Creating and Managing an Incident Response Team for a Large Company

*GCIH Gold Certification*

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Accepted:
Creating and Managing an Incident Response Team for a Large Company

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1) Incident Response Team Basics

a) Introduction

The computer security incident response team’s (C.S.I.R.T.) function is to react in a timely fashion, to intrusions, types of theft, denial of service attacks and many other events that have yet be to executed or considered against their company. The CSIRT will be responsible for investigating and reporting on malicious insider activity, internet spam, human resource violations and copyright infringements.

The CSIRT will typically be called into action by a notification or triggered event but can also be called into action by a discovery while performing one of many passive services. Call Centers, Help Desks, business unit liaisons, legal representatives, email notifications or anonymous forms from an Intranet will all be entry points into calling the CSIRT into action.

b) CSIRT Services

CSIRT serve several purposes. In addition to identifying, containing and eradicating a successful intrusion, the CSIRT will educate, communicate, execute vulnerability assessment, shape policy and more.

i) Passive Services
There are several passive services that the CSIRT will perform to provide the company aide protecting its information systems in anticipation of future malicious activity.

Vulnerability Assessment

The CISRT will perform vulnerability assessment against company assets. The CSIRT will verify reported vulnerabilities and how they can be exploited. The vulnerability assessment service can help the business to identify infrastructure that is a high risk and can also provide data on a system that has had incident response procedures executed against it. The vulnerability assessment service will help identify when the recovery phase of an incident response effort has mitigated the intrusion. Maintaining current vulnerability assessment data for the company’s high risk systems can better mitigate the security threats to the company.

Announcements and Information Disclosure

The announcement function is used to notify business units of potential threats to information systems, external virus outbreaks that can affect the infrastructure and new compliance objectives. The CSIRT will monitor technical developments and trends to help identify attack vectors. The announcement service will provide guidance to the business to aide in mitigating security threats before they happen.
In some cases, when investigating an intrusion, a disclosure of sensitive information will be uncovered. In the case of medical information (ePHI) or identity theft data loss, the CISRT will perform defined disclosure procedures. Depending on what data was exposed and which state the personally identifiable information owner resides in, the disclosure notification procedures will vary. Disclosure procedures will involve crafting notification letters, obtaining identity theft protection services for the effected parties, working with corporate communications to deal with the media, and potentially providing law enforcement evidence of the intrusion.

Intrusion Detection Service

The intrusion detection service is conducted by the monitoring efforts of the CSIRT. In some cases the security group and the CSIRT will be separate teams and monitoring of IDS and IPS technologies may be shared. In these cases, alerting on intrusion information will be passed up to the CSIRT for incident handling. The intrusion detection service typically monitors intrusion detection equipment, intrusion prevention equipment, security event manager logs and performs periodic intrusion discovery procedures. When an event of interest is identified, the CSIRT will move into its active services mode.

ii) Active Services
There are several services that the CSIRT will perform during an incident. The active services are typically what is expected of a CSIRT and are designed to contain, eradicate, recover, and report on an incident.

Incident Handling

Incident handling involves analyzing the incidents and events. Incident handling’s goal is to identify the scope of the incident, document the damage caused, and provide available response tactics. Incident handling typically involves incident analysis, evidence collection, tracking the origins of the intruder, response support for the victim(s) of the attack and coordination among other IRT, administrators and service providers.

Vulnerability Handling

Vulnerability handling involves gathering data around operating system and application vulnerabilities. The CSIRT will perform assessments against hardware and software to verify suspected vulnerabilities and help determine how the vulnerabilities can be exploited. The service will aide in determining the proper response to repair a vulnerability and can notify others about the mitigating strategy.

Evidence Handling

Evidence can be defined as any object found on an information system that could be involved in attacking the system or other systems around it. These can be computer viruses but also include exploit scripts, toolkits, log files, or even hardware devices such as physical key loggers.

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Lessons Learned Reporting

The reporting service primary goal is to document what happened and how the business can improve its’ defenses. The CSIRT will conduct a “lessons learned” or a post mortem meeting to discuss the incident and educate the management team. Incident Reporting is beginning to become an auditable event for external auditors to test against.

iii) Management Services

Awareness Training

Awareness training can be a service offered by the CSIRT. Since the CSIRT is typically conducting in depth investigations and vulnerability assessments against the businesses information assets, then next logical step is for the CSIRT to educate the technology teams about good security practices pertaining to the information systems that are being administered.

CSIRT will also seek opportunities to build awareness of the user base through newsletters, announcements, lessons learned, marketing campaigns, and websites.

Risk Assessments

The CSIRT can have important insight into risk assessments. When the business conducts a risk assessment to bring on a new technology or application, a member of the CSIRT should be a participant in the effort. The experience of the CSIRT members will help identify risk points, potential vulnerabilities, and threats.

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Compliancy Certifications

The CSIRT can also perform compliancy certifications. The team can conduct security evaluations on information systems or services to ensure the security or the pass/fail of a compliance regulation. The team can be used to provide guidance on best practices and recommendations for purchasing, installing or securing new systems.

c) CSIRT Policies and Standards

Policies are documented principles adopted by the management team. The policies of an organization should be clearly understood by the entire workforce and the knowledge of the incident response policy will allow the CSIRT to act on their responsibilities.

i) Incident Response Policy

Building an incident response policy involves several objectives.

First, an Incident Response Policy cannot be enforced unless it has management approval. Endorsement by management is critical. Without this approval the team will be destined to encounter business road blocks that will hinder a timely incident response. In some cases, it may not even be allowed.

Second, the policy must be clear. Any employee should be able to easily understand what the policy is about. If a non-technology oriented employee is confused by the policy, then the policy should be rewritten.
Third, the policy must be to the point. A long-winded policy will either be a bad policy or one that would include sections that should be in a procedure document instead.

Forth, the policy must be usable and implementable. Avoid statements that sound appropriate but will be open to interpretation. At the same time, the policy should not include objectives that the CSIRT will not be able to execute due to business processes or corporate culture.

Once the policy as been created, it is important to make regular checks against its effect on the workforce. When changes occur in the business direction or new technology systems are implemented, update the policy to match the new processes.

ii) Incident Response Standards and Procedures

A successful CSIRT is a team that has documented standards and procedures. Standards should be written from how the CSIRT will begin its investigations and report the findings to standards written for how the CSIRT will be trained and what authority the members will be granted.

A good standard will define when the CSIRT will contain and clean up incidents and when the team will watch and gather information for litigation.

Having good recovery procedures are essential. It is very rare to find a CSIRT member that has mastered every operating system and application in
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your environment. Having procedures to follow on how to correctly down and restore a system can help prevent time consuming efforts and alleviate some of the stress of the incident.

These written procedures will aide the CSIRT in formalizing how investigations are carried out, how evidence is handled, what organizations are notified at what times, how post mortem reporting is conducted, how malicious software is to be eradicated and how to perform a recovery of a information system.

iii) Code of Conduct

The code of conduct policy for the CSIRT is a set of rules outlining how a team member will behave in a way that supports the goals of the incident response team and the mission statement of the company. The code of conduct will be used when no other policy or procedure applies. It should reflect the natural behavior of a professional incident handler. An example of a CSIRT code of conduct policy was written by the original manager of the CERT,¹ Rich Pethia.

iv) Disclosure Policy

It is important to define the CSIRT disclosure policy. Without the policy, the team will have no guidance on who to disclose to, what to disclose and when to disclose the information. Traditionally, CSIRT staff treated all

¹ CERT Coordination Center. 
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information reported to them as confidential and information around security incidents were not distributed to other organizations. In some cases, law enforcement or other response teams were included when coordinating the response to the incident.

The policy should outline the information disclosure restrictions placed on the CSIRT staff. What will be reported to law enforcement? If the incident involved the disclosure of personally identifiable information, when do you disclose to the affected individuals? Personal information includes, but is not limited to, information regarding a person's home or other personal address, driver's license, marital status, financial information, credit card numbers, bank accounts, parental status, sex, race, religion, political affiliation, personal assets, home or other personal phone numbers, and so on. Did the incident involve the disclosure of electronically protected healthcare information as defined in HIPAA?² Did the incident involve social security numbers? If the CSIRT is to engage law enforcement, can the business afford to have equipment confiscated?

The disclosure policy will specify (sometimes legal) limitations that outlines how or when law enforcement is notified, customers are notified, external CSIRTs and upper management.

There are very clear state laws in the United States that outline when companies must notify individuals that their personal information has been disclosed by unauthorized events. At least 35 states, as of Q1 2007, have

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² http://hipaa.yale.edu/guidance/index.html
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enacted legislation requiring companies and government agencies to disclose security breaches involving personal information\(^3\).

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\(^3\) http://www.ncsl.org/programs/lis/cip/priv/breachlaws.htm
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Timing of a disclosure event is imperative. It is important to perform incident investigations and be as certain as possible about the disclosure events. At the same time the CSIRT should be notifying the victims as soon as possible. If the duration between the identification and the notification are too great, the company can face litigation and even greater loss of public opinion.\(^4\) It is imperative that the CSIRT utilize legal council when drafting a disclosure communication to anyone as this notification can have enormous consequences to the company’s reputation.

Disclosure Procedures to External CSIRT

There will be times where the company CSIRT will want to notify external CSIRT such as the CERT/CC, FIRST\(^5\), or private Managed Security Solutions Partners (MSSP). To be successful, it is important that coordination occurs among law enforcement, National CSIRTs and the research community who have experience in responding to security incidents. External CSIRTs can play an important role by helping their constituents protect their systems, detect, identify, and analyze compromises to the security of those systems and effectively coordinate the response to the attack. External CSIRT teams

\(^4\) http://www.privacyrights.org/ar/ChronDataBreaches.htm
\(^5\) http://www.first.org/members/teams/
can also be evangelists in promoting and helping other organizations build effective incident management capabilities.

The details for sharing of information will change depending on the incident and how the external CSIRT will benefit from the information. Information is typically disclosed to:

- Inform other CSIRT of a large attack.
- Inform other teams about a new vulnerability or attack vector.
- Contact other sites that are the target of an incident to help coordinate the remediation.

Procedures should be clearly written for the internal CSIRT to follow when submitting an incident outside the organization. When reporting intruder activity, it is important to ensure that you provide enough information for the external CSIRT to be able to understand and respond to your report, but still filter any information that would be considered sensitive to the company.

v) Evidence Handling Procedures

During the CSIRT’s active services, it is important to track information pertaining to the incident. This tracking of information should be at a level of detail that can be useful for recalling the event years later. Handling procedures should record information in logical organized methods to provide historical records and actions taken by the team. In many cases, this information can be used for statistical reporting purposes in management.
reports. For every incident, best practices capture and track, at a minimum, the following set of information:

- Local Tracking Number / External CSIRT Tracking Number
- Category of Incident
  - Disclosure, Hacking Attempt, Worm Outbreak, Malicious Insider, etc.
- Brief Description
- Contacts for all Parties Involved
- Subjective Priority
  - Critical, High, Medium, Low, Informational
- Evidence Gathered
  - who, what, where, why, how, when
- History of Actions
  - Record all actions by the team. This will be important if litigation is an optional outcome.
- Current Status of the Incident
  - Active, On Hold, Complete, etc.

CSIRT should utilize electronic collaboration tools such as a Microsoft SharePoint Server. Team members should have a single point to deposit, search, and update data on incident activities. Additionally, incidents should be archived for some predetermined period of time, using the collaboration tool. The SharePoint tool allows for a repository of electronic data, online workflow capabilities, versioning, automatic alerting and very flexible role
based access for team members and additional stake holders outside the team.

Physical evidence should be maintained in a designated “war room”. An empty office or conference room can be converted into a CSIRT war room with the understanding that the team will have sole access to a physically secured room. Locking cabinets for hard drives, tapes, and notes on tracking of the equipment are a must.

2) Primary Phases of the CSIRT

The functions that the CSIRT perform during active services are going to be considered the heart of the CSIRT mission. These primary functions are preparation, identification, containment, eradication, recovery, and lessons learned.

a) Identification

How does the company detect an event? What triggers the CSIRT into action? The answer for most is a mixed one.

– Technology departments deploy intrusion prevention sensors, monitor firewall logs, review honeypot activity, analyze antivirus alerts, review vulnerability assessment reports, examine authentication events, etc.

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6 http://www.honeynet.org is a popular open source honeypot project
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– Business units will typically educate and raise awareness about security risks to make the workforce use their eyes and ears to identify suspicious activity.

When either of these groups detects an event, the CSIRT should be notified.

i) Triage Role

The goal of the triage role is to ensure that information about an event is gathered from a single point of contact. The triage role is the primary contact for the CSIRT for the business. Contacted by email, fax, telephone, anonymous form, or hallway conversation, the triage role will kick off the incident procedures by calling into action the correct team members to start the investigation.

The company should be trained on how to report information to the CSIRT. The triage role should be clearly defined, contact methods should be easily accessible, simple and defined procedures for reporting and clear guidelines on types of events to be reported.

ii) Identification Tasks

The CSIRT should have a member of the management team as its sponsor. This is typically the CSO, CIO or VP over the technology department. Notify your sponsor that an investigation has started. If
additional resources are needed outside the CSIRT, the sponsor will help with obtaining what is needed.

It is in the identification function that a primary incident handler should be assigned. The responsibility of the primary handler is to ensure coordination, documentation, and communication with the CSIRT and any other departments or organizations directly involved. The primary handler will be responsible for the quality of the incident handling procedures for the assigned event.

The information gathered in this identification phase is critical. The first goal of the team is to determine whether the incident reported is actually an incident. The team will be asking assessment questions such as, what are the affected systems, if a vulnerability is present, the value of the system to the business (i.e. mission critical), can the vulnerability be exploited remotely, was this incident user error, was data exposed to unauthorized individuals, does this incident affect companies outside our own?

Be sure to establish good chain of custody scenarios. Document the “who, what, where, when”, whenever possible. Each piece of evidence must be under the control of a CSIRT member at all times and document the storage of evidence if it is secured. The chain of custody will be important for law enforcement if the evidence is going to be used in litigation.

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7 See appendix for law enforcement contact information
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b) Containment

The containment function is designed to prevent the attack from affecting systems, people, or organizations any more than it has already. The CSIRT is now trying to keep the scenario from getting worse.

A decision must be made when entering the containment phase. If evidence collected is going to be used for litigation, care must be taken to keep the system(s) from becoming contaminated by the containment efforts. Drives should be imaged, back ups performed, original copies secured, etc. Always use a backup or a copy to perform the incident handling procedures.

The CISRT should perform multiple backups as soon as it is practical. The backups can be used for forensics or in the off chance that containment procedures render the system(s) inoperable. In most cases, original media will be cataloged and secured, while a backup copy will be used to restore the system for eradication and recovery.

The containment phase can involve many tasks: Patching systems, password changes, firewall rule changes, account management, stopping of services and RootKit / Antivirus system scans. On the employee side the CSIRT may place phone calls to halt a business process, obtain paper materials or printouts that contain false information or send a corporate wide communication to alert the workforce.
c) Eradication

The eradication phase involves the removal of any malicious activity or artifacts left by the intrusion. Typically eradication engages in removing virus infections, backdoor software, data left by the intruder and uninstalling attack tools. If the system was hit with any flavor of a rootkit, formatting hard drives, reloading the system, patching and restoration from backup is highly recommended.

Vulnerability assessment and analysis is typically performed during the eradication phase. Initiating system and network level vulnerability scans will help the team find open vulnerabilities. In many cases, attackers often use the same vulnerability across the entire network. A quality scanner such as Qualys\(^8\) or Foundscan can go a long way in providing your CSIRT will vulnerability data. The CSIRT should research the vulnerability against the known information repositories such as CERT or BugTraq to understand the impact of the exploit against the company.

Improving the defenses of the systems or business process affected is vital. New firewall rules, host based intrusion prevention technologies, upgrades to more secure applications and patching are good techniques for improving the defenses. If the vulnerability is not removed, the system can become compromised all over. Business process can be strengthened by objectives such as implementing least access principles, encryption mechanisms and social engineering awareness.


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d) Recovery

The recovery phase is used to bring the restored system(s) back into production. Recovery will typically take place, according to the system owner, after business unit testing has been conducted.

Monitoring is an important objective during this phase. When the incident system(s) are brought back into production use, monitoring must be conducted to validate the eradication was successful. Auditing the operating system logs, intrusion detection or prevention logs, checking for backdoor ports, reviewing firewall logs and searching for any new vulnerabilities are standard procedures.

e) Lessons Learned

The best way to improve on a company’s defense is to learn from the mistakes made. The goal of the lessons learned reporting is to finalize the CSIRT documentation, and create a post mortem report for review. In most cases, a meeting is scheduled within a week to review the report. The report should focus on events leading up to the incident, generally what occurred, what was done to contain and eradicate, and what can be done to mitigate the vulnerability in the future. The reporting phase is a good time to note organizational problems that conflicted with the CSIRT’s procedures and suggest improvements. Invite the correct management, stake holders and information technology individuals to better expose the CSIRT’s efforts.
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lessons learned meetings can be a good place to obtain approval to fix business processes, obtain newer technologies, update incident handling procedures and to educate the business.

It is important to have the CSIRT members involved in the incident complete the lessons learned documentation as close to completing the incident as possible. These post mortem reports should be short but professional and designed for executive consumption.

3) CSIRT Membership

Outsiders may view the CSIRT as a team of highly educated technologists. Although technical experience is a good prerequisite, there are several attributes that are needed for a successful incident team. It is important for the company’s management team to understand the needs of the CSIRT. Specific incident response training, paid time off, and membership buy in from across the company are several topics that will need to be agreed upon.

a) CSIRT Staff

One of the challenging facets of building a successful incident response team is to employ a multifaceted team. A typical team will have the following schema:

– Primary Members
Technology Security Specialists
- System Administrators
- Network Engineers
- Desktop Support Specialists
- Disaster Recovery Coordinators

- Secondary Members
  - Inside Legal Council
  - Corporate HR Specialist
  - Corporate Communication Specialist
  - Physical Security or Facilities Coordinator
  - Management Team Sponsor

Geographically diverse companies will need to work out the combination of remote handlers with a centralized team. The primary members will be the core of the CSIRT and will work the majority of the smaller incidents. The secondary members will be expected to join the CSIRT when an event requires their expertise. A hoax email virus infection will not require the secondary members to be called into action, but payroll laptops going missing will no doubt call the entire team into action.

Interpersonal Skills

Having a wide range of skills is a high priority, but communication skills will greatly improve the reputation of the team. You may find expert security engineers that would seem to be a fit in the CSIRT except for a lack of interpersonal skills. The team members should have common sense, exhibit...
effective oral and written communication skills, show diplomacy when dealing with external groups, have the ability to follow standards and procedures, show integrity and have the willingness to continue their education.

Technical Skills

Technical skills will be important for a successful CSIRT. The primary members of the team will need to have a good amount of experience in their individual fields to effectively handle a security incident. Senior network engineers, senior system administrators, and senior security specialists will be good candidates for membership. The technical understanding provided by the experienced primary members will be needed for the large variety of incident scenarios that will be investigated.

b) CSIRT Training

Training of the CSIRT is important. Training will increase the skills of the team as new technologies are available, keep the team practiced, and educate the newest members.

Training should focus not only on forensic analysis and eradication techniques, but other general skills in communication, project management, evidence handling, team building, intruder techniques, compliancy laws, privacy laws and ethics. The team should be periodically evaluated to determine ways to expand the skills that would increase the competency of the CSIRT.

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Technical skills such as, but not limited to, firewall technologies, router and switch infrastructures, TCP/IP, Operating system installation and hardening, security event manager concepts, intrusion prevention technologies, vulnerability assessment techniques, wireless infrastructures, secure programming concepts, etc. should always be kept current.

New team members can be overwhelmed with the standards and procedures that they will be introduced to as an incident handler. In most cases, new CSIRT members will be paired with an experienced handler as a mentor. As the new team member becomes familiar with the roles of an incident handler, they can be used to draft communications, compose lessons learned reports for review, aide in research or work with evidence documentation.

c) Extensions of the CSIRT

A CSIRT, on occasion, may find that it will be unable to staff full time members. In these cases the CSIRT will need to develop good relationships with the subject matter experts needed when an incident is being investigated. The CSIRT policy can outline how outside employees can be called into service of the incident team when a set of criteria is met. You will see this situation more often for the human resources, legal council and physical facilities members. The management team should be clear on when the CSIRT can utilize these head count and what priority can be used. This standard
should be well established in advance so that these extended staff can be called into action quickly.

4) Conclusion

Using good communication skills, clear policies, professional team members and utilizing training opportunities, a company can run a successful incident response team. CSIRTs will continue to serve as an important component in supporting the management of risk and security in the business. By utilizing these passive and active phases of a CSIRT, the business will improve its security efforts across the enterprise and protect confidentiality, integrity and availability of its information systems.

5) References

CERT. Handbook for Computer Security Incident Response Teams (CSIRTs)

CERT. Defining Incident Management Processes for CSIRTs: A Work in Progress

SANS. Incident Handling Step-by-Step and Computer Crime Investigation: Book 1

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National Conference of State Legislatures.
http://www.ncsl.org/programs/lis/cip/priv/breachlaws.htm

http://www.microsoft.com/technet/SolutionAccelerators

Federal Bureau of Investigation
http://www.fbi.gov/contact/fo/fo.htm
# Appendix A

## FBI & Secret Service FIELD OFFICES

### ALABAMA

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<td>2121 8th Avenue N. Birmingham, AL 35203-2396</td>
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<td>USSS 205.731.1144/205.731.0007</td>
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<td>Mobile</td>
<td>FBI 334.438.3674/251.415.3235</td>
<td>One St. Louis Centre 1 St. Louis Street, 3rd Floor Mobile, AL 36602-3930</td>
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<td>Montgomery</td>
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<td>Federal Building &amp; U.S. Courthouse 222 West 7th Avenue, Room 559 Anchorage, AK 99513</td>
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### ARIZONA

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<th>City</th>
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<tr>
<td>Phoenix</td>
<td>FBI 602.279.5511/602.650.3024</td>
<td>201 East Indianola Avenue, Suite 400 Phoenix, AZ 85012-2080</td>
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<tr>
<td></td>
<td>USSS 602.640.5580/602.640.5555</td>
<td>3200 North Central Avenue, Suite 1450 Phoenix, AZ 85012</td>
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<tr>
<td>Tucson</td>
<td>USSS 520.670.4730/520.670.4826</td>
<td>300 West Congress Street, Room 4-V Tucson, AZ 85701</td>
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### ARKANSAS

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<tr>
<td>Little Rock</td>
<td>FBI 501.221.9100/501.228.8509</td>
<td>24 Shackelford West Boulevard Little Rock, AR 72211-3755</td>
</tr>
<tr>
<td></td>
<td>USSS 501.324.6241/501.324.6997</td>
<td>111 Center Street, Suite 1700 Little Rock, AR 72201-4419</td>
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### CALIFORNIA

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<tr>
<td>Fresno</td>
<td>FBI 209.487.5204/559.487.5013</td>
<td>5200 North Palm Avenue, Suite 207 Fresno, CA 93704</td>
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<tr>
<td>Los Angeles</td>
<td>FBI 310.477.6565/310.996.3359</td>
<td>Federal Office Building 11000 Wilshire Boulevard, Suite 1700 Los Angeles, CA 90024-3672</td>
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<tr>
<td>Riverside</td>
<td>FBI 909.276.6781/909.276.6637</td>
<td>4371 Latham Street, Suite 203 Riverside, CA 92501</td>
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<tr>
<td>Sacramento</td>
<td>FBI 916.481.9110/916.977.2300</td>
<td>4500 Orange Grove Avenue Sacramento, CA 95841-4205</td>
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<tr>
<td>San Diego</td>
<td>FBI 858.565.1255/858.499.7991</td>
<td>501 I Street, Suite 9500 San Diego, CA 92101</td>
</tr>
<tr>
<td>San Francisco</td>
<td>FBI 415.553.7400/415.553.7674</td>
<td>450 Golden Gate Avenue, 13th Floor San Francisco, CA 94102-9023</td>
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<tr>
<td></td>
<td>USSS 415.744.9026/415.744.9051</td>
<td>345 Spear Street San Francisco, CA 94105</td>
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<tr>
<td>San Jose</td>
<td>FBI 415.535.5288/408.535.5292</td>
<td>U.S. Courthouse &amp; Federal Building 280 S. First Street, Suite 2050 San Jose, CA 95113</td>
</tr>
<tr>
<td>Santa Ana</td>
<td>FBI 714.246.8257/714.246.8261</td>
<td>200 W. Santa Ana Boulevard, Suite 500 Santa Ana, CA 90210-4164</td>
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<tr>
<td>Ventura</td>
<td>USSS 805.339.8180/805.339.0015</td>
<td>5500 Telegraph Road, Suite 161 Ventura, CA 93003</td>
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<td>San Francisco</td>
<td>FBI 415.553.7400/415.553.7674</td>
<td>450 Golden Gate Avenue, 13th Floor San Francisco, CA 94102-9023</td>
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<td>U.S. Courthouse &amp; Federal Building 280 S. First Street, Suite 2050 San Jose, CA 95113</td>
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<td>USSS 805.339.8180/805.339.0015</td>
<td>5500 Telegraph Road, Suite 161 Ventura, CA 93003</td>
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### COLORADO

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<td>Colorado Springs</td>
<td>FBI 719.632.3352/719.632.3341</td>
<td>212 N. Washatch, Room 204 Colorado Springs, CO 80903</td>
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<tr>
<td>Denver</td>
<td>FBI 303.629.7171/303.628.3085</td>
<td>1601 Stout Street, 18th Floor Denver, CO 80224-1823</td>
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<tr>
<td></td>
<td>USSS 303.866.1010/303.866.1934</td>
<td>1600 Lincoln Street Denver, CO 80224</td>
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### CONNECTICUT

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<td>New Haven</td>
<td>FBI 203.777.6311/203.503.5098</td>
<td>600 State Street New Haven, CT 06111-6505</td>
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<tr>
<td></td>
<td>USSS 203.865.2449/203.865.2525</td>
<td>265 Church Street, Suite 1201 New Haven, CT 06110</td>
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### DELAWARE

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<tr>
<td>Wilmington</td>
<td>FBI 302.573.6188/302.573.6192</td>
<td>One Rodney Square 920 King Street, Suite 414 Wilmington, DE 19801</td>
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### DISTRICT OF COLUMBIA

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Creating and Managing an Incident Response Team for a Large Company

FLORIDA
Jacksonville
FBI 904.721.1211/904.727.6242
7820 Arlington Expressway
Jacksonville, FL 32211-7499
USSS 904.296.0133/904.296.0188
7820 Arlington Expressway, Suite 500
Jacksonville, FL 32211

Miami
FBI 305.944.9101/305.787.6538
16320 NW Second Avenue
North Miami Beach, FL 33169-6658
USSS 305.629.1800/305.629.1830
8375 NW 53rd Street
Miami, FL 33166

Orlando
USSS 407.648.6333/407.648.6606
135 West Central Boulevard, Suite 670
Orlando, FL 32801

Tallahassee
USSS 850.942.9502/850.942.9526
325 John Knox Road
Tallahassee, FL 32303

Tampa
FBI 813.273.4566/813.272.8019
Federal Office Building
500 Zack Street, Room 610
Tampa, FL 33602-3917
USSS 813.228.2636/813.228.2618
501 East Folk Street, Room 1101
Tampa, FL 33602

West Palm Beach
USSS 561.659.0184/561.655.8484
505 South Flagler Drive
West Palm Beach, FL 33401

GEORGIA
Albany
USSS 229.430.8442/229.430.8441
Albany Tower
215 Roosevelt Avenue, Suite 221
Albany, GA 31702

Atlanta
FBI 404.679.9000/404.679.6289
2635 Century Parkway Northeast, Suite 400
Atlanta, GA 30345-3112
USSS 404.331.6111/404.331.5058
401 West Peachtree Street, Suite 2906
Atlanta, GA 31702

Savannah
USSS 912.652.4401/912.652.4062
33 Bull Street
Savannah, GA 31401

HAWAI'I
Honolulu
FBI 808.566.4300/808.566.4470
Kalanianaole Federal Office Building
300 Ala Moana Boulevard, Room 4-230
Honolulu, HI 96815-0053
USSS 808.541.1912/808.545.4490
Kalaniamaole Federal Office Building
300 Ala Moana Boulevard, Room 6-210
Honolulu, HI 96850

IDAHO
Boise
USSS 208.334.1403/208.334.1289
Federal Building - U.S. Courthouse
550 West Front Street, Room 730
Boise, ID 83724-0001

ILLINOIS
Chicago
FBI 312.421.4310/312.786.2525
E.M. Dirksen Federal Office Building
219 South Dearborn Street, Room 905
Chicago, IL 60604-1702
USSS 312.353.5431/312.353.1225
Gateway IV Building
300 S. Riverside Plaza, Suite 1200
North Chicago, IL 60064

Springfield
FBI 217.522.9675/217.535.4440
400 West Monroe Street, Suite 400
Springfield, IL 62704-1800
USSS 217.492.4033/217.492.4680
400 West Monroe Street, Suite 301
Springfield, IL 62704

INDIANA
Evansville
USSS 812.985.9502/812.985.9504
P.O. Box 530
Newburgh, IN 47630

Indianapolis
FBI 317.639.3301/317.321.6193
Federal Office Building
575 N. Pennsylvania Street,
Room 679
Indianapolis, IN 46204-1702
USSS 317.226.6444/317.226.5494
Federal Office Building
575 N. Pennsylvania Street,
Suite 211
Indianapolis, IN 46204-1585

South Bend
USSS 219.273.3140/219.271.9301
P.O. Box 477
South Bend, IN 46625

IOWA
Des Moines
USSS 515.284.4565/515.284.4566
210 Walnut Street, Suite 637
Des Moines, IA 50309-2107

KANSAS
Wichita
USSS 316.269.6694/316.269.6154
Epic Center
301 N. Main Street, Suite 275
Wichita, KS 67202

KENTUCKY
Lexington
USSS 859.223.2358/859.223.1819
3141 Beaumont Centre Circle
Lexington, KY 40513

Louisville
FBI 502.583.3941/502.569.3869
Federal Building
600 Martin Luther King Jr. Place, Room 500
Louisville, KY 40202-2231
USSS 502.582.5171/502.582.6329
Federal Building
600 Martin Luther King Jr. Place, Room 377
Louisville, KY 40202-2231

LOUISIANA
Baton Rouge
USSS 225.389.0763/225.389.0325
One American Place, Suite 1500
Baton Rouge, LA 70825

New Orleans
FBI 504.816.3000/504.816.3306
2901 Leon C. Simon Drive
New Orleans, LA 70126
USSS 504.589.4041/504.589.6013
Hale Boggs Federal Building
501 Magazine Street
New Orleans, LA 70130

Shreveport
USSS 318.676.3500/318.676.3502
401 Edwards Street
Shreveport, LA 71101

MAINE
Portland
USSS 207.780.3493/207.780.3301
100 Middle Street
West Tower, 2nd Floor
Portland, ME 04101

Created and Managed an Incident Response Team for a Large Company
Creating and Managing an Incident Response Team for a Large Company

Tim Proffitt

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MARYLAND

Baltimore
FBI 410.265.8080/410.281.0339
7142 Ambassador Road
Baltimore, MD 21244-2754
USSS 410.962.2200/410.962.0840
100 S. Charles Street, 11th Floor
Baltimore, MD 21201

Eastern Shore
USSS 410.268.7286/410.268.7903
U.S. Naval Academy
Police Dept., Headquarters Building 257,
Room 221
Annapolis, MD 21402

Frederick
USSS 301.293.6434/301.694.8078
Rowley Training Center
9200 Powder Mill Road, Route 2 Laurel
Baltimore, MD 20708

MASSACHUSETTS

Boston
FBI 617.742.5533/617.223.6327
One Center Plaza, Suite 600
Boston, MA 02109
USSS 617.565.5640/617.565.5659
Thomas P. O’Neill Jr. Federal Building
10 Causeway Street
Boston, MA 02222

MICHIGAN

Detroit
FBI 313.965.2323/313.237.4009
Patrick V. McNamara Building
477 Michigan Avenue, 26th Floor
Detroit, MI 48226
USSS 313.226.6400/313.226.3952
Patrick V. McNamara Building
477 Michigan Avenue
Detroit, MI 48226

Grand Rapids
USSS 616.454.4751/616.454.5816
330 Ionia Avenue NW, Suite 302
Grand Rapids, MI 49503-2350

Saginaw
USSS 989.752.8076/989.752.8048
301 E. Genesee, Suite 200
Saginaw, MI 48607

MINNESOTA

Minneapolis
FBI 612.376.3200/612.376.3249
111 Washington Avenue South, Suite 1100
Minneapolis, MN 55401-2176
USSS 612.348.1800/612.348.1807
U.S. Courthouse
300 South 4th Street, Suite 750
Minneapolis, MN 55445

MISSISSIPPI

Jackson
FBI 601.948.5000/601.360.7550
Federal Building
100 West Capitol Street
Jackson, MS 39269-1601
USSS 601.965.4436/601.965.4012
Federal Building
100 West Capitol Street, Suite 840
Jackson, MS 39269

MISSOURI

Kansas City
FBI 816.512.8200/816.512.8545
1300 Summit
Kansas City, MO 64105-1362
USSS 816.460.0600/816.283.0321
1150 Grand Avenue, Suite 510
Kansas City, MO 64107

Springfield
USSS 417.886.8240/417.864.8676
91 St. Louis Street, Suite 306
Springfield, MO 65806

St. Louis
FBI 314.231.4324/314.589.2636
222 Market Street
St. Louis, MO 63103-2516
USSS 314.539.2238/314.539.2567
Thomas F. Eagleton U.S. Courthouse
311 S. 10th Street, Suite 11,346
St. Louis, MO 63102

MONTANA

Great Falls
USSS 406.452.8515/406.761.2316
11 Third Street North
Great Falls, MT 59401

NEBRASKA

Omaha
FBI 402.493.8688/402.492.3799
10755 Burt Street
Omaha, NE 68114-2000
USSS 402.965.9670/402.445.9638
2707 North 108 Street, Suite 301
Omaha, NE 68164

NEW HAMPSHIRE

Manchester
USSS 603.626.5631/603.626.5653
1750 Elm Street, Suite 802
Manchester, NH 03104

NEW JERSEY

Atlantic City
FBI 609.487.1300/609.487.1491
Ventnor Professional Campus
8601 Ventnor Avenue
Ventnor City, NJ 08406

Newark
FBI 973.792.2000/973.792.3035
1 Gateway Center, 22nd Floor
Newark, NJ 07102-9889
USSS 973.656.4500/973.984.5822
Headquarters Plaza, West Towers,
Speedwell Avenue, Suite 700
Morristown, NJ 07960

Trenton
USSS 609.989.2008/609.989.2174
200 East State Street, Suite 3000
Trenton, NJ 08608

NEW MEXICO

Albuquerque
FBI 505.224.2000/505.224.2276
415 Silver Avenue SW, Suite 300
Albuquerque, NM 87102
USSS 505.228.5290/505.248.5296
505 Marquette Street NW
Albuquerque, NM 87102

NEVADA

Las Vegas
FBI 702.385.1281/702.385.1281
John Lawrence Bailey Building
700 East Charleston Boulevard
Las Vegas, NV 89104-1545
USSS 702.388.6571/702.388.6668
600 Las Vegas Boulevard South,
Suite 600
Las Vegas, NV 89101

Reno
USSS 775.784.5354/775.784.5991
100 West Liberty Street, Suite 850
Reno, NV 89551
# Creating and Managing an Incident Response Team for a Large Company

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<th>NORTH CAROLINA</th>
<th>OKLAHOMA</th>
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<td>Albany</td>
<td>Charlotte</td>
<td>Oklahoma City</td>
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<tr>
<td>200 McCarty Avenue</td>
<td>400 South Tyron Street, Suite 900</td>
<td>3301 West Memorial Drive</td>
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<td>Albany, NY 12209</td>
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<tr>
<td>USSS 518.436.9600/518.436.9635</td>
<td>USSS 704.442.8370/704.442.8369</td>
<td>USSS 405.810.3000/405.810.3098</td>
</tr>
<tr>
<td>39 North Pearl Street, 2nd Floor</td>
<td>One Fairview Center</td>
<td>Lakepoint Towers</td>
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<tr>
<td>Albany, NY 12207</td>
<td>Charlotte, NC 28210</td>
<td>4013 NW Expressway, Suite 650</td>
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<td>Oklahoma City, OK 73116</td>
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<tr>
<td>FBI 716.856.780/716.843.5288</td>
<td>USSS 336.547.4185/336.547.4185</td>
<td>Tulsa</td>
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<tr>
<td>One FBI Plaza</td>
<td>4405 Koger Boulevard, Suite 220</td>
<td>USS 918.581.7272</td>
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<td>USSS 716.551.4401/716.551.5075</td>
<td>Raleigh</td>
<td>125 West 15th Street, Suite 400</td>
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<tr>
<td>610 Main Street, Suite 300</td>
<td>USS 919.790.2834/919.790.2832</td>
<td>Tulsa, OK 74119</td>
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<td>4407 Bland Road, Suite 210</td>
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<td>Raleigh, NC 27609</td>
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<td>USS 718.553.0911/718.553.7626</td>
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<td>William J. Green Jr. Federal Office Building</td>
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<td>John F. Kennedy Int’l. Airport Building 75, Room 246</td>
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<td>600 Arch Street, 8th Floor</td>
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<tr>
<td>Jamaica, NY 11430</td>
<td>King Street, Suite 414</td>
<td>Philadelphia, PA 19106</td>
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<td>35 Pinelawn Road</td>
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<td>1500 SW 1st Avenue, Suite 400</td>
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<td>Portland, OR 97201-5928</td>
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<td>Fargo</td>
<td>Portland</td>
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<tr>
<td>or 2746</td>
<td>USS 701.239.5070/701.239.5071</td>
<td>FBI 215.418.4000/215.418.4232</td>
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<tr>
<td>26 Federal Plaza, 23rd Floor</td>
<td>657 2nd Avenue North, Suite 322A</td>
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<td>Fargo, ND 58102</td>
<td>600 Arch Street, 8th Floor</td>
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<td>OHIO</td>
<td>Philadelphia, PA 19106</td>
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<td>335 Adams Street, 32nd Floor</td>
<td>JOHN W. PECK FEDERAL BUILDING</td>
<td>FBI 216.471.2000/216.431.8232</td>
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<tr>
<td>Brooklyn, NY 11201</td>
<td>550 MAIN STREET, 9TH FLOOR</td>
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<td>700 GRANT STREET, SUITE 300</td>
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<td>USS 716.263.6830/716.454.2753</td>
<td>FBI 513.421.4310/513.562.5450</td>
<td>1000 LIBERTY AVENUE</td>
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<td>JOHN W. PECK FEDERAL BUILDING</td>
<td>Pittsburgh, PA 15222</td>
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<tr>
<td>105 S. Clinton Street, Room 1371</td>
<td>550 MAIN STREET, 9TH FLOOR</td>
<td>USS 412.395.6484/412.395.6349</td>
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<tr>
<td>Rochester, NY 14614</td>
<td>JOHN W. PECK FEDERAL BUILDING</td>
<td>1000 LIBERTY AVENUE, SUITE 247</td>
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<td>Syracuse</td>
<td>Cleveland</td>
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<tr>
<td>USS 315.448.0304/315.448.0302</td>
<td>FBI 216.522.1400/216.622.6717</td>
<td>USS 570.346.5781/570.346.3003</td>
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<tr>
<td>James Hanley Federal Building</td>
<td>Federal Office Building</td>
<td>235 N. Washington Avenue, Suite 247</td>
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<tr>
<td>100 S. Clinton Street, Room 1371</td>
<td>1240 East 9th Street, Room 3005</td>
<td>Scranton, PA 18501</td>
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<td>Syracuse, NY 13261</td>
<td>Cleveland, OH 44119-9912</td>
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<tr>
<td>White Plains</td>
<td>USS 216.706.4365/216.706.4445</td>
<td>USS 412.395.6484/412.395.6349</td>
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<tr>
<td>USS 914.682.6300/914.682.6182</td>
<td>610 Rockside Woods Boulevard</td>
<td>1000 LIBERTY AVENUE, SUITE 247</td>
</tr>
<tr>
<td>140 Grand Street, Suite 300</td>
<td>Suite 440</td>
<td>Scranton, PA 18501</td>
</tr>
<tr>
<td>White Plains, NY 10601</td>
<td>CLEVELAND</td>
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</table>
Creating and Managing an Incident
Response Team for a Large Company

RHODE ISLAND

Providence
USSS 401.331.6456/401.528.4394
The Federal Center
180 Westminster Street, Suite 343
Providence, RI 02903

SOUTH CAROLINA

Charleston
USSS 843.747.7242/843.747.7787
5900 Core Avenue, Suite 500
North Charleston, SC 29406

Columbia
FBI 803.551.4200/803.551.4324
151 Westpark Boulevard
Columbia, SC 29210-3857
USSS 803.765.5446/803.765.5445
1835 Assembly Street, Suite 1425
Columbia, SC 29001

GREENVILLE
USSS 864.233.1490/864.235.6237
NCNB Plaza
7 Laurens Street, Suite 508
GREENVILLE, SC 29601

SOUTH DAKOTA

Sioux Falls
USSS 605.330.4565/605.330.4523
230 South Phillips Avenue, Suite 405
Sioux Falls, SD 57104

TDNENNESSEE

Chattanooga
USSS 423.752.5125/423.752.5130
Post Office Building
900 Georgia Avenue, Room 204
Chattanooga, TN 37402

Knoxville
FBI 865.546.0751/865.544.3590
John J. Duncan Federal Office Building
710 Locust Street, Suite 600
Knoxville, TN 37902-2537
USSS 865.545.4627/865.545.4633
John J. Duncan Federal Office Building
710 Locust Street, Room 517
Knoxville, TN 37902

MEMPHIS
FBI 901.747.4300/901.747.9621
Eagle Crest Building
225 North Humphreys Boulevard, Suite 300
Memphis, TN 38120-2107
USSS 901.544.0333/901.544.0342
5350 Poplar Avenue, Suite 204
Memphis, TN 38119

Nashville
FBI 615.736.5861/615.736.5848
658 U.S. Courthouse
801 Broadway Street
Nashville, TN 37203

TEXAS

AUSTIN
USSS 512.916.5103/512.916.5365
Federal Office Building
300 E. 8th Street
Austin, TX 78701

DALLAS
FBI 214.720.2200/214.922.7549
1801 North Lamar, Suite 300
Dallas, TX 75202-1795
USSS 972.868.3200/972.868.3232
125 East John W. Carpenter Freeway, Suite 300
Irving, TX 75062

EL PASO
FBI 915.832.5000/915.832.5259
660 S. Mesa Hills Drive
El Paso, TX 79912
USSS 915.533.6950/915.533.8646
Mesa One Building
4849 North Mesa, Suite 210
El Paso, TX 79912

HOUSTON
FBI 713.693.5000/713.693.3999
2500 East TC Jester
Houston, TX 77008-1300
USSS 713.686.2299/713.686.5093
602 Sawyer Street, Suite 500
Houston, TX 77007

LUBBOCK
USSS 806.472.7347/806.472.7542
1205 Texas Avenue, Room #13
Lubbock, TX 79401

MCALLEN
USSS 956.630.5811/956.630.5838
200 S. 10th Street, Suite 1107
Mcallen, TX 78501

SAN ANTONIO
FBI 210.225.6741/210.978.5380
U.S. Post Office Building
615 East Houston Street, Suite 200
San Antonio, TX 78205-9998
USSS 210.472.6175/210.472.6185
727 East Durango Boulevard,
Suite B410
San Antonio, TX 78206-1265

TYLER
USSS 903.534.2933 903.581.9569
6101 South Broadway, Suite 395
Tyler, TX 75703

UTAH

SALT LAKE CITY
FBI 801.579.1400/801.579.4500
257 Towers Building
257 East 200 South, Suite 1200
Salt Lake City, UT 84110-2048
USSS 801.524.5910/801.524.6216
57 West 200 South Street, Suite 450
Salt Lake City, UT 84101

VERMONT

FBI 518.465.7551/518.431.7463
Contact field office located in
Albany, NY
USSS 617.565.5640/617.565.5659
Contact field office located in
Boston, MA

VIRGINIA

NORFOLK
FBI 757.455.0100/757.455.2647
150 Corporate Boulevard
Norfolk, VA 23509-4999
USSS 757.441.3200/757.441.3811
Federal Building
200 Granby Street, Suite 640
Norfolk, VA 23510

RICHMOND
FBI 804.261.1044/804.627.4494
1970 East Parham Road
Richmond, VA 23228
USSS 804.771.2274/804.771.2076
600 East Main Street, Suite 1910
Richmond, VA 23219

ROANOKE
USSS 540.345.4301/540.857.2151
105 Franklin Road SW, Suite 2
Roanoke, VA 24011

WASHINGTON

SEATTLE
FBI 206.622.0460/206.262.2587
1011 Third Avenue
Seattle, WA 98101
USSS 206.220.6800/206.220.6479
890 Federal Building
915 Second Avenue
Seattle, WA 98174

SPOKANE
USSS 509.335.2532/509.353.2871
601 W. Riverside Avenue, Suite 1340
SPOKANE, WA 99201

WEST VIRGINIA

CHARLESTON
USSS 304.347.5188/304.347.5178
5900 Core Avenue, Suite 500
North Charleston, SC 29406

WISCONSIN

MADISON
USSS 608.264.5191/608.264.5592
131 W. Wilson Street, Suite 303
Madison, WI 53703

MILWAUKEE
FBI 414.276.4684/414.276.6560
330 East Kilbourn Avenue
Milwaukee, WI 53202
USSS 414.297.3587/414.297.3595
572 Courthouse
517 E. Wisconsin Avenue
Milwaukee, WI 53202

WYOMING

CHEYENNE
USSS 307.772.2380/307.772.2387
2120 Capitol Avenue, Suite 3026
CHEYENNE, WY 82001

Tim Proffitt
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