



# The Domestic

# IED Threat

By JOHN KRESS and STEVEN GROGGER

**T**errorists have clearly demonstrated both the intent and capability to employ improvised explosive devices (IEDs) worldwide. This tactic has been used by the Irish Republican Army in Britain, insurgents in Iraq and Afghanistan, the Medellín cartel in Colombia, Muslim extremists in London, and numerous other terrorist and criminal organizations. Intelligence estimates support the conclusion that terrorists will continue to use IEDs to achieve their objectives. As seen in Iraq, “the various recovered terrorist training manuals describe in great detail the process by which operatives can convert common chemicals into explosives. In addition, their instruction manuals demonstrate the ease by which explosives can be manufactured by the average person with a limited knowledge of chemistry.”<sup>1</sup> It will take a joint effort at all levels of government to mitigate this threat to the homeland.

## Presidential Directive

On February 12, 2007, President George W. Bush signed Homeland Security Presidential Directive-19 (HSPD-19), which addresses the threat of terrorist use of explosives and IEDs in the United States. The directive states that with our open and free society, this threat will be a challenge because of the ready availability of potential IED materials and components, evolving tactics for employment, and the ease with which instructions can be found to create them for numerous operational requirements and targets. These challenges

are addressed and mitigated by the directive’s focus on a layered security strategy.<sup>2</sup>

The layered security strategy will “deter, prevent, and detect terrorist use of explosives before threats become imminent and ensure that protection and response efforts effectively neutralize or mitigate attacks should they occur.”<sup>3</sup> HSPD-19 tasks the Department of Justice to develop a national strategy for IED incidents and to produce an IED annex to the National Response Plan. HSPD-19 also directs Department of Homeland Security (DHS) collaboration throughout this process. The threat of IEDs in the homeland and the release of HSPD-19 have prompted several exercises and joint conferences to determine how this strategy will be implemented in an interagency environment.

## Key Players

Currently, several Federal agencies have responsibility for different aspects of the IED threat to the homeland. Under a possible recommendation addressed in HSPD-19, a Federal Government entity may be created to coordinate these multiple agencies to ensure that the national IED strategy is synchronized

in regard to training, research and development, intelligence, and national initiatives.<sup>4</sup>

The Office of Bombing Prevention (OBP) is the DHS lead agent for ensuring that diverse IED security programs nationwide function together to meet evolving bombing threats. Secretary of Homeland Security Michael Chertoff tasked the OBP with leading the collaborative effort to develop the national strategy for IEDs, which addresses the 11 requirements prescribed in HSPD-19, including an inventory of existing statutes, regulations, and policies, and an assessment of the combined governmental capability to deal with IED threats or events. The OBP is dedicated to enhancing and coordinating the Nation’s ability to detect, deter, prevent, and respond to attacks that use IEDs against critical infrastructure, key resources, and soft targets.<sup>5</sup>

The Justice Department’s Bomb Data Center (BDC) is lead for all explosive events in the United States and maintains the official database for these types of events. The BDC conducts trend analysis and posts national advisories on explosive thefts and major explosive incidents.<sup>6</sup>

The Joint IED Defeat Organization (JIEDDO) is a Department of Defense (DOD) agency whose stated mission is to “focus (lead, advocate, coordinate) all DOD actions in

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**Motion detector-type improvised explosive device with detonator**

support of Combatant Commanders' and their respective Joint Task Forces' efforts to defeat Improvised Explosive Devices as weapons of strategic influence.<sup>77</sup>

The Federal Bureau of Investigation (FBI) Terrorist Explosive Devices Analytical Center coordinates and manages the full technical and forensic analysis of terrorist IEDs to understand their origin and evolution.<sup>8</sup> The Joint Terrorism Task Force is composed of Federal, state, and local law enforcement personnel, who have the responsibility to investigate terrorist threats and activities and respond to terrorist incidents, to include bombing matters. The task force provides "forums for inter-agency and intergovernmental collaboration on prevention activities."<sup>79</sup>

The communication architecture that is in place to address the IED threat includes an Incident Database maintained by the Justice Department in coordination with DHS and the Office of the Director of National Intelligence (ODNI). This database includes information on incidents involving the suspected criminal misuse of explosives and a secure information-sharing system concerning the use of explosives as a terrorist weapon that is maintained by DHS, in coordination with Justice and ODNI. Also, DHS, in coordination with Justice, DOD, and the Office of Science and Technology Policy, coordinates Federal research, development, test, and evaluation initiatives relating to the detection and prevention of, protection against, and response to explosive attacks.<sup>10</sup>

### Cabinet-level Exercise

In April 2007, the executive branch hosted a Cabinet-level exercise that focused on

testing the response to a domestic IED terrorist attack. It involved attacks against transportation assets (for example, subway, rail), other key infrastructure (energy), and unprotected targets (churches, schools) over a 23-day period. The lessons learned included the need to coordinate the Federal response with the Nation's Governors and to understand better the capabilities, limitations, and factors controlling the employment of DOD assets during an incident. As part of the exercise, the acting DOD Secretary, Attorney General, and DHS Secretary were asked to determine the most effective use of military forces (Title 10 Active duty, Title 32 National Guard, or a combination of both) by providing a decision matrix that would be incorporated into a revised National Response Plan.<sup>11</sup>

### Contingency Plans

The U.S. Northern Command (USNORTHCOM) area of responsibility includes air, land, and sea approaches. It encompasses the continental United States, Alaska, Canada, Mexico, and the surrounding water out to approximately 500 nautical miles. It also includes the Gulf of Mexico and the Straits of Florida. The commander of USNORTHCOM is responsible for theater security cooperation with Canada and Mexico. The command's mission is to anticipate and conduct homeland defense and civil support operations within the assigned area of responsibility to defend, protect, and secure the United States and its interests.

USNORTHCOM addresses the IED threat with four contingency plans (CONPLANs):

- Regional War on Terrorism (CONPLAN 3475) establishes a framework for the USNORTHCOM role in the war on terror and synchronizes how the command will work with the rest of the U.S. Government and law enforcement agencies and engage theater support cooperation efforts with Canada and Mexico.

- Homeland Defense (CONPLAN 3400) deters, prevents, and defeats threats and aggression aimed at the United States, its territories, and interests within the assigned area of responsibility. It includes precoordinated, preplanned flexible deterrent options and force package options.

- Defense Support of Civil Authorities (CONPLAN 3501) describes DOD support to civil authorities during natural disasters

and civil emergencies. This plan is aligned to support the National Response Plan and is a generic umbrella plan for domestic support.

- Chemical, Biological, Radiological, Nuclear, and High Yield Explosives Consequence Management (CONPLAN 3500) describes the concept for DOD support to civil authorities. This plan provides response forces for multiple, near-simultaneous events and is designed to augment local, tribal, state, and other Federal agency efforts.<sup>12</sup>

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These plans are active in both pre- and post-IED events. USNORTHCOM, however, has significant statutory limitations proscribing its authority. Operations are limited by U.S. policy and the command structure between Title 10 and Title 32 forces; additionally, domestic operations are rarely led by DOD.

### National Planning Scenario

An integral part of collaborating and developing policy for the IED threat to the homeland is using and understanding the National Planning Scenario (NPS), which is "designed to be the foundational structure for the development of national preparedness standards from which homeland security capabilities can be measured."<sup>13</sup> NPS-12, "Explosives Attack: Bombing Using an IED," is based on the use of multiple devices and coordinated attacks by the enemy. It includes multiple suicide bombers within subways or entertainment arenas, vehicle bombs in sports or entertainment parking areas, or large vehicle bombs



Federal Bureau of Investigation (David K. Jennings)

**FBI agents train at Hazardous Device School**

disguised as emergency response vehicles at the emergency room of the nearest hospital to the arena. For planning purposes, casualties are estimated at 100 fatalities and 450 hospitalized individuals. The economic impact would be in the millions of dollars and include significant damage to infrastructure by blast and fire, resulting in a recovery time of weeks to months.

### Key Questions

In June 2007, USNORTHCOM sponsored a conference entitled “IEDs in the Homeland,” which was a brainstorming event with representation from interagency partners, Service components, and JIEDDO. Key participants included the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF), BDC, DHS, and OBP. The goal of the conference was to answer several key questions and to allow the various agencies to identify and discuss the IED threat based on NPS-12.

*What constitutes an IED “campaign”?* The USNORTHCOM conference made several threat assessments that complemented NPS-12 and facilitated defining what constitutes an IED campaign. The assessment assumed that the highly successful tactics, techniques, and procedures (TTPs) employed by insurgents and terrorists in the past (and in the present, particularly in Southwest Asia) would be copied and applied by future parties threatening the homeland. A point raised by these assumptions is that DOD current hands-on experience in detecting, countering, and responding to IEDs is an invaluable resource that must be tapped in order to train agencies outside of DOD. The USNORTHCOM assessment focused on a protracted campaign instead of isolated sporadic attacks. According to the unclassified National Intelligence Estimate report, there are several threats that could employ IEDs in the homeland.

The first and primary threat is from Islamic terrorist organizations, specifically al Qaeda. This threat will probably seek to leverage the contacts and capabilities of al Qaeda in Iraq.<sup>14</sup> Of main concern is the group’s proficiency with conventional small arms and IEDs, along with its ability to develop new TTPs and to overcome obstacles to security. The threat will focus on prominent political, economic, and infrastructure targets with the goal of producing mass casualties, visually dramatic destruction, significant economic aftershocks, and/or fear within the U.S. population.<sup>15</sup> To accomplish these goals, the group may employ chemical, biological, radiological, nuclear, or explosive (CBRNE) material.

The second threat that could use IEDs in the homeland is single-issue organizations. This threat includes such groups as the Oklahoma City bombers and other internal U.S. terrorist and criminal organizations. These groups often try to challenge or change the government and its policies. They could utilize different techniques than the Islamic terrorist organizations, as many are able to blend in and use their knowledge about the homeland to increase their chances of successfully launching an attack.

*How might DOD support IED prediction, detection, and deterrence in the homeland?* With DOD’s current understanding of and real-world experience in IEDs, especially explosives ordnance teams, its knowledge could greatly enhance the training of other agencies that could disarm or destroy IEDs as first responders. This knowledge has been used in supporting the FBI’s Hazardous Devices School in partnership with the Army Ordnance Munitions and Electronic Maintenance School in Huntsville, Alabama. If legally authorized and

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NPS-12 does provide an idea of the level of event that would likely characterize a campaign. HSPD-19 characterized Theodore Kaczynski’s series of bombings against professors, airlines, and corporate executives over nearly 20 years as the “Unabomber Bombing Campaign.” The directive also characterized Eric Rudolph’s bombing of multiple targets from 1996 to 1998 as the “Eric Rudolph Bombing Campaign.” The likely course of action that could be called a *campaign* would include IEDs detonated in multiple moderate to large metropolitan areas over a short or extended time and including selected symbolic targets.

formally requested, DOD also has significant intelligence, surveillance, and reconnaissance assets that could assist other agencies in defeating an IED campaign.

*Do existing North American Aerospace Defense Command and USNORTHCOM CONPLANS/execute orders meet interagency expectations for potential DOD support?* Conference participants identified several phases of IED incident or attack evolution and the resulting action by various agencies. In the initial phase, single IED incidents occur and are dealt with by local, state, and Federal law enforcement. USNORTHCOM would take action to increase security and force protection



Joint Improvised Explosive Device Defeat Task Force works to eliminate IED threat during joint Army–Air Force exercise

U.S. Air Force (Stephen Otero)



at DOD facilities. If an escalation of explosive events occurred, the National Response Plan would be initiated and DOD could be tasked to provide support to civil agencies. USNORTHCOM would expect to receive requests for law enforcement assets, including bomb detection equipment and military working dogs. Affected state Governors would activate National Guard assets in a Title 32 status, which would allow them to augment law enforcement agencies (once approved by the Secretary of Defense and President). USNORTHCOM could expect mission assignments in accordance with defense support of civil authorities concept plans to include communications, transportation, logistics, medical, and incident awareness/assessment support. If explosive events continued to escalate, augmented by other attacks, at some point Federal law enforcement could be overwhelmed in terms of its ability to provide security, and, if directed by the President, DOD could assume the lead and conduct operations in accordance with existing homeland defense concept plans.

*What are the significant challenges?*

One challenge discussed by conference participants was the increased use of hydrogen peroxide- and acetone-based explosives in developed nations where military-grade high explosives are not readily available, as is the case in the homeland. At present, law enforcement and security officials have a limited ability to detect these “bathtub” explosives, including triacetone triperoxide (TATP) and hexamethylene triperoxide diamine. The two main methods of detecting these explosives are canines and technology. The ATF is the Justice Department lead agency for training canines for other Federal, state, local, and international law enforcement agencies. The agency conducts a 2-day program to familiarize canines with various explosives. (During fiscal year 2007, the ATF trained 226 canine teams to find peroxide-based explosives.<sup>16</sup>)

One example of this type of IED occurred on October 1, 2005, when a University of Oklahoma student accidentally blew himself up with homemade TATP. On September 29, 2005, he attempted to purchase fertilizer (presumably to manufacture ammonium nitrate/fuel oil), which raised suspicions from a local off-duty law enforcement officer. This information was not immediately acted on, and the student was able to manufacture over 3 pounds of TATP in his shared apartment.<sup>17</sup>

Another challenge identified by the USNORTHCOM conference was the use

of strategic communications during an IED attack. An important question was who would first use the term *campaign*. This word could trigger significant political and procedural implications. It was determined that its most likely first use would be by the media. It was also determined that it would not be the role of DOD or USNORTHCOM to designate an attack or series of attacks as a campaign. USNORTHCOM and DOD would follow the strategic communication guidance used by the lead agency. The importance of terminology during an attack shows the need and challenges for interagency joint cooperation.

A terrorist threat or incident may occur at any time of day with little or no warning, involve single or multiple geographic areas, and result in mass casualties. The likelihood continues to grow that such incidents will include improvised explosive devices. Defeating these attacks in the United States will be a joint effort between Federal lead agencies and other interagency partners, including the Department of Defense. It is incumbent on the department to ensure that expertise gained in the Middle East continues to be shared with interagency partners in the homeland. All agencies from local to Federal must understand what policies are in place to mitigate this threat. United States Northern Command’s Force Protection and Mission Assurance Division will continue to analyze national IED policies and documents as they emerge. **JFQ**



Members of LAPD bomb squad and bomb detection canine unit

## NOTES

<sup>1</sup> James I. Rostberg, “Common Chemicals as Precursors of Improvised Explosive Devices: The Challenges of Defeating Domestic Terrorism” (Master’s thesis, Naval Postgraduate School, 2005), 10.

<sup>2</sup> “Draft HSPD–19 Report to the President of the United States Including a National Strategy and Recommendations,” July 25, 2007, 7.

<sup>3</sup> Ibid.

<sup>4</sup> George W. Bush, Homeland Security Presidential Directive/HSPD–19, “Combating Terrorist Use of Explosives in the United States” (Washington, DC: The White House, February 12, 2007), available at <[www.whitehouse.gov/homeland/hspd19/](http://www.whitehouse.gov/homeland/hspd19/)>.

<sup>5</sup> Tony Villa, “Office of Bombing Prevention: Introduction and Overview,” briefing presented during USNORTHCOM IED Conference, Peterson AFB, June 26–27, 2007.

<sup>6</sup> Jesse L. Chester, “Bureau of Alcohol, Tobacco, Firearms, and Explosives: Counterterrorism Division,” briefing presented during USNORTHCOM IED Conference, Peterson AFB, June 26–27, 2007.

<sup>7</sup> Department of Defense Directive 2000.19E, “Joint Improvised Explosive Device Defeat Organization,” February 14, 2006, 2.

<sup>8</sup> “Draft HSPD–19 Report,” 27.

<sup>9</sup> Ibid.

<sup>10</sup> Villa.

<sup>11</sup> Frances F. Townsend, “Lessons Learned from the Cabinet Level Exercise of February 24, 2007,” memorandum for supporting agencies (Washington, DC: The White House, March 21, 2007).

<sup>12</sup> Kevin Pace, “NORAD–USNORTHCOM Plans Summary with Respect to the IED Threat,” briefing presented during USNORTHCOM IED Conference, Peterson AFB, June 26–27, 2007.

<sup>13</sup> David Howe, “Planning Scenarios Executive Summaries, Created for Use in National, Federal, State, and Local Homeland Security Preparedness Activities,” report prepared by the Homeland Security Council, July 2004, vi.

<sup>14</sup> See Office of the Director of National Intelligence (ODNI), “Declassified Key Judgments of the National Intelligence Estimate ‘Trends in Global Terrorism: Implications for the United States’ Dated April 2006” (Washington, DC: ODNI, September 26, 2006), available at <[www.dni.gov/press\\_releases/Declassified\\_NIE\\_Key\\_Judgments.pdf](http://www.dni.gov/press_releases/Declassified_NIE_Key_Judgments.pdf)>.

<sup>15</sup> Ibid.

<sup>16</sup> Bureau of Alcohol, Tobacco, Firearms, and Explosives, “Canines Sniff Out Peroxide-Based Explosives, Improvised Explosives Devices,” news release, March 7, 2007.

<sup>17</sup> “College Suicide Bomber Tried to Buy Fertilizer,” Associated Press, October 7, 2005, available at <[www.foxnews.com/story/0,2933,171522,00.html](http://www.foxnews.com/story/0,2933,171522,00.html)>.