Space Station – Wikipedia.org

How can you make it work?

Use succinct definitions. For example:

Threat Definitions

Rating Category	Description
Defined	There are aggressors who utilize this tactic who are known to be targeting this facility or the organization. There is a history of this type of activity in the area and this facility is a known target. Specific threats have been received or identified by law enforcement agencies.
Credible	There are aggressors who utilize this tactic who are known to target this type of facility. There is a history of this type of activity in the area and this facility and/or similar facilities have been targets previously. No specific threat has been received or identified by law enforcement agencies.
Potential	There are aggressors who utilize this tactic, but they are not known to target this type of facility. There is a history of this type of activity in the area, but this facility has not been a target.
Minimal	No aggressors who utilize this tactic are identified for this facility and there is no history of this type of activity at the facility or the neighboring area.

How can you make it work?

Consequence Definitions

Rating Category	Description
Devastating	Complete loss of assets/mission capability or extreme impairment of mission capability is expected for an indefinite period of time.
Severe	Complete loss of assets/mission capability or extreme impairment of mission capability is expected for a limited and quantifiable period of time.
Noticeable	Mission capability is impaired, but can continue without an interruption of more than a few hours to one day. Major assets may be damaged, but remain functional.
Minor	No noticeable impact on mission capability or loss of major assets is expected.

Definitions can be modified to meet the culture of the organization

- Depending on the requirements of the organization, downtime can be quantified
- Devastating for an airport is different than devastating for a museum

How can you make it work?

One approach is to provide baseline ratings for level of threat and/or consequence

- For level of threat, the federal government set a precedence for this approach by providing Design Basis Threats (DBTs) and associated threat levels
- However, there are issues with this approach:
 - They do not vary across different types of facilities
 - They do not account for the target attractiveness of the organizations in the facility
 - They do not consider affect of local conditions on the threat
- How can you do better? You can:
 - Provide baseline threat ratings for facilities of different types at different levels of size, population, etc.
 - Account for target attractiveness
 - Will need to allow assessors to adjust threat ratings to account for local conditions



How can you make it work?

- Vulnerability Ratings
 - Vulnerability ratings (low, medium, high or very high) are determined by the existing countermeasures.
 - A proven approach is to link countermeasures to specific threats.
 - Countermeasures can be weighted by their effectiveness to address specific threats.

Countermeasures	Assault	Assault with a Deadly Weapon	Larceny	Burglary	Vehicle Ramming	Mail/Package Bomb
Vehicle Barriers	N	N	N	N	Y	N
Guard Patrol (unarmed)	Y	N	Y	Y	N	N
CCTV	Y	Y	Y	Y	N	N
Lighting	Y	Y	Y	Y	N	N
Access control	Y	Y	Y	Y	N	N
Magnetometers	N	Y	N	N	N	N
X-Ray screening bags/purses	N	Y	N	N	N	N
X-Ray screening of mail/packages	N	N	N	N	N	Y
Intrusion Detection	N	N	N	Y	N	N
Fencing	Y	Y	N	Y	N	N
Security Awareness Training	Y	Y	Y	N	N	Y

Other Challenges

Threat	Threat Level	Impact of Loss	Vulnerability	Risk
	Rating	Rating	Rating	Rating
Arson	Potential	Severe	Low	Low
Assault	Credible	Minor	Medium	Low
Assault with a Deadly Weapon	Potential	Severe	Medium	Medium
Bomb Threat	Minimal	Noticeable	Very High	Medium
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Sabotage	Potential	Devastating	Medium	Medium
Vandalism	Minimal	Minor	High	Low
Vehicle Ramming	Minimal	Severe	Very High	Medium

- Security Risk Assessments will result in identification of risk from each DBT
- Once risks are quantified:
 - Some can be mitigated to an acceptable level (i.e., minimal, low, or medium – if medium is acceptable)
 - Some risks cannot be mitigated due to physical and/or financial constraints
 - Therefore, some unacceptable risks (i.e., high and/or very high) will need to be accepted, at least temporarily.

Addressing Unacceptable Risks

For those risks which can be mitigated the assessor must:

- Link countermeasure upgrades to specific threats
- Determine if the new and/or upgraded countermeasures provide sufficient security improvement to lower the level of vulnerability (i.e., generally the threat level nor the consequence level is reduced)
- Lowering vulnerability may not reduce the level of risk.

Minimal Threat				
Impact of Loss	Vulnerability			
	Low	Medium	High	Very High
Minor	Blue	Blue	Blue	Blue
Noticeable	Blue	Blue	Blue	Green
Severe	Blue	Blue	Green	Green
Devastating	Blue	Green	Green	Green

Potential Threat				
Impact of Loss	Vulnerability			
	Low	Medium	High	Very High
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Devastating	Green	Green	Yellow	Yellow

Credible Threat				
Impact of Loss	Vulnerability			
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Severe	Green	Yellow	Red	Red
Devastating	Green	Yellow	Red	Red

Good Rules of Thumb

Generally require two assessors

- 1 to conduct interviews and 1 to take notes during the interviews
- 1 to take pictures and 1 to document where the picture was taken
- 2 people to review information and determine levels of threat and consequence
- Experienced assessors who understand the intent behind each countermeasure and are able to evaluate if the existing countermeasure is adequate

An independent reviewer to read the assessment report to:

- Determine if information presented is clear (i.e., when you have been on-site your descriptions of the site, access control, vehicle and pedestrian traffic flow, etc. will seem clear to you as you automatically fill in blanks based on your on-site observations)
- Evaluate information presented to verify it supports rating justifications, findings, and /or conclusions
- Compare rating justifications to definitions to make sure they match

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Case Study



Case Study – Office Mission

- The standard mission of the Field Office is to:
 - take claims
 - adjudicate claims
 - change benefits
 - answer general inquiries regarding benefits
 - to make referrals to other state and federal agencies if there is an indication that they can help the customer
- This office employs 16 people and see approximately 60 customers per day
- They deny about 80% of the claims that come through the office.

Case Study – General Information

- Facility is located in a town/county of approximately 40,000 residents
- It is not close to a major interstate, but it is within ½ mile of a railroad line.
- Local crime rate (purple) is higher than US average (green) in all categories



Case Study – General Information

- There is one public entrance at the front of the facility.
- Parking is directly in front of the building.
- The side door is used for deliveries.
- There is one door that opens into a common hallway inside the facility.
- The employee restrooms are accessed through the common hallway.
- All visitors must sign in with the guard at the front entrance.
- The receptionist at the window will inform the proper employee that someone is here to see them.
- The employee then comes to the front, unlocks the door between the reception area and the employee workspace and escorts the visitor to his/her cubicle.
- The office receives a high volume of mail.



Case Study –Threat Profile

- The personnel are frequently threatened with violence.
- The some claimants have mental issues.
- Abusive language is very common as is alcohol and drug abuse.
- There have been incidents of people entering the facility with knives and pipes.
- No one has openly displayed a gun or claimed to be carrying a gun.
- Another common problem is claimants calling the office and threatening to commit suicide. The Office Manager is concerned one of the suicidal claimants many decide to kill one or more of the employees and then take his/her own life.

Case Study –Threat Profile

- The office is not in the best part of town. It is several blocks from one of the higher crime areas.
- The local jail is about 10 blocks away.
- Some shots were fired at the building at night when no one was there.
- The last break in was over 5 years ago. A window was broken and someone entered and got the keys to the government vehicle and stole the car. The vehicle was recovered close to the State Penitentiary. A prisoner at the Penitentiary had to get back from his weekend furlough and needed transportation. He took the car and drove until he ran out of gas.

Case Study – Existing Countermeasures

- The building has an IDS system. The system consists of magnetic contacts on doors, motion and sound detectors. The system annunciates at the Regional Control Center (RCC). The RCC calls the local police and the office manager.
- The IDS system has a duress alarm feature. If the person arming or disarming the system punches in a specific code, the RCC knows that it is a duress signal and will notify the local police. The office manager accidentally tested the system and police arrived in about 3 minutes.
- There are duress alarms at the reception windows. These also annunciate at the RCC. These have never been tested as far as anyone could remember.
- Deliveries are made to the side door of the facility. There is a peephole and an intercom. An employee must identify the delivery person prior to opening the door. This is a relatively small community. The delivery people are well known to the employees, but employees have no training in handling suspicious packages.



Case Study – Existing Countermeasures

- The facility has 1 armed guard during business hours.
- The guard's desk is just inside the front door with their back to customer seating.
- Visitors are required to sign in with the guard at the door.
- However, the guard takes breaks outside and is often away from the desk.
- Visitors often enter the building and go directly to one of the reception windows.
- The building has a sprinkler system.



First Step – Rate Each Threat

Threat	Threat Rating
Arson	Potential
Assault	Credible
Assault with a Deadly Weapon	Credible
Bomb Threat	Minimal
Burglary	Defined
CBR Airborne	Potential
CBR Release – Mailed or Delivered	Potential
CBR Release - Water Supply	Minimal
Explosive Device – Mailed or Delivered	Potential
Explosive Device – Vehicle Borne IED	Minimal
Kidnapping/Hostage Taking	Credible
Larceny/Theft	Credible
Robbery	Minimal
Sabotage	Minimal
Vandalism	Defined
Vehicle Ramming	Credible

Rating Category	Description
Defined	There are aggressors who utilize this tactic who are known to be targeting this facility or the organization. There is a history of this type of activity in the area and this facility is a known target. Specific threats have been received or identified by law enforcement agencies.
Credible	There are aggressors who utilize this tactic who are known to target this type of facility. There is a history of this type of activity in the area and this facility and/or similar facilities have been targets previously. No specific threat has been received or identified by law enforcement agencies.
Potential	There are aggressors who utilize this tactic, but they are not known to target this type of facility. There is a history of this type of activity in the area, but this facility has not been a target.
Minimal	No aggressors who utilize this tactic are identified for this facility and there is no history of this type of activity at the facility or the neighboring area.

Note: All ratings are accompanied by a written justification in the report.

Second Step – Rate Consequence from Each Threat

Threat	Consequence Rating
Arson	Severe
Assault	Noticeable
Assault with a Deadly Weapon	Severe
Bomb Threat	Noticeable
Burglary	Noticeable
CBR Airborne	Devastating
CBR Release – Mailed or Delivered	Severe
CBR Release - Water Supply	Minor
Explosive Device – Mailed or Delivered	Severe
Explosive Device – Vehicle Borne IED	Devastating
Kidnapping/Hostage Taking	Severe
Larceny/Theft	Noticeable
Robbery	Noticeable
Sabotage	Severe
Vandalism	Minor
Vehicle Ramming	Severe

Rating Category	Description
Devastating	Complete loss of assets/mission capability or extreme impairment of mission capability is expected for an indefinite period of time.
Severe	Complete loss of assets/mission capability or extreme impairment of mission capability is expected for a limited and quantifiable period of time.
Noticeable	Mission capability is impaired, but can continue without an interruption of more than a few hours to one day. Major assets may be damaged, but remain functional.
Minor	No noticeable impact on mission capability or loss of major assets is expected.

Third Step – Rate Vulnerability to Each Threat

Threat	Vulnerability Rating
Arson	Low
Assault	Very High
Assault with a Deadly Weapon	Very High
Bomb Threat	Very High
Burglary	Medium
CBR Airborne	Medium
CBR Release – Mailed or Delivered	High
CBR Release - Water Supply	Low
Explosive Device – Mailed or Delivered	High
Explosive Device – Vehicle Borne IED	Low
Kidnapping/Hostage Taking	Medium
Larceny/Theft	Low
Robbery	Medium
Sabotage	Medium
Vandalism	Very High
Vehicle Ramming	Very High

Rating Category	Description
Very High	This facility provides an attractive target for terrorists or criminals and/or the existing countermeasures provide no deterrence and/or defense from the threat.
High	This facility provides an attractive target for terrorists or criminals and/or the existing countermeasures provide some level of deterrence and/or defense, but require improvement.
Medium	This facility provides an attractive target for criminals and/or the level of deterrence and/or defense provided by the existing countermeasures is adequate.
Low	This facility does not provide an attractive target for criminals and/or the level of deterrence and/or defense provided by the existing countermeasures is adequate.

Next Step – Determine the Risk Posed by Each Threat

Threat	Threat Level	Consequence	Vulnerability	Risk
	Rating	Rating	Rating	Rating
Arson	Potential	Severe	Low	Low
Assault	Credible	Noticeable	Very High	High
Assault with a Deadly Weapon	Credible	Severe	Very High	Very High
Bomb Threat	Minimal	Noticeable	Very High	Medium
Burglary	Defined	Noticeable	Medium	Medium
CBR Airborne	Potential	Devastating	Medium	Medium
CBR Release – Mailed or Delivered	Potential	Severe	High	High
CBR Release - Water Supply	Minimal	Minor	Low	Low
Explosive Device – Mailed or Delivered	Potential	Severe	High	High
Explosive Device – Vehicle Borne IED	Minimal	Devastating	Low	Low
Kidnapping/Hostage Taking	Credible	Severe	Medium	High
Larceny/Theft	Credible	Noticeable	Low	Low
Robbery	Minimal	Noticeable	Medium	Low
Sabotage	Minimal	Severe	Medium	Low
Vandalism	Defined	Minor	Very High	Medium
Vehicle Ramming	Credible	Severe	Very High	Very High

Countermeasure Upgrades

- Move guard desk
- Have guard search bags
- Test duress buttons/fix if necessary
- Suspicious package training
- Bollards along front of the building – primarily at entrance

Threat	Threat Level	Consequence	Vulnerability	Risk
	Rating	Rating	Rating	Rating
Arson	Potential	Severe	Low	Low
Assault	Credible	Noticeable	Very High	High
Assault with a Deadly Weapon	Credible	Severe	Very High	Very High
Bomb Threat	Minimal	Noticeable	Very High	Medium
Burglary	Defined	Noticeable	Medium	Medium
CBR Airborne	Potential	Devastating	Medium	Medium
CBR Release – Mailed or Delivered	Potential	Severe	High	High
CBR Release - Water Supply	Minimal	Minor	Low	Low
Explosive Device – Mailed or Delivered	Potential	Severe	High	High
Explosive Device – Vehicle Borne IED	Minimal	Devastating	Low	Low
Kidnapping/ Hostage Taking	Credible	Severe	Medium	High
Larceny/Theft	Credible	Noticeable	Low	Low
Robbery	Minimal	Noticeable	Medium	Low
Sabotage	Minimal	Severe	Medium	Low
Vandalism	Defined	Minor	Very High	Medium
Vehicle Ramming	Credible	Severe	Very High	Very High

Risk Reduction

- Move guard desk
- Have guard search bags
- Test duress buttons/fix if necessary
- Suspicious package training
- Bollards along front of the building – primarily at entrance

Threat	Vulnerability	Risk
	Rating	Rating
Arson	Low	Low
Assault	Very High	High
Assault with a Deadly Weapon	Very High	Very High
Bomb Threat	Very High	Medium
Burglary	Medium	Medium
CBR Airborne	Medium	Medium
CBR Release – Mailed or Delivered	High	High
CBR Release - Water Supply	Low	Low
Explosive Device – Mailed or Delivered	High	High
Explosive Device – Vehicle Borne IED	Low	Low
Kidnapping/ Hostage Taking	Medium	High
Larceny/Theft	Low	Low
Robbery	Medium	Low
Sabotage	Medium	Low
Vandalism	Very High	Medium
Vehicle Ramming	Very High	Very High

Vulnerability	Risk
Rating	Rating
Low	Low
High	Medium
High	High
Very High	Medium
Medium	Medium
Medium	Medium
Medium	Medium
Low	Low
Medium	Medium
Low	Low
Low	Medium
Low	Low
Medium	Low
Medium	Low
Very High	Medium
Medium	High

Questions?

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