

The Joint Improvised Explosive Device Defeat Organization:

DOD's Fight Against IEDs Today and Tomorrow



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ABOUT THE COVER:

A simulated IED emits a firestorm as Soldiers in the Iowa National Guard's 1-133 Infantry Battalion experience the concussion and noise of an explosion during Theater Immersion Training at Camp Shelby, Mississippi, earlier this year. The Iowa unit rounded out the 1st Brigade, 34th "Red Bull" Division, of nearly 4,000 soldiers now serving in Iraq.

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Finally, we want to recognize the efforts of those in the Department of Defense and other government agencies who are involved daily in the counter-IED fight in the United States, Iraq, and Afghanistan. We especially want to recognize the efforts of the brave men and women who are fighting IEDs in the field. This report recognizes their hard work to protect our most precious asset—the lives of our Soldiers, Sailors, Airmen, and Marines.

This report is dedicated to the service members who lost their lives to or were wounded by IEDs. We honor their sacrifice and express our sympathies to their families.

VIC SNYDER

W. TODD AKIN

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EXECUTIVE SUMMARY

The end of major combat operations in Iraq in 2003 was merely the beginning of a different fight, a fight in which an unconventional weapon has had a deadly impact on conventional forces. The Improvised Explosive Device (IED) has proven to be the number one threat to Coalition Forces in Iraq and now in Afghanistan. Its use is spreading. In response to this relatively cheap and somewhat unsophisticated killer, the Department of Defense (DOD) has invested billions of dollars and established a large organization with one goal: to defeat IEDs. The Joint IED Defeat Organization (JIEDDO) has had some success in this mission, but the use of IEDs persists. Because of the resources invested in JIEDDO and the urgency of its charge, it is important to assess the entity as it stands today and consider its role for the future. Therefore, the House Armed Services Subcommittee on Oversight and Investigations conducted this study to answer two questions: (1) Is JIEDDO winning the Counter-IED (C-IED) fight in Iraq and Afghanistan? and (2) What is the Department's long-term plan for JIEDDO and for addressing other asymmetric threats?

JIEDDO's actions and activities fall under three lines of operation: (1) "Defeat the Device," (2) "Attack the Network," and (3) "Train the Force." The primary focus of the Defeat the Device effort is on neutralizing the IED after it is emplaced. This includes funding the development of technical and non-technical countermeasures and the ability to rapidly field new equipment. Attack the Network activities aim to find and eliminate bomb makers and their supporters before they can assemble and emplace IEDs. The C-IED Operations Integration Center, JIEDDO's hub for fusing operations and intelligence information, is the primary enabler for JIEDDO's support for attacking IED networks. Finally, the Joint Center of Excellence supports training for U.S. personnel on how to protect themselves from IED.

Although JIEDDO spends more than \$4 billion annually under these three lines of operation and reports significant progress, this study concludes that it is not clear how well the organization is accomplishing its mission. Our findings include:

- ◆ JIEDDO is supposed to be the focal point for all Department of Defense actions to defeat IEDs; however, JIEDDO does not actively lead all DOD C-IED efforts.
- ◆ JIEDDO relies on certain C-IED statistics to justify its claims of success; however, these metrics do not effectively capture or accurately reflect its performance.
- ◆ One of JIEDDO's strengths is its large budget and flexible appropriations; however, considering the substantial appropriations JIEDDO receives, additional oversight would serve the mission and the nation well.
- ◆ The Department quickly turned an *ad hoc* Army Task Force into today's multibillion dollar JIEDDO; however, despite the recent decision to institutionalize the organization, questions concerning JIEDDO's future remain. For instance, some believe JIEDDO's "laser-like" focus on the IED threat is essential, while others suggest that JIEDDO should expand the scope of its mission to counter other asymmetric threats.

This report examines these and other issues surrounding JIEDDO. The Subcommittee offers findings and recommendations to the Department of Defense as it continues its battle to protect service members from IEDs—the number one combat killer in Iraq and Afghanistan.

INTRODUCTION

IEDs are the enemy's equivalent of artillery, and artillery has always been the largest killer on the battlefield.

General Montgomery C. Meigs, USA (Ret.)
Former Director, JIEDDO¹

The deadliest threat to our military personnel in Iraq and Afghanistan is the Improvised Explosive Device (IED). In 2004, senior military commanders called for a “Manhattan Project-like” effort against IEDs, and the Department of Defense (DOD) later established the Joint IED Defeat Organization (JIEDDO). The United States has since spent nearly \$14 billion on JIEDDO and its predecessor organizations in an effort to keep up with this ever-changing threat. This figure does not include what has been spent by the Services and other agencies. The Subcommittee initiated this study to try to answer two questions:

Is JIEDDO winning the Counter-IED (C-IED) battle in Afghanistan and Iraq today?

What is the Department’s long-term plan for JIEDDO, specifically, and for addressing IEDs and other asymmetric threats, in general?

BACKGROUND

In 2004, Coalition Forces in Iraq faced an ever-increasing threat from a new weapon, the IED. They had little means to counter it. The term “IED” represents a wide range of explosive devices and detonators, from a simple artillery shell detonated by a “command” wire, to the relatively sophisticated and more lethal Explosively Formed Penetrator (EFP) detonated by a motion sensor. The improvised nature of these weapons means that they can be quickly and easily modified to overcome countermeasures developed to defeat them. Moreover, those who use IEDs against military or civilian targets can do so with little risk to themselves, since the stationary devices can usually be emplaced without detection and then detonated remotely. The reference to the Manhattan Project by U.S. Central Command leaders was meant to convey the need for a large-scale, focused effort, combining the nation’s best scientific minds with nearly unconstrained resources to develop technical solutions to the problem. Starting in 2004, the Department engaged in a significant effort to develop and field

¹ Greg Grant, “Homemade Bombs, High-Tech Response,” *Government Executive* (15 June 2007). Accessed online at: <http://www.govexec.com/features/0607-15/0607-15s3.htm> (27 October 2008).

electronic jammers, vehicle armor, and IED detection and pre-detonation techniques rapidly—all defensive measures dealing with the IED after it had been emplaced. These efforts were necessary responses for reducing casualties quickly, but they did not prevent an increased use of IEDs.

When used exclusively, these defensive efforts—what are collectively referred to as “Defeat the Device” efforts—left the IEDs intact if an electronic jammer was used, and the IED emplacers virtually untouched. They effectively allowed anti-Coalition Forces in Iraq to produce and emplace IEDs with relative impunity. Early in the fight, several experts recommended placing greater emphasis on an offensive approach to counter IEDs by targeting the individuals, or terrorist and insurgent networks, producing and emplacing IEDs.² These efforts are referred to as “Attack the Network” efforts. Initial attempts were erratic and slow to develop. Today, JIEDDO directs a well-resourced effort to attack enemy networks that use IEDs.

“JAMMERS”

One of the most common methods used to detonate IEDs is to trigger them remotely using a radio signal. Various common electronic items such as remote controls for toys and garage doors, key fobs for automobiles, two-way radios, cordless telephones, and cell phones have been used to detonate IEDs. JIEDDO has allocated much of its Defeat the Device funding to the development and fielding of vehicle-mounted and man-portable jamming equipment that prevents the trigger signal from reaching the bomb. To date, JIEDDO has fielded over 37,000 jammers. Every U.S. military vehicle traveling outside of an operating base in Iraq and Afghanistan is supposed to be protected by a jammer. As attackers change frequencies and methods of attack, jammers must also be changed. It’s important to note that if a jammer is effective, U.S. personnel may not know, and the IED then left to injure or kill others.



Man-portable jammers.



An EOD expert holds a cell phone IED triggering device that malfunctioned.

² See, for instance, Walter Perry, Ed O’Connell, Richard Mesic, and Scott McMahon, “A Proposal for a Counter-IED Time-Sensitive Target Cell,” RAND Project Memorandum PM-1843-OSD (July 2005), and Brian A. Jackson, David Frelinger, Ed O’Connell, and Walter Perry, “What Do We Need to Know and How Do We Learn It? Sustaining Intelligence-Directed Attrition Efforts Against Insurgent Organizations,” RAND Project Memorandum PM-1929-OSD (October 2005).

Although, senior military leaders recognized that C-IED training is critical to the fight,³ in the early years of the Iraq war not all U.S. military personnel received adequate C-IED training prior to their deployment.⁴ Despite certain remaining shortfalls in training equipment, the training regimen has been improved and almost all deploying troops presently receive some form of C-IED training. JIEDDO supports extensive Service and combatant command efforts to train U.S. personnel in recognizing and protecting themselves against various IEDs threats, and in understanding and anticipating evolving adversarial tactics, techniques, and procedures (TTPs).

The tremendous growth in the use of IEDs and their expansion to other theaters can be attributed to a number of factors. First, the munitions and explosives used in IEDs, including homemade explosives (HMEs), are widely available. Additionally, there are numerous and relatively simple methods to trigger IEDs without risk to the bomber. The tactics and techniques for a successful IED attack change constantly, and they can be easily and widely shared via the Internet and other means. Still, the primary reason for the rapid increase in the use of IEDs is that they have been highly effective against larger, technically superior Coalition Forces.

The use of IEDs has effects beyond inflicting casualties. According to Lieutenant General Thomas Metz, Director of JIEDDO, “IEDs are weapons of strategic influence because they attack the U.S. national will and try to undermine and eliminate Western influence.”⁵ IEDs are employed to attack “iconic,” heavily armored, military vehicles, to demonstrate, often through the dissemination of video clips of attacks, the ability of overmatched irregular fighters to inflict damage on organized military forces. Moreover, in the absence of a reliable method to detect IEDs and prevent their use, Coalition Forces have dedicated significant efforts and resources to searching, clearing, and securing roads and other vital areas. The U.S. military has also expended significant resources to develop countermeasures. For



A soldier examines the contents of a discovered weapons cache outside Abu Thayla, Iraq, on April 13, 2008. Iraqi National Police and U.S. Army soldiers from 3rd Squadron, 1st Cavalry, 3rd Brigade Combat Team, 3rd Infantry Division discovered and seized 29 120-mm mortar rounds, over 500 mines, seven Chinese 107-mm rockets and five rocket-propelled grenades.

DOD Photo/Specialist Daniel Herrera, U.S.A.

³ COL Christopher P. Hughes, USA, *War on Two Fronts* (CASEMATE, Drexel Hill, PA: 2007), 216.

⁴ Peter Eisler, Tom Vanden Brook, and Blake Morrison, “Anti-IED drills improve, but not every soldier goes through them,” *USA Today* (17 October 2007). Accessed online at: http://www.usatoday.com/news/military/2007-10-17-ied-training_N.htm (7 November 2008).

⁵ Ann Roosevelt, “IEDs Are Strategic Weapons, General Says,” *Defense Daily* (20 June 2008).

example, JIEDDO has spent more than \$2.3 billion to develop, procure, field, and sustain electronic jamming technology and techniques to thwart simple, cheap triggering devices such as two-way radios or garage door openers. Because a similarly expensive effort may be necessary to develop new jamming techniques when attackers change triggering devices or it may be necessary to field more heavily armored vehicles when attackers increase the lethality of IEDs, they could become a weapon of significant economic impact.⁶

Finally, attacks against civilians (“soft targets”) are used to create fear, incite violence, and generally disrupt efforts to stabilize countries in conflict. Infrastructure attacks seriously impede construction and reconstruction efforts. IED attacks can therefore influence the decisions of military commanders and political leaders, as well as the public will, at home and within host countries.



A South African-built Buffalo of the Kansas Army National Guard's 891st Engineer Battalion stands by to investigate a suspected IED that was spotted along the shoulder of a highway in southern Iraq.

USA Photo/Master Sergeant Lek Mateo.

⁶ For a discussion of the cost versus benefits trade-offs of the Mine-Resistant Ambush-Protected vehicle (MRAP), see Andrew F. Krepinevich and Dakota L. Wood, “Of IEDs and MRAPs: Force Protection in Complex Irregular Operations,” Center for Strategic and Budgetary Assessments (17 October 2007).

JIEDDO TODAY

We've got to have something like the Manhattan Project.

General Lance Smith, USAF (Ret.)
Former Deputy Commander
U.S. Central Command¹

JIEDDO'S MISSION

The Department's focused effort against IEDs began in 2003 as an *ad hoc* 12-member Army Task Force. It eventually evolved to a Joint IED Defeat Task Force, which in turn has grown to the current Joint IED Defeat Organization with a staff of 3,100 and an annual budget of more than \$4 billion.² In February 2006, Department of Defense Directive 2000.19E, *Joint Improvised Explosive Device Defeat Organization*, officially established JIEDDO as a joint entity under the authority of the Deputy Secretary of Defense. The Directive defines JIEDDO's mission as follows:

The JIEDDO shall focus (lead, advocate, coordinate) all Department of Defense actions in support of the Combatant Commanders' and their respective Joint Task Forces' efforts to defeat Improvised Explosive Devices as weapons of strategic influence.³

To meet this charge, JIEDDO divides its activities into four primary mission areas, which correspond roughly to the three lines of operation. The first mission area focuses on purchasing and rapidly fielding IED countermeasures or technologies. Most of the activities for this mission correspond to the Defeat the Device line of operation, although some fall under Attack the Network. The next mission area provides intelligence support for tactical-level operations. This mission area is primarily aligned with JIEDDO's Attack the Network operations. The third primary mission is training, which corresponds to JIEDDO's Train the Force line of operation. Finally, JIEDDO exercises a strategic planning role.

¹ Rick Atkinson, "Left of Boom: The Struggle to Defeat Roadside Bombs," *Washington Post Special Report* (30 September 2007) A13.

² For a more detailed review of JIEDDO's history, see LTC Richard F. Ellis, USA; Maj. Richard D. Rogers, USAF; and LCDR Bryan M. Cochran, USN, "Joint Improvised Explosive Device Defeat Organization (JIEDDO): Tactical Successes Mired in Organizational Chaos; Roadblock in the Counter-IED Fight" (Joint Forces Staff College: 13 March 2007) 3-5.

³ *Joint Improvised Explosive Device Defeat Organization*, DOD Directive 2000.19E (14 February 2006), para 4.

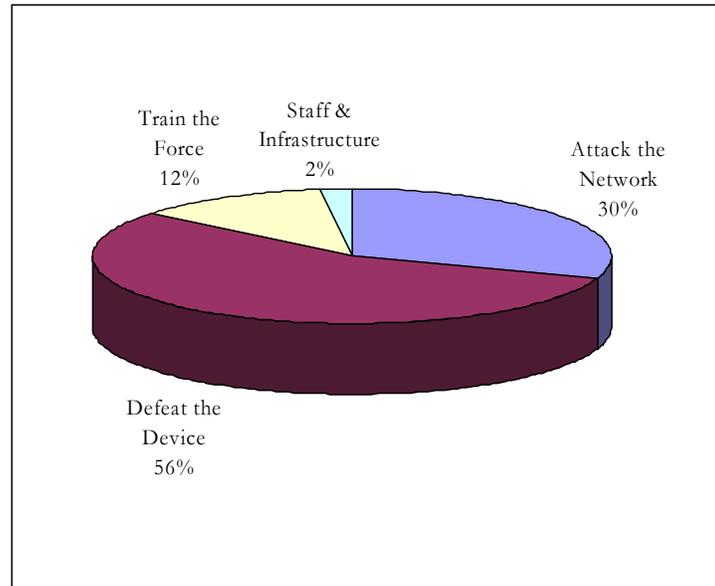


Figure 1. Allocation of JIEDDO's Fiscal Years 2007 and 2008 appropriations by its lines of operation.

RAPID ACQUISITION

The mission area that receives the majority of JIEDDO's financial resources focuses on providing technological countermeasures for IEDs. Those involved work to develop and field equipment to mitigate the effects of IEDs. This includes jammers to block radio frequency signals that detonate IEDs, IED detection and pre-detonation equipment, and armor upgrades for vehicles. The Defeat the Device line of operation accounted for about 53 percent of JIEDDO's Fiscal Year 2008 budget. Increasingly, however, this rapid acquisition mission has also expanded to provide tools for Attack the Network efforts, including funding for materiel solutions like Intelligence, Surveillance, and Reconnaissance (ISR) sensors, and for non-materiel solutions, such as personnel billets for weapons intelligence and law enforcement professionals.

For rapid acquisition, interaction and partnership with industry and academia is especially important. Early on, some in industry criticized JIEDDO for its *ad hoc* acquisition process and its inability to quickly and thoroughly evaluate proposals and provide feedback to industry.⁴ In response, in 2007 JIEDDO established its Joint IED Defeat Capability Approval and Acquisition Management Process (JCAAMP) to identify C-IED requirements and acquire both materiel and non-materiel solutions rapidly.⁵ According to JIEDDO officials, this

⁴ See Rod C. Nubgaard, USCG; Stanley Thomas, USMC; CDR Dwight Shepherd, USN; Donald Bellah, DOD; LTC Paul Ostrowski, USA; and CDR Shawn Bentley, USN, "JIEDDO Organizational Review" (The Industrial College of the Armed Forces, National Defense University, Washington, D.C.: Academic Year 2005-2006).

⁵ *Joint Improvised Explosive Device Defeat Capability Approval and Acquisition Management Process (JCAAMP)*, DOD JIEDDO Instruction 5000.01 (9 November 2007).

process has shortened the period between recognition of a developing IED threat and the deployment of a C-IED initiative from years to months.

FINDING NETWORKS

JIEDDO relies on its “Finding Networks” to identify technical or operational countermeasures to fill persistently difficult, high-priority capability gaps. With hopes of including the nation’s best scientific minds in this process, the networks are made up of subject matter experts from industry, academia, Service and DOD laboratories, and other government agencies. By leveraging the unique capabilities of these technical experts, JIEDDO is able to identify promising technological solutions, test and evaluate them, and then field those that are successful quickly.

To develop potential C-IED solutions to address both urgent needs and operational capability gaps, JCAAMP relies on what JIEDDO officials refer to as “Finding Networks,” comprised of experts from industry, academia, and government. Both warfighters and Finding Networks identify these needs and capability gaps. Potential IED countermeasures are developed in response to Broad Area Announcements (BAA), which are JIEDDO’s way of communicating to industry precisely what capabilities it needs. Once JIEDDO officials select a promising industry proposal in response to a BAA, JCAAMP begins.



A Marine of the 15th Marine Expeditionary Unit assigned to Explosive Ordnance Team 8 prepares a Talon II remote-controlled robot to go down range and investigate a possible IED along the shoulder of a busy highway in southern Iraq.

USA Photo/Master Sergeant Lek Mateo.

In JCAAMP, the proposal is evaluated, validated, and, if it passes muster, JIEDDO may fund it.⁶ When JIEDDO commits funds to develop and field a new IED countermeasure, it becomes an “initiative.” If a countermeasure receives JIEDDO funding, it is tested. If it

⁶ The Director of JIEDDO makes funding decisions for initiatives costing less than \$25 million; decisions for initiatives costing more than \$25 million are elevated to the Deputy Secretary of Defense.

passes testing, it will be deployed and operationally assessed. JIEDDO's goal is to find and develop a countermeasure within 4 to 12 months and, if viable, to deploy and assess it within 12 to 24 months. According to JIEDDO, it is currently responding to 87 Joint Urgent Operational Needs Statements (JUONS)⁷ from the warfighter with 119 separate initiatives.⁸

At any point during this process, funded initiatives may prove ineffective either in the lab or in the field. General Meigs explained that, in his view, an ability to take risks and sometimes fail is essential to innovating and fielding much-needed C-IED equipment and tactics quickly.⁹



One initiative JIEDDO has transferred to the Services is the "Rhino," a vehicle-mounted system to pre-detonate IEDs.

⁷ A Joint Urgent Operational Need, or JUON, is identified by a combatant commander from an ongoing, named operation that requires Joint Chiefs of Staff validation and resourcing. Usually, the JUON gains Joint Staff validation and resourcing of a solution within days or weeks. The scope of a combatant commander JUON is limited to addressing urgent operational needs that: (1) fall outside of the established Service acquisition processes and (2) if not addressed immediately will seriously endanger personnel or pose a major threat to ongoing operations.

⁸ Lieutenant General Thomas F. Metz, USA, Director, Joint Improvised Explosive Device (IED) Defeat Organization. Statement before the U.S. House, Armed Services Committee, Subcommittee on Oversight and Investigations (16 September 2008), 3.

⁹ General Montgomery C. Meigs, USA (Ret.), Former Director, Joint Improvised Explosive Device (IED) Defeat Organization. Meeting with Subcommittee Chairman Snyder (Washington D.C.: 18 June 2008).

FROM CLEARING ROADS OF IEDS TO CAPTURING THE BOMB MAKER

(A Dramatization)

Part I

Company E's Route Clearance Team, together with an Iraq-based Engineering Battalion, receives the mission to ensure that a main supply route is free of IEDs. The mission will take several days and cover hundreds of miles. The team prepares for its mission by reviewing IED intelligence and then sets out in various armored vehicles equipped with devices to pre-detonate Explosively Formed Penetrator IEDs, attachments to rake up IED command wires, and detectors to look beneath the road surface for buried IEDs. All vehicles are equipped with jammers to protect them from IEDs initiated by radio frequency signals. From a safe stand-off distance, a soldier identifies a suspected IED using a high-powered day/night/thermal camera that is mounted on his vehicle on a telescoping mast. He notices the road's guardrail has been modified, reminding him of a similar scenario that he observed during his unit's pre-deployment C-IED training at Fort Irwin, California. The team decides to deploy a remote-controlled robot to investigate. The robot operator confirms the presence of the IED but determines that the device cannot be safely neutralized in place. It must be removed from the roadway using the long robotic arm attached to one of their vehicles.

To Be Continued ...



To detect buried IEDs, JIEDDO spent \$33.1 million on the Husky Mounted Detection System.



Another JIEDDO initiative is the Wire Neutralization System-Wolf Collar for raking up command wires used to trigger IEDs. JIEDDO has spent \$67 million on this initiative.

Photos/JIEDDO.

(JIEDDO-funded or supported work is underlined.)

On the other hand, JIEDDO-funded initiatives that are assessed as effective ultimately “transition” into DOD programs of record. Or, if continued funding comes through supplemental appropriations, JIEDDO “transfers” them to the Services, combatant commands, or other DOD organizations. These other organizations must then acquire, sustain, and operate the programs. Guidance from the Deputy Secretary of Defense directs JIEDDO to complete these transitions or transfers within 24 months.¹⁰ According to JIEDDO, it transitioned 12 C-IED initiatives to the Services and U.S. Special Operations Command (SOCOM) in Fiscal Year 2008 and is planning to transfer 44 more in Fiscal Year 2009. These transitions and transfers will require \$1.135 billion in supplemental funding. Eight more transitions and 20 transfers in Fiscal Year 2010 will require \$252 million of base and supplemental funding.¹¹ As will be discussed later, the hand-over of these initiatives to other DOD organizations has not always been smooth.

It is important to note that while JCAAMP has been discussed as a model system for rapid acquisition of C-IED capabilities, there are other examples of processes that support capabilities not necessarily related to C-IED requirements. For example, both the Office of the Secretary of Defense’s Joint Rapid Acquisition Cell (JRAC) and the Army’s Rapid Equipping Force (REF) have been successful in quickly finding and fielding solutions to other urgent warfighters requests. As a result, Congress recently required the Department to commission a study on the processes used to generate urgent operational needs requirements and the rapid acquisition processes used to fulfill those requirements.¹²

INTELLIGENCE SUPPORT

Another JIEDDO mission is providing intelligence support for the C-IED fight. Although this mission includes support to Defeat the Device (route clearance missions) and Train the Force (new adversary techniques), much of it falls under JIEDDO’s Attack the Network line of operation. The mission includes support to offensive operations against “networks” of IED financiers, makers, and trainers as well as their supporting infrastructure. Slightly over 30 percent of JIEDDO’s Fiscal Year 2008 budget supported the Attack the Network line of operation. Examples of these initiatives include finding and funding effective signals intelligence technologies, passive radio-frequency detection technologies, and broad-area persistent surveillance systems.

To provide intelligence support, JIEDDO relies on its Counter-IED Operations Integration Center (COIC). The COIC supports Coalition Force movement and attacks against enemy IED networks by collecting and analyzing available intelligence and operations data and providing a summary of that information to operators in the field for action. Although the COIC’s efforts may be redundant with those of other operations and intelligence organizations, JIEDDO reports that its greatest strength is its ability to focus

¹⁰ “Transfer of JIEDDO C-IED initiatives to the Components,” Deputy Secretary of Defense Memorandum (14 August 2007).

¹¹ Gurdev Buttar, “JIEDDO Transition and Transfer Process,” Briefing Slides, JIEDDO Cross Briefs Conference (26-28 August 2008).

¹² Duncan Hunter National Defense Authorization Act for Fiscal Year 2009, Pub. L. No. 110-417, § 801 (2008).



JIEDDO has funded a 26-foot mechanical interrogator arm that allows stand-off probing of suspected IEDs.

... BOOM!

Part II

It wasn't more than a couple seconds after the robotic arm released the IED from its grasp that the bomb exploded on the side of the road. The blast gave the soldiers a jolt, but the only damage was a 4-foot blast crater in the side of the roadway. Fortunately, no one was injured in what could have been a deadly attack, and the road was passable. But the blast wasn't the end of the mission—it was the beginning in this day's Counter-IED fight. The soldiers on the scene contacted Explosive Ordinance Disposal (EOD) experts from a nearby Forward Operating Base. The EOD soldiers are part of a Combined Explosive Exploitation Cell, or CEXC. Less than 20 minutes after the explosion, the CEXC was at the scene scouring the blast crater and conducting a post-blast analysis to help link the incident to a bomb maker. The team recovered some of the components of the IED, and the pieces were immediately examined for finger prints. A print was recovered from the components and scanned into the CEXC's database. It's a match with a Coalition database entry! The print belongs to a suspected bomb maker who has been previously identified by intelligence sources. He lives in a nearby village.

To Be Continued ...



A CEXC team investigates the site of a recent IED attack.
USMC Photo/Lance Corporal, Matthew Hutchison.

narrowly on the IED threat and to provide IED information on operationally-driven timelines. The COIC is actively developing new tools to analyze and synthesize available data more effectively and to present it in user friendly form to tactical units.¹³

JIEDDO FIELD TEAMS

JIEDDO recognizes that the IED fight will not be won from the Pentagon. It assigns personnel to operations teams in Iraq and Afghanistan comprised of military and civilian personnel. These teams are conduits back to JIEDDO for evolving C-IED requirements, and they report new IED tactics, techniques, and lessons learned in theater back to the training centers and JIEDDO's headquarters. The teams also implement and manage JIEDDO's C-IED initiatives in Iraq and Afghanistan.

According to JIEDDO, the COIC reached full operational capability in 2007, and it maintains a joint common operational and intelligence picture of worldwide IED systems. This common picture is critical to the C-IED fight as it allows all organizations to see and share the same information wherever they are located. These common pictures and other COIC-provided products are derived from highly classified intelligence, but COIC makes them available at the SECRET level for tactical units.¹⁴

JIEDDO reports that the COIC is responding to Requests for Support (RFS) from deployed forces at a rate of 170 per month. An RFS generally consists of a request for the COIC to provide fused information from the intelligence, law enforcement, and operational communities, and to provide combat forces advice for moving safely across the battlespace and planning missions. According to General Metz, in the last 18 months, the COIC has supported 213 missions that resulted in the kill or capture of 691 high-value terrorists, insurgents, and criminals.¹⁵

The Government Accountability Office (GAO) report on JIEDDO's intelligence support found that, "[T]here appears to be a general consensus among JIEDDO Officials, COIC's warfighter customers, and other external intelligence-related entities . . . that the COIC has provided a valued service to the warfighter. . . ."¹⁶ JIEDDO believes efforts to develop analytical tools to combine and present information from many different sources (national intelligence data, tactical data from deployed units, geographical and cultural information, imagery, etc.) in a usable format have been truly revolutionary. Deployed forces reportedly embrace the COIC because it provides valuable tactical intelligence support that was previously unavailable to lower echelon units. Additionally, forward deployed units report that the COIC's focused C-IED support frees up their own limited intelligence assets for other missions. On the other hand, Marine Corps intelligence officials say that while COIC

¹³ Metz, HASC Statement, 2-3.

¹⁴ Joint Improvised Explosive Device Defeat Organization, *Annual Report, Fiscal Year 2007*, 8.

¹⁵ Metz, HASC Statement, 2-3.

¹⁶ U.S. Government Accountability Office, *The Joint Improvised Explosive Device Defeat Organization Provides Valuable Intelligence Support But Actions Are Needed to Clarify Roles and Improve Coordination*, GAO-09-172C (Washington, D.C.: November 2008), 4. Unclassified excerpts.

products are useful, the Marines have long embraced the concept of combined intelligence and operations centers of their own.¹⁷

COMBINED EXPLOSIVES EXPLOITATION CELLS (CEXC)

CEXC units are often called the “CSI” teams of the IED fight. Intelligence, law enforcement, explosives, and technical experts team to investigate who is responsible for IED incidents. They may survey a post-blast site to collect fingerprints, search for telltale signs of a particular bomb maker, and look for unique aspects of how the device was deployed. JIEDDO supports the CEXC by funding civilian electrical engineers, information technology specialists, and intelligence analysts for these teams.

Although the COIC provides value, GAO remains concerned about the lack of coordination between COIC and other intelligence organizations that attack hostile human networks, as well as the exact role of the COIC. COIC officials admit that enemy networks are rarely, if ever, pure IED networks; networks that move IED related components also move other contraband or engage in other forms of hostilities. The Global Innovation and Strategy Center (GISC) of U.S. Strategic Command recently conducted a study of all DOD efforts to attack human networks.¹⁸ The study, conducted at the request of the Vice Chairman of the Joint Chiefs of Staff, found that there are currently 185 separate Attack the Network efforts that are not consolidated, centralized, or coordinated. The study’s authors referred to this structure as “ad-hocracy.”¹⁹

Another item of interest is the evolution of the “Training COIC.” To free the COIC from supporting units undergoing pre-deployment C-IED training, so it can focus on missions in the combat theater, JIEDDO is funding the development of a Training COIC (TCOIC) in coordination with the U.S. Army Training and Doctrine Command (TRADOC). The TCOIC will provide C-IED training for Army brigade combat teams and division staffs. Joint Forces Command (JFCOM), the combatant command charged with coordinating joint training, is in discussions with JIEDDO and TRADOC to ensure that the TCOIC will support C-IED training for all Services.²⁰

Finally, while the COIC’s primary focus is on supporting Coalition Force movement and attacks on IED networks, its mission statement includes attacking “other focused asymmetric threats,”²¹ and there is evidence of this expanded effort in COIC operations,

¹⁷ Brigadier General Richard M. Lake, USMC, Director of Intelligence, Headquarters Marine Corps, briefing to HASC O&I Subcommittee staff (10 September 2008).

¹⁸ *Human Network Attack Study*, Final Report, U.S. Strategic Command Global Innovation and Strategy Center (31 March 2008).

¹⁹ Kevin Williams, Director, U.S. Strategic Command Global Innovation and Strategy Center, briefing to HASC O&I Subcommittee (9 September 2008).

²⁰ Major General Jason K. Kamiya, USA, Director, Joint Training Directorate (J7), U.S. Joint Forces Command. Statement before the U.S. House, Armed Services Committee, Subcommittee on Oversight and Investigations (16 September 2008), 3. See also, HASC O&I Subcommittee staff discussions with TCOIC staff, and Staffdel Fenner to U.S. Joint Forces Command and U.S. Air Force 480th Intelligence Wing (Norfolk, VA: 4 September 2008).

²¹ Frank Larkin, “Attack the Network Operations: Counter-IED Operations Integration Center (COIC),”

demonstrations, and briefings.²² The expansion of JIEDDO's mission raises significant concerns (e.g., will it dilute its C-IED efforts or overlap with other organizations' similar efforts?). Nevertheless, General Metz testified that the Department would have to issue a new directive to expand the mission beyond IEDs to other asymmetric threats. He confirmed that discussions of "widening the aperture" were very informal, and he engaged in them very cautiously, so that JIEDDO would not lose its focus.²³ DOD's Director of Program Analysis and Evaluation (PA&E) also testified that as other asymmetric threats had been discussed, "We have been very quick to take them out of the charter of JIEDDO. . . . so far, things other than IEDs are not in JIEDDO's charter. . . ."²⁴

LAW ENFORCEMENT PROGRAM (LEP)

Attacking IED networks is a lot like fighting organized crime and gangs. Recognizing this similarity, JIEDDO funded a program that brings together experienced law enforcement professionals from the Drug Enforcement Agency, Federal Bureau of Investigation, police departments, and other agencies to support the warfighter. They lend their expertise to teach and support military personnel to investigate bomb-making networks, investigate incidents, question witnesses and suspects, and collect evidence for pending C-IED operations and prosecutions.

TRAINING SUPPORT

JIEDDO's third mission is to support the Services and the Combatant Commands (COCOMs) as they train personnel to recognize IEDs and protect against them. U.S. personnel generally acknowledge that while technological IED countermeasures are important, "the most effective tool to defeat the IEDs is the American Soldier."²⁵ Through its Train the Force line of operation, JIEDDO provides training tools, expertise, and the latest adversary IED TTPs to the Services and the COCOMs. This effort includes support for individual and group training to prepare units prior to and during deployment. This line of operation received about 15 percent of JIEDDO's Fiscal Year 2008 budget.

The Train the Force effort is coordinated primarily through JIEDDO's Joint Center of Excellence (JCOE), which is headquartered at the Army's National Training Center at Fort Irwin, California. Each Service maintains its own Center of Excellence. The JCOE provides IED-specific support and coordination to and among the Services. The Army's Center is at Fort Irwin, California; the Marine Corps' Twentynine Palms, California; the Navy's Indian

Briefing Slides, JIEDDO Cross Briefs Conference (26-28 August 2008). Unclassified excerpts.

²² Staffdel Kuiken to COIC (2 July 2008). CODEL Cooper to COIC (14 July 2008).

²³ Metz, HASC Statement.

²⁴ Bradley Berkson, Director, Programs Analysis and Evaluation. Statement before the U.S. House, Armed Services Committee, Subcommittee on Oversight and Investigations (16 September 2008).

²⁵ COL Daniel L. Zajac, MAJ Brian A. Bissonnette, and CPT John F. Carson, Jr., USA, "First Army IED Training Methodology," *INFANTRY* (July-August 2005), 45.

Head, Maryland; and the Air Force's Lackland Air Force Base, Texas. Moreover, to support large units' home station training throughout the country, JIEDDO provides funds for IED training lanes, which consist of sections of roads and streets lined with hidden, mock IEDs.



Medics from the 3rd Infantry Division's 2nd Battalion, 69th Armor Regiment, encounter a vehicle-borne IED as they train at the National Training Center at Fort Irwin, Calif. The training is safe.

USA Photo/Donna Miles.

The JCOE ensures that the most current C-IED TTPs and equipment are available to the Combat Training Centers and the home station training areas. The COIC supports the JCOE's mission to incorporate real-time changes in enemy TTPs into the training syllabus as rapidly as possible. The JCOE's goal is to make sure that deploying units have the most up to date information when they arrive in theater. The JCOE also ensures that fresh information is continuously factored into the development, fielding, and testing of new training equipment and concepts.

JIEDDO's budget for training was \$410 million in Fiscal Year 2007 and \$710 million in Fiscal Year 2008.³² In Fiscal Year 2008 JIEDDO provided nearly \$194 million for constructing 29 home station training lanes at active and reserve component training stations.³³ JCOE training initiatives in Fiscal Year 2006 included funding upgrades to training facilities and equipment for our Coalition partners at U.S. training facilities in Europe and in theater. The JCOE has also funded specialized C-IED search dog team training and Counter Radio-Controlled Electronic Warfare (CREW) training. At JFCOM, the JCOE funded the

³² JIEDDO, *Annual Report, Fiscal Year 2007*, 19.

³³ JIEDDO Responses to HASC O&I Subcommittee staff questions (24 October 2007, updated 27 October 2008).

Knowledge and Information Fusion Exchange (KnIFE), which provides a sanctioned venue for military personnel to exchange C-IED data and lessons learned. Also, the JCOE provided more than 1,000 C-IED training devices, such as electronic jammers and armored route clearance vehicles, to various training locations.



Robotics training at the National Training Center at Fort Irwin, California. The robots used here are the MARCbots. Talons and PackBots are also used in the C-IED fight.

Photo/JIEDDO.

Finally, the JCOE provides Tactical Advisory Teams (TATs) and Joint Expeditionary Teams (JETs) with recent combat experience to advise and mentor deploying units from platoon to division level on various aspects of the C-IED fight. These teams provide training on the most current TTPs to counter IEDs. Similarly, the JCOE provides training on newly-fielded equipment, from jammers to robots, and it provides role-players to act as “opposition forces” and local populations.

The Services and COCOMs consider the JCOE’s training efforts to be valuable.³⁴ They consider the availability of high-quality and well-funded and resourced training teams and mentors, who are knowledgeable on the most current C-IED TTPs, a cost-free asset.

³⁴ Brigadier General Richard M. Lake, briefing to HASC O&I Subcommittee staff (10 September 2008). See also, Kamiya, HASC statement, 2.



JIEDDO-funded sensors on Warrior Alpha unmanned aerial vehicles provide persistent surveillance for the C-IED fight.

...NABBED!

Part III

Armed with the name and location of the suspected bomb maker, intelligence and operations officers immediately deployed an unmanned aircraft high above his neighborhood. The Unmanned Aerial Vehicle (UAV) was equipped with a sensor that provides persistent surveillance—24 hours a day of full motion video—of the target area. Over several days, intelligence analysts observed multiple vehicles arriving and unloading suspicious packages at the suspected bomb maker's home. This, along with the fingerprint, was enough evidence for Coalition Forces to arrest and detain the suspected bomb maker. Only days after the explosion, they executed a well-planned raid based on current tactical intelligence. Combat forces conducting the raid relied on COIC-provided information to develop their plans. The suspected bomb maker was captured without any injuries to Coalition Forces, and evidence of his bomb making was collected for the prosecution.

STRATEGIC PLANNING

JIEDDO's fourth mission is strategic planning for the C-IED fight. In addition to JIEDDO's, there are numerous C-IED activities within the individual Services, research and development organizations, and the defense intelligence community. JIEDDO is charged by DOD Directive 2000.19E with being the focal point for all these activities and with developing the Department's overall goals for the C-IED mission.³⁵ The Director of JIEDDO has the responsibility to coordinate with all DOD components to develop, publish, and update the strategic plan for all Department C-IED efforts. JIEDDO completed the *National Defense IED Defeat Strategy* in July 2007. However, the Deputy Secretary of Defense did not sign this 47-page strategy, and instead instructed the Director to reduce the plan to a shorter, higher-level document.³⁶ The revised *Strategic Plan for JIEDDO* constitutes the guidance for all of the Department's C-IED activities. According to JIEDDO officials, the organization is currently updating this plan to include performance measures, goals, and lines of operation strategies. JIEDDO anticipates completing these updates by the end of calendar year 2008. Additionally, JIEDDO's 2007 Annual Report mentions the publication of an instruction to support the execution of the strategic plan across the Department.³⁷ However, JIEDDO never produced this instruction; instead, JIEDDO officials stated that they are drafting guidance.³⁸

In addition, according to DOD Directive 2000.19E, the Under Secretary of Defense for Intelligence is responsible for ensuring that the DOD intelligence community supports the requirements of an *IED Intelligence Campaign Plan*. Although the Directive does not assign responsibility for drafting this plan, JIEDDO took the lead role in developing it. The *IED Intelligence Campaign Plan* is an attachment to the *Strategic Plan for JIEDDO*.

The Directive also requires each geographic combatant commander to develop a specific *Counter-IED Campaign Plan* that details the vision, mission, goals, and performance measures supporting the *Strategic Plan for JIEDDO*. Five of the COCOMs have completed or submitted drafts of their *Counter-IED Campaign Plan*.³⁹ Another four have not submitted one because either they believe that their C-IED plans are covered in other documents or they do not think a C-IED plan is relevant to their respective missions.⁴⁰ The new Africa Command is currently working on a plan, but JIEDDO has not received a draft yet.

³⁵ DOD Directive 2000.19E, para 6.2.

³⁶ Joint Improvised Explosive Device (IED) Defeat Organization, *Strategic Plan for JIEDDO* (September 2007).

³⁷ JIEDDO, *Annual Report, Fiscal Year 2007*, 3.

³⁸ Information provided by JIEDDO officials (27 October 2008).

³⁹ Staffdel Fenner to U.S. Southern Command, U.S. Central Command, and U.S. Special Operations Command (Key West, Miami, and Tampa, FL: 28-29 August 2008). Additional information provided by JIEDDO officials (4 November 2008).

⁴⁰ U.S. Northern Command and U.S. European Command do not believe that a distinct plan is necessary. U.S. Transportation Command and U.S. Strategic Command do not think a plan is relevant to their mission.

STAFFING AND ORGANIZATION

As of September 2008, JIEDDO had a permanent staff of 468, of whom 192 are contract employees. JIEDDO’s workforce is supplemented with an additional 1,370 “wartime” staff and over 1,200 personnel working C-IED initiatives. Most of this supplemental staff is made up of contractor-provided personnel.⁴¹ This level of contractor reliance was understandable for an organization that needed to stand-up rapidly to meet urgent wartime needs. Department officials are examining the heavy dependency on contractor support and military personnel on one-year details. In testimony to the Subcommittee, DOD’s Director of Program Analysis and Evaluation stated that the Department is determined to recruit and retain a government workforce that operates in support of our combat forces.⁴²

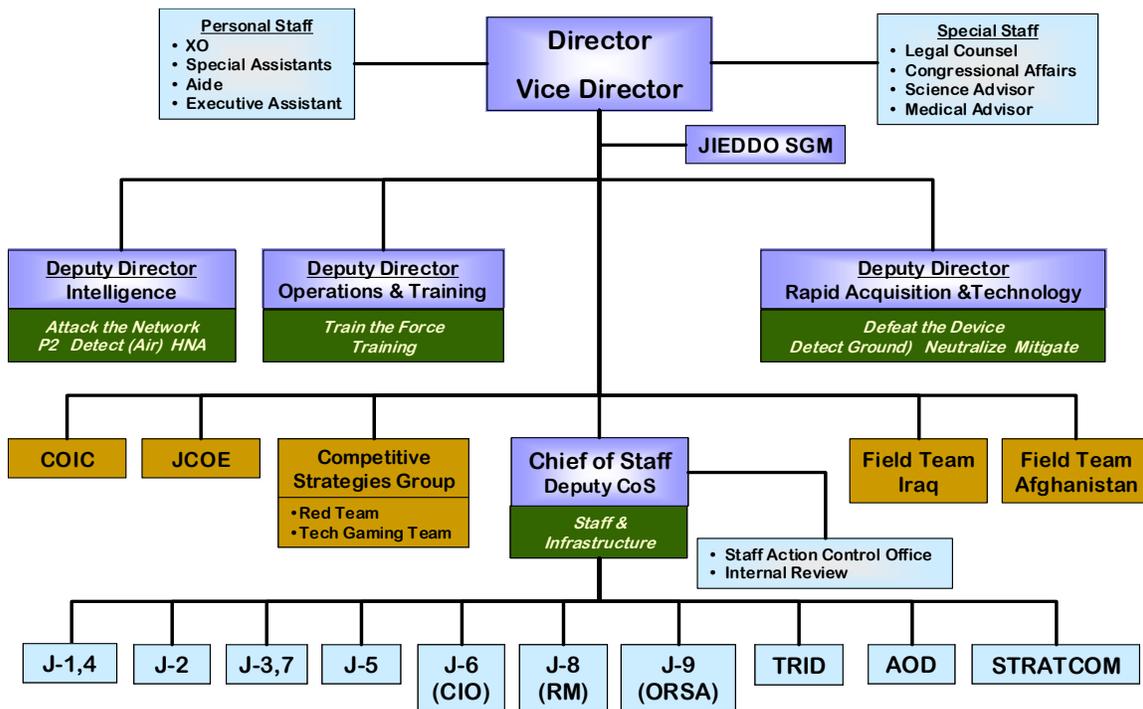


Figure 1. Organization Chart for JIEDDO⁴³

(COIC = Counter IED Operations Integration Center; JCOE = Joint Center of Excellence; CIO = Chief Information Officer; RM = Resource Manager; ORSA = Operations Research/Systems Analysis; TRID = Technical Requirements and Integration Division; AOD = Acquisition Oversight Division; STRATCOM = Strategic Communications Division)

⁴¹ Staffing data as of 1 September 2008, provided by JIEDDO.

⁴² Berkson, HASC statement, 2.

⁴³ Organization chart as of 1 September 2008, provided by JIEDDO.

FUNDING FOR DOD'S C-IED EFFORTS

Since Fiscal Year 2004, nearly \$14 billion has been appropriated for the Department's specific IED defeat efforts (Army Task Force, Joint IED Task Force, and JIEDDO). As Table 1 indicates, the bulk of IED defeat funding has come in wartime emergency supplemental appropriations. The President's budget requests for Fiscal Years 2008 and 2009 included migration of \$500 million and \$496 million, respectively, into the base budget. However, both the Senate Appropriations Committee and the Senate Armed Services Committee moved most of those funds back into the supplemental budgets, reasoning that JIEDDO's expenses are exclusively war related.³⁸

JIEDDO's budget is appropriated through the Joint IED Defeat Fund (JIEDDF) and the entire budget is available for three years from the date of the appropriation. Congress also gave the Secretary of Defense special authority to transfer these funds between military personnel; operations and maintenance; procurement; research, development, test, and evaluation; and defense working capital funds accounts without the normal requirement to obtain prior approval from the congressional defense committees.³⁹ JIEDDO officials maintain that this "colorless" funding and the ability to spend funds over a three-year period is critical to develop and field new countermeasures rapidly. Additionally, according to JIEDDO, the nature of its funding provides the necessary flexibility to change initiatives and spending priorities in response to the constantly changing IED threat. JIEDDO's former director, General Meigs, recently expressed concern that, as JIEDDO's budget migrates to the base Defense appropriations, the organization may lose these flexible budget authorities.⁴⁰

FY04 Army Supplemental	FY05 Army Supplemental	FY06 Supplemental	FY07 Supplemental	FY08 Base	FY08 Supplemental	Total
\$0.1	\$1.345	\$3.583	\$4.393	\$0.12	\$4.198	\$13.739

Table 1. DOD Counter-IED Organizations' Appropriations⁴¹
(Billion \$)

The nature of these appropriations means Congress has less formal insight into how JIEDDO spends its money because the House and Senate Armed Services Committees do not authorize funds appropriated through the mid-year (what is often called the "main") emergency supplemental appropriation. To balance this, Congress requires JIEDDO to report on each of its obligations and transfers of funds.⁴² Similarly, in an effort to provide additional

³⁸ Senate Report 110-37, Report to Accompany S. 965, U.S. Troop Readiness, Veterans' Care, Katrina Recovery, and Iraq Accountability Appropriations Act of 2007, U.S. Senate, Committee on Appropriations (2007), at 25, and Senate Report 110-335, Report to Accompany S. 3001, Duncan Hunter National Defense Authorization Act for Fiscal Year 2009, U.S. Senate, Committee on Armed Services (2008), at 48.

³⁹ Department of Defense Appropriations Act, 2007, Pub. L. No. 109-289, 120 Stat. 1303 (2006).

⁴⁰ Meigs, Meeting with Subcommittee Chairman Snyder.

⁴¹ Appropriations Data provided by JIEDDO (6 November 2008).

⁴² John Warner National Defense Authorization Act for Fiscal Year 2007, Pub. L. No. 109-364, § 1503 (2006), as amended by Pub. L. No. 110-417, § 1503(c).

congressional oversight, the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009 requires that JIEDDO provide Congress with monthly reports explaining its monthly commitments, obligations, and expenditures.⁴³

In addition, supplemental appropriations have an impact on JIEDDO's ability to recruit and retain a government workforce. The Director of PA&E highlighted the challenges of providing assurances of continuity for JIEDDO's workforce due to the uncertainty stemming from its supplemental funding. He encouraged the Subcommittee to support the base budget funding for JIEDDO to help mitigate this issue.⁴⁴

It is important to note that the appropriations in Table 1 do not account for all of the resources the Department expended to counter the IED threat. For example, most of the vehicle up-arming effort and the fielding of new armored vehicles (such as the Mine-Resistant, Ambush-Protected (MRAP) vehicles) are not funded by JIEDDO. Likewise, many of the new Intelligence, Surveillance, and Reconnaissance assets, such as manned and unmanned aerial vehicles, are dedicated to the IED defeat mission. Though supported by JIEDDO, most of the cost for these efforts has been borne by Service-managed programs.



Warrior Alpha UAV on a surveillance mission.

Photo/JIEDDO.

⁴³ Pub. L. No. 110-417, § 1503(d).

⁴⁴ Berkson, HASC Statement, 2.

AREAS OF CONCERN

Despite JIEDDO's achievements, the Subcommittee has several concerns about aspects of its management and performance. Some of these concerns stem from JIEDDO's inability to clearly articulate what it has accomplished with its relatively large budget, permissive spending authorities, and broad charter. Congress has also expressed concerns about the Department's ability to oversee JIEDDO to ensure that funds are not wasted, that there is no inappropriate duplication of effort, that staffing is appropriate, and that equipment is effectively delivered to the warfighter.⁴⁵

GOVERNMENT ACCOUNTABILITY OFFICE STUDIES

To exercise additional oversight of JIEDDO, Congress mandated several GAO reviews⁴⁶ to assess:

- ◆ Financial operations, management, and accounting practices;
- ◆ Staffing and human capital operations;
- ◆ Coordination with and leveraging of existing DOD intelligence community Attack the Network efforts;
- ◆ Performance measures and metrics;
- ◆ Authority and ability to lead, coordinate, and advocate all of DOD's C-IED activities;
- ◆ Warfighter feedback on JIEDDO's efforts;
- ◆ Processes for finding and rapidly fielding C-IED solutions; and
- ◆ Deputy Secretary of Defense oversight of JIEDDO activities.

In March 2007, GAO completed a review of JIEDDO's strategic plan, initiative sustainment guidance, and training. At that time, GAO found:

JIEDDO has not developed a strategic plan to clearly articulate its mission. As a result, JIEDDO cannot assess whether it is making the right investment decisions or whether it has effectively organized itself to meet its mission. . . . While DOD established JIEDDO with a broad mission to focus DOD's counter-IED efforts, JIEDDO needs to more clearly define this mission and once clearly defined, translate its mission into actionable goals and objectives.

⁴⁵ S. Rep. No. 110-335 at 48 (2008), and S. Rep. No. 110-37 at 25 (2007).

⁴⁶ House of Representatives Conference Report 110-477, Conference Report to Accompany H.R. 1585, National Defense Authorization Act for Fiscal Year 2008 (2007), at 1003, and Senate Report 109-292, Report to Accompany H.R. 5631, Department of Defense Appropriations Bill (2006), at 239-40.

In the absence of a strategic plan, JIEDDO does not have a sound basis for determining how to invest its resources among its three lines of organizational effort. . . . Furthermore, the organization cannot determine if its workforce has the right skills and abilities to accomplish its mission, if its financial management structure adequately tracks resources to goals and objectives, or if its metrics effectively measure the organization's progress. . . . Moreover, JIEDDO has not finalized its guidance for how and when sustainment costs for all proven counter-IED initiatives will be transitioned to the services.⁴⁷

Although JIEDDO has made progress addressing these concerns, several of GAO's criticisms remain valid. As mentioned earlier, JIEDDO did publish its strategic plan in September 2007, but it is written in broad and general terms that do not provide sufficient basis for investment and manpower decisions. This shortcoming may be the result of the Deputy Secretary of Defense's instruction to produce a more compact, higher-level document. As previously mentioned, the organization is currently updating its plan and will issue the revision by the end of calendar year 2008.

In its March 2008 report, GAO expressed several continuing concerns about JIEDDO's financial and human capital operations. GAO recommended JIEDDO establish and document effective controls for financial management and develop a system or method to identify, track, and report on all government and contractor personnel on a routine basis.⁴⁸ JIEDDO concurred with nearly all the report's findings and recommendations and has taken actions to make improvements in these areas, as summarized in a June 16, 2008 memorandum.⁴⁹ These include: (1) Developing a system to properly account for all personnel, including those who are supported under JIEDDO-funded contracts managed by the Services and other DOD organizations; (2) Hiring a full-time auditor and establishing an internal review office; and (3) Implementing the Comprehensive Cost and Requirements System used by other DOD organizations to manage budgets. The memorandum also acknowledges that some of the necessary controls are still being developed.

TRANSITION AND TRANSFER OF INITIATIVES

Both the former and current Directors of JIEDDO have mentioned that there are still problems with transitioning or transferring JIEDDO's initiatives to the Services and other

⁴⁷ U.S. Government Accountability Office, *A Strategic Plan is Needed to Guide the Joint Improvised Explosive Device Defeat Organization's Efforts to Effectively Accomplish Its Mission*, GAO 07-377C (Washington, D.C.: 28 March 2007) "Highlights." Unclassified excerpts.

⁴⁸ U.S. Government Accountability Office, *Defense Management: More Transparency Needed Over the Financial and Human Capital Operations of the Joint Improvised Explosive Device Defeat Organization*, GAO-08-342 (Washington, D.C.: 6 March 2008).

⁴⁹ Dr. Robin L. Keese, Deputy Director, Joint Improvised Explosive Device Defeat Organization, "Fiscal Year 2008 Annual Statement on Internal Controls and Compliance with [Office of Management and Budget] Circular A-123," Memorandum to the Assistant Secretary of the Army, Financial Management and Comptroller (16 June 2008).

DOD organizations.⁵⁰ One obstacle to a smooth hand-over is the difference in budget cycles. As discussed earlier, JIEDDO's funding comes almost entirely through supplemental appropriations, which are not made on a regular budget cycle. The receiving organizations must plan for sustained funding of the initiatives in their supplemental budget requests or in their two-year-cycle base budget requests. The differences in the timing of these appropriations can lead to delays in sustained funding of critical C-IED initiatives.

Additionally, JIEDDO's role in the oversight of initiatives after it hands them over to the Services and other DOD organizations is not clear. For instance, if the receiving organization does not adequately plan for sustained funding of the initiative or decides to reduce or eliminate funding based on competing priorities, then the initiatives could wither or die. In some cases changes in the current wars may dictate that an initiative should be terminated. However, oversight is needed to ensure that initiatives still critical to the IED fight are not inappropriately diminished or eliminated. To address these concerns, in Fiscal Year 2008 JIEDDO created an Acquisition Oversight Division to "ensure effective transition and transfer of proven initiatives to the Services for sustainment and further integration."⁵¹

COORDINATION OF ALL DOD C-IED ACTIVITIES

DOD Directive 2000.19E requires JIEDDO's Director to integrate all Department C-IED activities.⁵² The Directive defines Joint IED Defeat as:

The collection of all DOD-wide efforts to reduce or eliminate the effects of all forms of IEDs used against U.S. and Coalition Forces, including policy, resourcing, materiel, technology, training, operations, information, intelligence, assessment, and research.

JIEDDO has not yet demonstrated this capability. In its quarterly reports to Congress, it is not clear that JIEDDO's knowledge of these activities is complete or used effectively.⁵³ The reports contain what are essentially responses from several DOD organizations to JIEDDO requests for information on their C-IED activities. There is no indication that JIEDDO processes (e.g., synthesizes or keeps a database sorted along its lines of operation) or makes use of this information. JIEDDO appears to be collecting the information simply to meet a congressional requirement rather than to fulfill its mission to lead, coordinate, and advocate.

Similarly, Congress expressed concern in the National Defense Authorization Act for Fiscal Year 2009 that JIEDDO has neglected its responsibility to lead, advocate, and coordinate the Department's Science and Technology (S&T) investment in countering IEDs.⁵⁴

⁵⁰ Meigs, Meeting with Subcommittee Chairman Snyder, and Metz, HASC Statement.

⁵¹ JIEDDO, *Annual Report, Fiscal Year 2007*, 19.

⁵² DOD Directive 2000.19E, para 6.2.3.

⁵³ Pub. L. No. 109-364, § 1402.

⁵⁴ Joint Explanatory Statement to Accompany S. 3001, Duncan Hunter National Defense Authorization Act for Fiscal Year 2009 (2008), at 737.

In response, Congress required the Director of JIEDDO to work with the Director of Defense Research and Engineering to develop a comprehensive S&T investment strategy for countering IEDs.⁵⁵

Finally, GAO had found in its 2007 study that:

JIEDDO faces challenges with its ability to coordinate counter-IED efforts across DOD as required by DOD Directive 2000.19E. Several of JIEDDO's coordination challenges stem from its process to select counter-IED initiatives, while other challenges stem from its efforts to support the services' counter IED training efforts. For example, in selecting counter-IED initiatives, JIEDDO has not clearly defined what constitutes a counter-IED solution that it should fund. The absence of a clear definition has led to confusion concerning the criteria JIEDDO uses to identify potential initiatives to fund, hampers its ability to coordinate efforts across DOD and contributes to potential duplication of efforts. For example, JIEDDO has funded some armor solutions while rejecting others. In addition, some counter-IED initiatives bypass JIEDDO's process, either partially or fully, because, in part, the services retain the authority [from DOD] to develop and procure their own solutions independent of JIEDDO. Further, JIEDDO does not have full visibility over all the services' counter-IED efforts, which could potentially result in duplication of efforts.⁵⁶

GAO believes that despite efforts to address these challenges, many still remain and that a new strategic plan, if properly written with clear goals and objectives, could help to resolve some of these challenges.⁵⁷

DOD OVERSIGHT OF JIEDDO

According to DOD Directive 2000.19E, JIEDDO operates under the authority, direction, and control of the Deputy Secretary of Defense (DEPSECDEF). According to the Director of DOD's Office of Program Analysis and Evaluation, the DEPSECDEF's oversight of JIEDDO consists of monthly evaluations of the organization, during which time the DEPSECDEF reviews the organization's priorities, performance metrics, programs and proposals, budget, and budget execution.⁵⁸ Additional checks and balances within the Department that influence JIEDDO's actions are provided by Inspectors General, auditors, contract audit agencies, and fiscal and programmatic oversight provided by the Services.⁵⁹ The Director of PA&E pointed out that it is the Services that execute most, if not all, of the funds that JIEDDO commits. The Director of PA&E told the Subcommittee that each of the

⁵⁵ Pub. L. No. 110-417, § 1504.

⁵⁶ GAO 07-377C. "Highlights."

⁵⁷ U.S. Government Accountability Office staff discussion with HASC O&I Subcommittee staff (23 October 2008).

⁵⁸ Berkson, HASC statement.

⁵⁹ *Ibid.*

Service acquisition agencies had sufficient statutory and regulatory authorities to certify the effectiveness of those programs.

Further complicating oversight of JIEDDO's activities, a number of other DOD boards and organizations claim oversight over certain JIEDDO functions, including the Office of the Under Secretary of Defense for Intelligence, the Senior Resource Steering Group, and the JIEDDO Integrated Process Team. Additionally, the Department of the Army, as DOD's Executive Agent for JIEDDO, is responsible for providing administrative support, such as personnel, financial management, and logistics services. The Army is also responsible for ensuring the adequacy of these services.⁶⁰

In this complex oversight environment, questions remain as to whether a relatively large organization that is managing a considerable budget, which is appropriated without going through the normal authorization process, can receive sufficient primary oversight directly from the Deputy Secretary of Defense. Although the roles of Department officials working to ensure the success of JIEDDO are at least partially defined in directives and other publications, in practice, the lines of authority, responsibility, and accountability are somewhat unclear. The result is that the C-IED efforts of JIEDDO, the Services, and the COCOMs are sometimes uncoordinated.



Members of a Navy and Marine Explosive Ordnance Disposal (EOD) take cover behind their Humvee as they destroy an improvised explosive device near Forward Operating Base Hit, Iraq, on January 2, 2006.

USMC Photo/Gunnery Sergeant Keith A. Milks.

⁶⁰ DOD Directive 2000.19E, E3.

ARE WE WINNING THE BATTLE AGAINST IEDS IN IRAQ AND AFGHANISTAN?

I am often asked if the IED threat can be removed from the battlefield, and my answer is, “No.” In its most fundamental form, the IED is a lethal ambush, and men have been ambushing their enemies for thousands of years.

Lieutenant General Thomas Metz, USA
Director, JIEDDO¹

ANALYZING JIEDDO’S EFFORTS

Because of the deadly impact of IEDs and the enormous sums of money the government has spent trying to counter them, it is extremely important to evaluate the success of JIEDDO. The Department defines success in their C-IED effort broadly, as when IEDs are no longer a weapon of “strategic influence.” Recognizing that there is no possibility of eliminating IEDs from the battlefield entirely, General Metz believes that the “systemic use of the IED as a strategic weapon can be defeated by making it so risky to those in the network, to their life, limb, or capture, and to keep the cost of the network constantly going up—that [the enemy] will move onto something else.”²

There is little doubt that despite the complexity and difficulty of its mission, JIEDDO and its predecessor organizations have made contributions to the C-IED effort: enhanced C-IED training for U.S. forces; the fielding of radio frequency jammers and other technological countermeasures; and the establishment of the COIC, sponsorship of the Law Enforcement Program; and other Attack the Network initiatives. Anecdotal feedback about JIEDDO from the COCOMs, the Services, and veterans of Operations IRAQI FREEDOM and ENDURING FREEDOM is generally favorable. Much of the positive feedback focuses on funds being made available and JIEDDO’s ability to field countermeasures rapidly. Others point to the benefit of having a high-level organization within the Department that is focused solely on today’s most lethal threat to deployed forces. Others state that JIEDDO’s COIC provides valuable support to tactical operations—both to transit the battlespace safely and to kill or capture bombers and their supporters.

Measuring JIEDDO’s success beyond anecdotes, though, remains difficult. JIEDDO’s efforts contribute to, but are not the sole reason for, protecting forces from IEDs. JIEDDO

¹ Metz, HASC Statement.

² *Ibid.*

officials and the Office of the Secretary of Defense (OSD) often quote the metric of how many IEDs it takes to inflict a U.S. military casualty, pointing out that the number has been rising steadily in Iraq. In other words, they argue that the enemy has to work harder to injure or kill U.S. personnel. However, this ratio is influenced by factors that are not necessarily the result of JIEDDO's efforts, such as increases in Iraqi tips about IEDs and networks, and, as previously mentioned, more effective ISR operations and vehicle and personal armor. More importantly, if the enemy is able to emplace a greater number of IEDs to inflict the same or even higher casualties, then this ratio of IEDs per casualty is arguably not a good indicator of success against the IED as a weapon of strategic influence.

The organization recently developed additional metrics to monitor the use and effectiveness of IEDs. JIEDDO uses these metrics to assess the severity of the IED fight against the success of its C-IED efforts. These metrics include:

- ◆ Number of IED incidents;
- ◆ Ratio of found and cleared IEDs to IEDs detonated;
- ◆ Number of U.S. military vehicles destroyed by IEDs;
- ◆ The local population's support to IED networks and for the use of IEDs against Coalition Forces; and
- ◆ Number of times an IED network is disrupted (e.g., bomb cache found, bomb maker or emplacer killed or captured, interdiction of bomb making materials).

Taken as a whole, this set of metrics should provide a clear picture of the status of the C-IED fight and JIEDDO's impact on it. However, JIEDDO has not yet provided a complete set of data for these new measures of effectiveness. JIEDDO has recently begun to normalize its IED statistics by relating the number of casualties and IED incidents to the number of Coalition Forces in theater.³ This effort should help provide perspective to the IED fight by allowing comparison of the risks Coalition Forces are exposed to in Iraq and Afghanistan.



Master at Arms 2nd Class Phillip Darity, a U.S. Navy dog handler, issues commands to his military working dog, Argo, while conducting a simulated training drill.

USN Photo/Photographer's Mate 1st Class Arlo K. Abrahamson.

³ Lieutenant General Thomas F. Metz, USA, Director, Joint Improvised Explosive Device (IED) Defeat Organization. Response to Question for the Record from hearing before the U.S. House, Armed Services Committee, Subcommittee on Oversight and Investigations hearing on "Defeating the IED Threat: Today's Efforts and Tomorrow's Requirements" (Washington, D.C.: 16 September 2008), CHARRTS No.: HASCOI-07-004 (received 30 October 2008).

The trends in the IED fight in Iraq and Afghanistan are dramatically different. As the Department’s IED activity chart below indicates, the total number of IEDs either exploded or found and disarmed has recently dropped significantly in Iraq. On the chart, the term “IED attack” designates an attack in which the IED detonates. A detonated IED is “ineffective” if there are no resulting casualties. Thus, there are signs of success against the use of IEDs in Iraq. Overall, all forms of violence in Iraq have decreased, and civilian deaths are down. As discussed above, IED trends cannot be attributed solely to JIEDDO efforts. They could also be attributed to decreases in violence in general, brought about by changes such as an updated counterinsurgency strategy, the Anbar Awakening, the increasing effectiveness of the Iraqi Security Forces, and Muqtada al-Sadr’s “ceasefire.”⁴

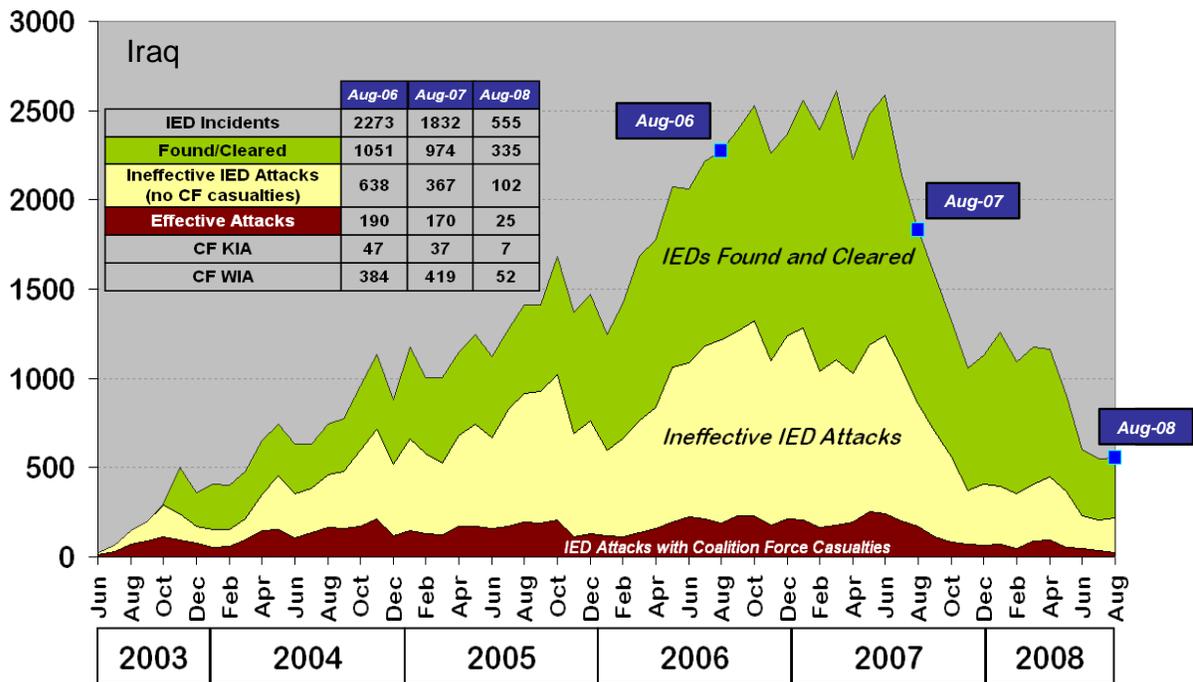


Figure 2. IED incidents in Iraq.

On the other hand, as shown in Figure 3, we are falling behind in the C-IED battle in Afghanistan. IED attacks in Afghanistan are increasing in frequency and lethality;⁵ however, at this time the number of attacks is still substantially lower than attacks in Iraq at their peak.

⁴ U.S. Department of Defense, *Measuring Stability and Security in Iraq: Department of Defense Report to Congress in Accordance with the Department of Defense Appropriations Act 2008 (Sec. 9010 PL 109-289; Sec. 9204, PL 110-252)* (September 2008), 21-31.

⁵ See, Anna Mulrine, “Taliban’s New Super-Bombs Threaten U.S. Troops, Even in Pricey MRAPs,” *U.S. News and World Report* (3 November 2008). Accessed online at: <http://www.usnews.com/articles/news/iraq/2008/10/31/talibans-new-super-bombs-threaten-us-troops-even-in-pricey-mraps.html> (3 November 2008).

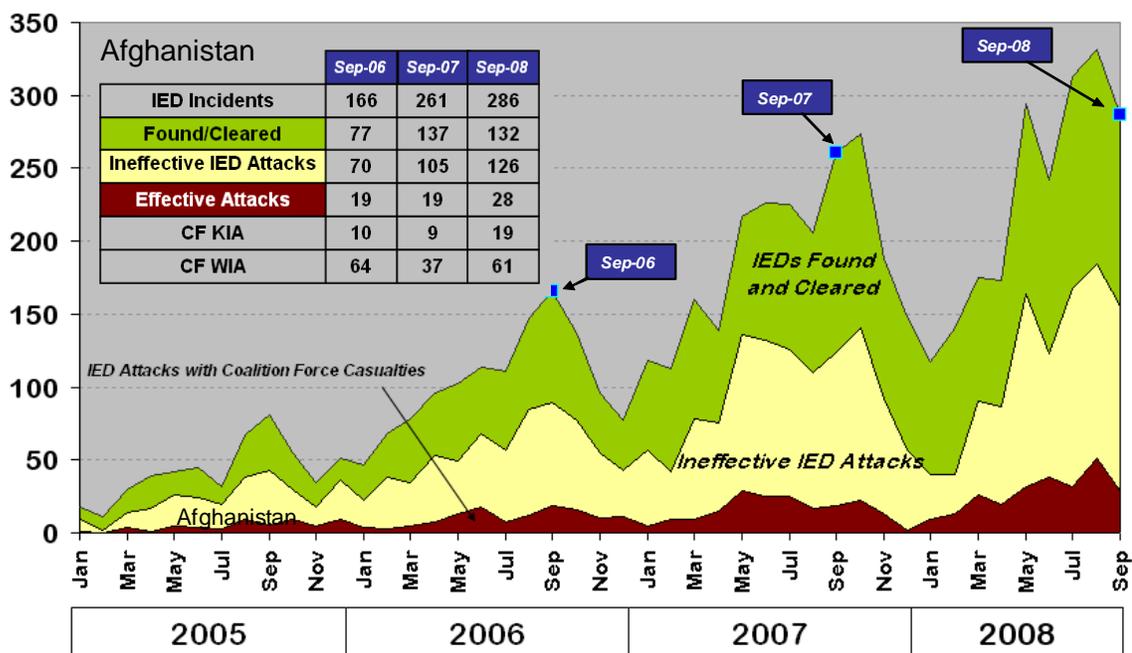


Figure 3. IED incidents in Afghanistan.⁶

In addition, the COIC uses other statistics to measure its effectiveness. For example, it points to the increase in Requests for Support from the field, the number of COIC products used in support of major operations, and the number of “hits” or visits to the JIEDDO web-based portal seeking IED data and analytical tools.⁷ COIC officials also claim to have supported hundreds of missions that have resulted in the killing or capturing of a significant number of high value individuals. While these statistics may be related to the C-IED fight, they are only ultimately meaningful as a measure of JIEDDO’s success in the C-IED fight if they can be directly related to an actual decrease in effective IED attacks.

In general, it is difficult to relate any of JIEDDO’s specific initiatives to the measures it uses to demonstrate success. Without a clear relationship between a program or initiative and the measure used to judge its success, it is impossible to demonstrate which of the specific initiatives and programs supported by JIEDDO are effective and to what degree. Programs cannot be sorted and realigned consistent with their relative value, nor can resources be allocated to the highest priorities. Recently, though, JIEDDO has begun to track changes in enemy TTPs, such as the type of IED, type of triggering mechanism, and general location of incidents.⁸ By mapping these trends against the introduction of initiatives in theater, JIEDDO hopes it will have insight into the effectiveness of those initiatives.

⁶ Charts provided by JIEDDO (October 2008).

⁷ Staff discussions with JIEDDO personnel during a visit to the COIC revealed that most of these “hits” were generated by JIEDDO personnel trying to get information to help them create products to respond to Requests for Support.

⁸ Metz, Response to QFR 4.

THE FUTURE OF JIEDDO

As DOD continues to strengthen its response to evolving asymmetric threats, JIEDDO is uniquely postured to accept a wider strategic planning role.

Lieutenant General Thomas Metz, USA
Director, JIEDDO¹

INSTITUTIONALIZATION OF JIEDDO

As the C-IED fight continues, senior DOD officials are discussing JIEDDO's future and whether it should be an enduring entity in its current organizational form. According to an August 2007 memorandum, one of the Deputy Secretary of Defense's top 25 DOD transformation priorities was to "aggressively support JIEDDO and its institutionalization."² After that decision was made, the DEPSECDEF looked to his Deputy's Advisory Working Group (DAWG), a group made up of the vice chiefs of the Services, to consider options for how to implement that direction. On May 2, 2008, the DAWG recommended to the DEPSECDEF that JIEDDO should be kept intact as an entity in the Office of the Secretary of Defense with a reporting chain directly to the DEPSECDEF, as it has been. The DAWG also advised that some of JIEDDO's budget should migrate to the base budget. The Department will publish the details of the decision to institutionalize JIEDDO in a Program Decision Memorandum in the fall of 2008.³ Two studies were intended to inform the DAWG's decision: (1) A Senior Warfighters Forum considered the combatant commands' requirements, or the "demand side"; and (2) A DOD Policy Analysis and Evaluation Group considered the capabilities, or the "supply side," of the future C-IED fight.

THE COMBATANT COMMAND SENIOR WARFIGHTER FORUM

At the request of the Vice Chairman of the Joint Chiefs of Staff, JFCOM led a Senior Warfighter Forum (SWarF) of the COCOM Deputy Commanders on the "functions and prioritized capability attributes that would guide *operationalization* [emphasis added] of the Joint IED Defeat Organization to an enduring counter-IED capability."⁴ Although the decision to

¹ Metz, HASC Statement, 4.

² "DoD Transformation Priorities," Deputy Secretary of Defense Memorandum (9 August 2007).

³ The Honorable Gordon England, Deputy Secretary of Defense, letter to Chairman Vic Snyder and Ranking Member W. Todd Akin (19 August 2008).

⁴ "Senior Warfighter Forum (SWarF) on Operationalizing Counter-Improvised Explosive Device (IED)

institutionalize JIEDDO has already been made, the COCOM perspectives are particularly relevant because they are JIEDDO's primary customers.

During the SWarF, Special Operations Command (SOCOM) commented about the institutionalization of JIEDDO's capabilities. SOCOM acknowledged that "JIEDDO initially provided an agile 'Manhattan Project' approach to address asymmetric threats," but it suggested that pieces of JIEDDO may be more appropriately placed elsewhere in DOD:

The JIEDDO model appears to be a good fit for rapidly addressing a specific problem across the Joint Force, but the recent shift in [the] focus of JIEDDO indicates that it may have outlived its intended purpose. JIEDDO has also offered agile funding, which is critical in time of war. Additionally, the JIEDDO model as an organization has merit. In a dynamic world we need the ability to rapidly establish Task Forces or organizations for a purpose, and then absorb them as they serve their need. Based on this, consideration should be given to transitioning C-IED capability management to the appropriate Capability Portfolio Managers who can integrate, coordinate, and synchronize the C-IED efforts by providing the strategic advice necessary to maintain Department focus.⁵

In addition, the SWarF participants analyzed the C-IED capabilities that each COCOM required, and they prioritized these. There was broad consensus that the top three capabilities were Intelligence, Operations, and Training. Other COCOM C-IED priorities were Acquisition, Support to Partner Nations, Analysis, and Strategic Planning.

The SWarF participants commented on intelligence and operations information fusion, the top two C-IED requirements. The participants agreed that an integrated and networked exchange of information, such as that provided by the COIC, is extremely important. Specific comments on the COIC and JIEDDO intelligence support varied, though. Some COCOMs noted that the COIC could be a model for countering and defeating other potentially disruptive threats, such as cyber attacks. JFCOM concluded, "The Operations and Intelligence fusion model of [the] COIC offers promising support to combatant commands against disruptive threats like IEDs." On the other hand, SOCOM criticized JIEDDO and its COIC, stating, "Over time, JIEDDO has evolved into areas that are redundant to existing organizations and their roles and missions. This is clearly evidenced by the establishment of the JIEDDO COIC, which is conducting Counter Terrorist Network (CTN) functions germane to SOCOM."

Similarly, Southern Command (SOUTHCOM), "Questioned the need to stand-up another organization to address this specific threat. Would like to limit the number of organization[s] to go to for support—suggest migration of some JIEDDO functions to

Capabilities," Memorandum CM-0201-08 from Vice Chairman, Joint Chiefs of Staff (19 March 2008). JFCOM uses the terms "operationalization" and "institutionalization" interchangeably.

⁵ "Joint Counter Improvised Explosive Device (JCIED) Capability Attribute Identification and Prioritization Senior Warfighter Forum (SWarF)," Memorandum from LTG John R. Wood, USA, Deputy Commander, JFCOM (12 May 2008).

JFCOM. SOUTHCOM would also like to see the Joint Intelligence Lab (JIL)⁶ grow.” We note here that the authors of a Joint Forces Staff College paper on JIEDDO published in 2007 also proposed moving not just intelligence support but all of JIEDDO’s capabilities under JFCOM.⁷ They argued that JIEDDO could be streamlined by using the COCOMs’ authority to leverage existing DOD acquisition and intelligence support and to develop and provide joint C-IED training. This, they felt, would provide JIEDDO “the freedom to develop innovative solutions while relying on JFCOM to execute the intelligence, planning, and training functions, which are firmly established in its structure.”⁸ In a briefing to the Subcommittee staff, JFCOM’s Director of Operations (J3) generally opposed any changes to JIEDDO, including the proposals to move some or all of JIEDDO’s functions under JFCOM.⁹ The Director of Joint Training (J7) at JFCOM’s Joint Warfighting Center in written testimony to the Subcommittee stated that he would not advise restructuring JIEDDO because of the inherent risks of change to the C-IED support to forces in the field.¹⁰ However, he clarified in answering questions during a hearing that he is not against changes to JIEDDO or its mission as long as the risks are considered.¹¹ The Subcommittee has asked for the commander’s position on moving some or all of JIEDDO’s capabilities under JFCOM.

POLICY ANALYSIS AND EVALUATION STUDY GROUP

To help advise the DAWG, in 2008 a DOD Policy Analysis and Evaluation Study Group assessed the institutionalization of JIEDDO’s unique capabilities to address future disruptive threats. The results will inform the Fiscal Year 2010-2015 Program Objective Memorandum (POM). This Study Group focused on the Department’s long-term needs to address future disruptive threats—which include asymmetric threats beyond the IED—and reviewed JIEDDO’s effectiveness in countering IEDs in relation to existing metrics and performance measures (previously noted as lacking). Study Group members included representatives from JIEDDO, the Joint Staff, the COCOMs, the Services, the Defense Intelligence Agency, the Joint Rapid Acquisition Cell (JRAC), and the Under Secretaries of Defense for Intelligence; Comptroller; Acquisition, Technology, and Logistics; and Policy.¹²

The Study Group considered a number of options. One option was to keep JIEDDO intact as either a separate defense agency, an entity subordinate to a COCOM, or a permanent OSD organization under the DEPSECDEF. A second option was to “spin off” JIEDDO functions, including the COIC, the JCOE, and the rapid acquisition capability to other DOD

⁶ According to JFCOM, the JIL “focuses on improving intelligence capabilities and supporting the integration of intelligence, operations, and plans. The JIL provides tailored intelligence expertise, products, and tools to advance joint intelligence concept development and experimentation.” Accessed online at: http://www.jfcom.mil/about/fact_jil.html (6 November 2008).

⁷ LTC Richard F. Ellis, USA; Maj. Richard D. Rogers, USAF; and LCDR Bryan M. Cochran, USN, “Joint Improvised Explosive Device Defeat Organization (JIEDDO): Tactical Successes Mired in Organizational Chaos; Roadblock in the Counter-IED Fight” (Joint Forces Staff College: 13 March 2007).

⁸ *Ibid.*, 14.

⁹ Staffdel Fenner to JFCOM and USAF 480th IW (Norfolk, VA: 4 September 2008).

¹⁰ Kamiya, HASC statement, 5-6.

¹¹ Kamiya, HASC statement.

¹² Joint Improvised Explosive Device Defeat Organization, briefing to HASC O&I staff (20 February 2008).

entities. A last option was various combinations of the first two. For instance, one alternative could be to keep JIEDDO intact but move the training function, particularly the JCOE, under the U.S. Army Training and Doctrine Command or under JFCOM. The Study Group's findings were briefed to the DAWG in April 2008. Whatever action is taken, it must be clear whether the debate is about JIEDDO-like capabilities and attributes or if it is about JIEDDO as an organization.

IEDS BEYOND IRAQ AND AFGHANISTAN

Experts acknowledge that the use of IEDs worldwide will persist and may increase, in large part due to the successful use of these weapons in Iraq and Afghanistan. As it stands, there are 200 to 300 improvised explosive attacks each month *outside* Iraq and Afghanistan.¹³ While the forefront of the IED battle is now in Iraq and Afghanistan, other regions may one day be at the center of the fight. In testimony before the Subcommittee, the Director of PA&E noted that IEDs will remain a force protection issue for the foreseeable future. He stated, "So long as we have troops in contact and at risk, in harm's way, you need to continue that [counter-IED] effort, for, if nothing else, the force-protection aspect of it."¹⁴



A thunderous blast signals the destruction of an IED made of two 122mm artillery rounds hidden in a burlap bag and placed on the shoulder of a busy highway in southern Iraq.

USA Photo/Master Sergeant Lek Mateo.

Because IED attacks occur worldwide, JIEDDO's mission requires that it support all COCOMs in defeating IEDs. However, its support outside of U.S. Central Command is limited by funding. Supplemental funding is for war-related costs, and the Department uses these appropriations to support Operations IRAQI FREEDOM and ENDURING FREEDOM. Only a small fraction of JIEDDO's funding has been appropriated in the base budget, and JIEDDO has used some of this funding to support Southern Command.

The Pentagon will have to defend and Congress will have to appropriate more money in the base Defense budget to support the enduring C-IED mission across other COCOMs and the Services.

¹³ Tom Vanden Brook, "IEDs Go Beyond Iraq and Afghanistan," *USA Today* (3 April 2008), 1.

¹⁴ Berkson, HASC statement.

BEYOND IEDS: FUTURE ASYMMETRIC THREATS

There is no such thing as a pure IED network.

COIC Official¹⁵

It is important to note that IEDs are a weapon; they are not the enemy. Terrorist, insurgent, criminal, narcotic and other adversarial networks could use IEDs for various reasons. Many U.S. government organizations analyze and track these networks. Networks, other non-state actors, and state actors also use other asymmetric weapons and tactics. The IED is just one example of an asymmetric threat that can be used by individuals and organizations, or even organized forces, in both irregular and conventional warfare. Those DOD organizations responsible for planning for future wars and stability operations are considering many types of future adversaries and asymmetric threats that might challenge the United States and its allies.

JIEDDO has received much praise because it is specifically focused against the IED threat. Now, however, despite the clear IED focus in JIEDDO's mission statement and charter, there are signs that it is expanding its scope to address other asymmetric threats. In fact, the COIC states that its mission is to "Collaborate with the warfighter to innovatively harness and mass information, analysis, and technology to ruthlessly attack IED networks or *other focused asymmetric threats*" [emphasis added].¹⁶

The Office of the Secretary of Defense is also apparently considering the application of JIEDDO's capabilities to other asymmetric threats. As previously discussed, the study groups (SWarF and PA&E) that evaluated the institutionalization of JIEDDO's capabilities examined them with regard to the Department's ability to respond to many kinds of future "disruptive" threats. If JIEDDO capabilities are useful for application to these and other threats, then they should certainly be considered for this purpose. However, this raises several issues.

If one of JIEDDO's keys to success is its focus on a particular threat, will expansion of its mission dilute this effort? The JIEDDO Director admitted that it might. In his Subcommittee testimony, he attributed the success of JIEDDO to its "laser focus on IEDs." He cautioned, "[O]pening up the aperture too wide, too quickly [to include other asymmetric threats] would lose that laser-like focus for JIEDDO."¹⁷

If JIEDDO is a good model for an organization that can respond to a particular threat, but should not be distracted from its focus on IEDs, should OSD consider separate organizations for each new credible asymmetric or disruptive threat? Who would define what

¹⁵ Staffdel Kuiken to COIC (3 July 2008).

¹⁶ Frank Larkin, "Attack the Network Operations: Counter-IED Operations Integration Center (COIC)."

¹⁷ Metz, HASC Statement.

the plausible asymmetric or disruptive threats will be? And, how will each receive adequate funding under likely budget constraints?

If, on the other hand, JIEDDO's mission expands to include countering other asymmetric threats, then the broadening of the mission has to be considered in light of other similar DOD efforts. Significant efforts to prepare for and counter asymmetric threats are already taking place within other organizations to include, at a minimum, the Army Asymmetric Warfare Office, the Marines Corps Center for Irregular Warfare, and the Air Force Center of Excellence for Irregular Warfare, as well as similar functions within the Central, Southern, Joint Forces, and Special Operations Commands. An expansion of JIEDDO's mission raises the probability of waste and inappropriate redundancies if other entities are focused on the same challenges.

Similarly, JIEDDO's Attack the Network capabilities, especially those resident in the COIC, are only one part of a larger effort to uncover, disrupt, and attack hostile human networks worldwide. As previously discussed, the recent GISC study of all of DOD's "Human Network Attack" efforts found that there are 185 current initiatives underway. Whether the COIC expands its interest beyond IEDs or stays focused on this one threat, some coordination of its mission with those of other network attack activities is necessary to avoid inefficient use of resources and to properly prioritize them. The GISC study offered recommendations that include appointing a "champion" for disparate Attack the Network activities and initiatives. Others include improving collaboration and information sharing; developing a common lexicon, measures of effectiveness, and data standards; and defining capability gaps. The Vice Chairman of the Joint Chiefs of Staff, who requested the study, is currently evaluating these recommendations.¹⁸



Marines burn brush along a canal to eliminate potential spots for insurgents to hide improvised explosive devices and ordnance in Saqlawiyah, Iraq, on November 16, 2007.

DOD Photo/Lance Corporal Joseph A. Lambach, USMC.

¹⁸ Williams, Director, U.S. Strategic Command Global Innovation and Strategy Center, briefing to HASC O&I Subcommittee (9 September 2008).

FINDINGS AND RECOMMENDATIONS

1. JIEDDO and the COCOMs and Services it supports emphasize the importance of flexible appropriations, including “colorless” money with three year authority, to develop countermeasures to constantly changing IEDs and methods of attack rapidly. However, concerns remain within Congress and GAO that JIEDDO’s financial management processes, although improving, do not provide adequate assurances that its financial information is accurate. As a result, JIEDDO is unable to provide full transparency over the cost and value of its operations to the Department or to Congress.

Recommendation: The Department should ask for the flexible budget authorities it thinks it needs as it transitions JIEDDO funding requests to the base budget. Congress should carefully evaluate these requests against the urgency of the need and the adequacy of JIEDDO’s financial management and controls. In addition, the Department should follow GAO’s recommendations to improve JIEDDO’s financial management.

2. In order to develop technological countermeasures to the evolving IED threat rapidly, the Department needs to take risks and allow for failed initiatives. However, tolerance for risk and failure should be commensurate with urgency, i.e., when taking casualties, higher risk can be tolerated.

Recommendation: The Department should maintain its ability to take higher risks while rapidly developing effective IED countermeasures and should tolerate some number of failed initiatives when warranted by the strategic impact IEDs are having.

3. JIEDDO has made contributions in its four mission areas: support to rapid acquisition, operations and intelligence fusion (support to human network attack), training support, and strategic planning. Other DOD organizations have also made contributions to the C-IED fight. Although JIEDDO’s mission is to “lead, advocate, and coordinate” all DOD activities to defeat IEDs as weapons of strategic influence, JIEDDO does not appear to be cognizant of all other DOD C-IED activities, particularly Attack the Network efforts. Much less is JIEDDO leading, advocating for, or coordinating these efforts.

Recommendation: The Department should de-conflict and rebalance its C-IED efforts in order to eliminate unnecessary or wasteful redundancy. Duplicative efforts should be consciously and explicitly addressed. The Department should support whichever activities are most effective and cost efficient. The priority, of course, is to save lives.

4. To date, most of JIEDDO’s almost \$14 billion budget has been contained in supplemental appropriations. Consequently, Congress has not exercised as much oversight of the management and execution of these funds, particularly in the areas of

JIEDDO's exponential personnel growth, as if these had come through the formal authorization process. Additionally, the lack of permanence of this organization funded through supplemental appropriations has adversely affected personnel hiring and management.

Recommendation: The Department should continue to move a greater share of JIEDDO's budget into the base in order to:

- ♦ *Enable DOD and Congress to thoroughly evaluate JIEDDO relative to all other important defense requirements, and*
- ♦ *Sustain critical capabilities for the enduring mission, stabilize personnel management, and improve transparency and oversight.*

5. DOD oversight of JIEDDO may be too complex and/or may not be adequate. Although the Director of JIEDDO reports directly to the Deputy Secretary of Defense (DEPSECDEF), a number of other DOD boards and organizations claim oversight over JIEDDO as well, including the Office of the Under Secretary of Defense for Intelligence, the Senior Resource Steering Group, the JIEDDO Integrated Process Team, the Secretary of the Army, and others.

Recommendation: The Department should re-examine the sufficiency of JIEDDO oversight and the effectiveness of sharing oversight responsibilities between DEPSECDEF and multiple boards and organizations. It should also reevaluate whether the DEPSECDEF's "span of control" allows for effective direct oversight of JIEDDO's considerable resources and extensive capabilities.

6. JIEDDO's performance measures do not clearly address its progress in its mission to defeat the IED as a weapon of strategic influence. Without well-defined performance measures, JIEDDO cannot adequately determine the effectiveness of its efforts. The Nation does not yet know if JIEDDO is winning the C-IED fight.

Recommendation: The Department should better define what JIEDDO success means and apply more appropriate metrics. This will support better internal and external oversight as well as resource allocation and prioritization.

7. The Services and other DOD organizations face challenges when JIEDDO transfers or transitions initiatives because of incompatible budget authorities and cycles, as well as inadequate planning and preparation for the hand-off. COCOMs believe that acquisition should be integrated with and informed by them in order to plan for required logistics support and/or support services.

Recommendation: The Department should resolve any disconnect between JIEDDO's charter to transition initiatives and the Services' and other organizations' respective abilities to sustain these initiatives and build them into programs of record. The Department should also establish a process by which the COCOMs can participate in the JIEDDO and Service C-IED acquisition processes.

8. As JIEDDO starts to address other asymmetric threats, the broadening of its mission beyond the sole focus of IEDs may dilute the IED effort and the reasons for its existence and successes. In addition, expansion beyond an IED focus may also create more inappropriate redundancies within DOD.

Recommendations: As the Department moves forward with expanding JIEDDO's mission focus, it should consciously balance the benefit of the current "laser-like" focus on IEDs and the broader application of capabilities it may be duplicating with other agencies. Redundancies should be explicitly addressed.

To ensure transparency and continued support, the Department should consult Congress as it considers expanding JIEDDO's mission.

As the Department assesses its own studies on attacking human networks, training support, and rapid acquisition, it should consider how these broader examinations affect or are impacted by JIEDDO's activities.

The Department should continue to evaluate JIEDDO's mission and the size of its budget. If numbers of casualties, and thereby the strategic impact of IEDs increases or diminishes, the size of JIEDDO (or its capabilities) should be appropriately scaled.

9. Joint Forces Command is concerned that the Training COIC (TCOIC), funded by JIEDDO and run by U.S. Army Training and Doctrine Command, is focused too narrowly on Army training needs and may not satisfy requirements of the other Services. The TCOIC is an expensive asset. If it does not provide support to all of the Services, the Services would be forced to develop alternatives at unnecessary cost to the taxpayer.

Recommendation: The Department should ensure that the TCOIC provides sufficient support to all of the Services.

ISSUES FOR FURTHER STUDY

This report is intended to be an initial examination of JIEDDO and the decision to institutionalize it. During the course of this preliminary look at JIEDDO, we found that the organization has made some notable contributions, but we also found that it faces continuing challenges. Accordingly, we have made several recommendations for the organization's future and DOD's enduring C-IED capabilities. However, the Subcommittee did not have adequate time or access (e.g., travel to theater and some documents) to examine several important issues in sufficient depth. The following should be considered in any future examination of JIEDDO, specifically, and the Department's C-IED effort generally:

1. Monitoring GAO's ongoing study of and recommendations for JIEDDO as well as DOD's implementation of these recommendations.
2. Evaluating sufficiency of current interagency support for DOD's C-IED efforts as well as JIEDDO's support to other agencies, including support to the Department of Homeland Security's C-IED efforts.
3. Evaluating the President's Fiscal Year 2010 DOD budget submission for the JIEDDF.
4. Reassessing JIEDDO's request for its appropriations to have transfer authority ("colorless") and three-year availability based on the maturity of the organization and the urgency of the C-IED need.
5. Monitoring JIEDDO's efforts to transition its workforce from contractors to federal government employees.
6. Assessing JIEDDO's efforts to utilize the nation's best scientific minds in the C-IED fight.
7. Continuing to assess plans to keep JIEDDO intact and reporting to the DEPSECDEF versus migrating its capabilities, in whole or in part, to other DOD organizations, COCOMs, or the Services. This effort should include travel to theater to directly observe JIEDDO support to deployed forces.

CONCLUSION

The Improvised Explosive Device (IED) is the number one threat to Coalition Forces in Iraq and Afghanistan. In response to this relatively cheap and somewhat unsophisticated killer, the Department of Defense (DOD) quickly turned an *ad hoc* Army Task Force into today's multibillion dollar Joint IED Defeat Organization (JIEDDO). Although JIEDDO has had some success in its mission to defeat IEDs as weapons of strategic influence, the IED remains the enemy's weapon of choice. Because of the resources invested in JIEDDO and the urgency of its charge, the House Armed Services Subcommittee on Oversight and Investigations conducted this study to assess the organization as it stands today and consider its role in the future fight against IEDs and other asymmetric weapons. The Subcommittee focused on two primary questions: (1) Is JIEDDO helping to win the Counter-IED (C-IED) fight in Iraq and Afghanistan? and (2) What is the Department's long-term plan for JIEDDO and for addressing other asymmetric threats?

Although JIEDDO spends more than \$4 billion annually under its three lines of operation, and it reports significant progress in the C-IED fight, this study concludes that it is not clear how well the organization is accomplishing its mission. The study finds that JIEDDO: does not actively lead all DOD C-IED efforts, as it is supposed to; needs improvement in identifying metrics and measurements; and would benefit from additional oversight of its large budget and flexible appropriations. Moreover, although the Deputy Secretary of Defense decided to institutionalize the organization, questions concerning JIEDDO's future remain. The Services and the combatant commands acknowledge that the capabilities that JIEDDO brings to the C-IED fight are valuable, but it is not clear whether or how JIEDDO as an organization will evolve as future disruptive threats emerge.

Finally, this report identifies several areas for future study. The Subcommittee suggests monitoring the Government Accountability Office's ongoing actions, evaluating the sufficiency of interagency support for the Department's C-IED efforts, assessing future policy and budget decisions relating to JIEDDO, and reviewing the size and make-up of JIEDDO's workforce.

The bottom line is Congress and the Department need to get this right in order to save the lives of the nation's sons and daughters whom we ask to go into harm's way.

APPENDIX A: GLOSSARY OF ACRONYMS

BAA	Broad Area Announcements
CENTCOM	Central Command
C-IED	Counter-Improvised Explosive Device
COIC	Counter-IED Operations Integration Center
COCOM	Combatant Command
CREW	Counter Radio-Controlled Electronic Warfare
CTN	Counter Terrorist Network
DAWG	Deputy's Advisory Working Group
DEPSECDEF	Deputy Secretary of Defense
DOD	Department of Defense
EFP	Explosively Formed Penetrator
GAO	Government Accountability Office
GISC	Global Innovation and Strategy Center
HME	Homemade Explosives
IED	Improvised Explosive Device
ISR	Intelligence, Surveillance, and Reconnaissance
JCAAMP	Joint IED Defeat Capability Approval and Acquisition Management Process
JCOE	Joint Center of Excellence
JCOP	Joint Common Operational Picture
JFCOM	Joint Forces Command
JIEDDF	Joint IED Defeat Fund
JIEDDO	Joint IED Defeat Organization
JET	Joint Expeditionary Team
JIL	Joint Intelligence Lab
JRAC	Joint Rapid Acquisition Cell
JUONS	Joint Urgent Operational Needs Statement
KnIFE	Knowledge and Information Fusion Exchange
MRAP	Mine-Resistant, Ambush-Protected Vehicle
OSD	Office of the Secretary of Defense
PA&E	Office of Program Analysis and Evaluation
POM	Program Objective Memorandum
RDT&E	Research, Development, Test, and Evaluation
REF	Rapid Equipping Force
RFS	Requests for Support
S&T	Science and Technology
SOCOM	Special Operations Command
SOUTHCOM	Southern Command
SWarF	Senior Warfighter Forum
TAT	Tactical Advisory Team
TCOIC	Training Counter-IED Operations Integration Center
TRADOC	U.S. Army Training and Doctrine Command
TTP	Tactics, Techniques, and Procedures
WIT	Weapons Intelligence Teams

APPENDIX B: HEARINGS, BRIEFINGS, INTERVIEWS

HEARINGS:

“Defeating the IED Threat: Today’s Efforts and Tomorrow’s Requirements”

September 16, 2008

Mr. Bradley Berkson
Director, Programs, Analysis and Evaluation
Office of the Secretary of Defense

Lieutenant General Thomas F. Metz, USA
Director
Joint Improvised Explosive Device (IED) Defeat Organization

Mr. Tom Matthews
Director, Warfighter Requirements and Evaluations
Office of the Undersecretary of Defense (Intelligence)

Mr. William Beasley
Director, Joint Rapid Acquisition Cell
Office of the Under Secretary of Defense (Acquisition, Technology & Logistics)

Major General Jason K. Kamiya, USA
Director, Joint Training Directorate (J7)
U.S. Joint Forces Command

MEMBER BRIEFINGS:

**Chairman Snyder meeting with General (Ret.)
Montgomery C. Meigs, Former Director, JIEDDO**

June 18, 2008

**Chairman Snyder meeting with Dr. Robin L. Keesee,
Deputy Director, JIEDDO**

July 30, 2008

**“The Intelligence Efforts and Operations against Human
Networks that use IED and Other Asymmetric Weapons
Against Our Deployed Military Forces.”**

September 9, 2008

Lieutenant General Thomas F. Metz, USA
Director
Joint IED Defeat Organization (JIEDDO)

Mr. Kevin Williams, Director
Global Innovation and Strategy Center
U.S. Strategic Command

Mr. Jeffrey Rapp
Director
Joint Intelligence Task Force-Combating Terrorism

Defense Intelligence Agency

Mr. Stan Sims
Deputy Director
Warfighter Requirements and Evaluations
Office of the Under Secretary of Defense for Intelligence

MEMBER TRAVEL:

CODEL Cooper to the Counter-IED Operations Integration Center (COIC).

July 14, 2008

Host: Dr. Robin L. Keesee
Deputy Director, JIEDDO

STAFF BRIEFINGS AND MEETINGS:

GAO update on JIEDDO engagement	<i>May 21, 2008</i>
COL Christopher P. Hughes, USA	<i>June 23, 2008</i>
Dr. Robin L. Keesee, Deputy Director, JIEDDO	<i>July 30, 2008</i>
COL Dick Larry, USA, Chief, Adaptive Networks, Threats & Solutions Division, Army Asymmetric Warfare Office	<i>August 1, 2008</i>
GAO update on JIEDDO engagement	<i>August 6, 2008</i>
Dr. Andrew F. Krepinevich, Director, Center for Strategic and Budgetary Assessments	<i>August 21, 2008</i>
CAPT Mark Kavanaugh, USN, PM JCREW	<i>August 25, 2008</i>
BGen Richard M. Lake, USMC, Director of Intelligence	<i>September 10, 2008</i>

STAFF TRAVEL:

Staffdel Kuiken to COIC	<i>July 3, 2008</i>
SASC and HASC Staffdel to the National Counter-Terrorism and National Counter-Proliferation Centers	<i>July 7, 2008</i>
Staffdel Fenner to Army Asymmetric Warfare Office	<i>July 11, 2008</i>
Staffdel DeTeresa, USMC Irregular Warfare Center, Quantico, VA	<i>July 18, 2008</i>
Staffdel Fenner, JIEDDO, LTG Thomas Metz, Director, Arlington, VA	<i>August 8, 2008</i>
Staffdel Fenner, JIATF-South, SOUTHCOM, SOCOM, and CENTCOM	<i>August 27-29, 2008</i>
Staffdel Fenner, JFCOM, USAF 480 th Intelligence Wing, and TCOIC	<i>September 3-4, 2008</i>

APPENDIX C: SUPPORTING DOCUMENTS

“Do IED Jammers Really Work?” *StrategyWorld.com*, 29 October 2008. (Available at: <http://www.strategypage.com/htm/w/h tecm/articles/20081029.aspx>.)

“Explosives Cache Seized in Sadr City,” *Stars and Stripes*, 30 October 2008. (Available at: <http://www.stripes.com/article.asp?section=104&article=58491>.)

Abahazy, Dan. “USJFCOM Senior Warfighter Forum (SWarF) on Joint Improvised Explosive Device Defeat Organization (JIEDDO).” Information Paper for the O&I Subcommittee, 26 August 2008. Revised, 4 November 2008.

Atkinson, Rick. “Left of Boom: The Struggle to Defeat Roadside Bombs.” *Washington Post Special Report*, 30 September 2007.

Barnes, Julian E., and Peter Spiegel. “A Battle Over the ‘Next War.’” *Los Angeles Times*, 21 July 2008. (Available at: <http://articles.latimes.com/2008/jul/21/nation/na-nextwar21>.)

Bennett, John T. “Amid Criticism, JIEDDO Stands by Selection Process.” *DefenseNews.com*, 6 January 2008.

Bensahel, Nora, Andrew Rathmell, Thomas Sullivan, and Edward O’Connell. “Associating Iraqis with the IED Fight.” Project Memorandum PM-1936-OSD. Arlington, VA: RAND Corporation, December 2005.

Bergman, Ronen. “Living To Bomb Another Day.” *New York Times*, 10 September 2008, 25.

Buttar, Gurdev. “JIEDDO Transition and Transfer Process.” Briefing Slides, JIEDDO Cross Briefs Conference. 26-28 August 2008.

CACI International. *Dealing with Today’s Asymmetric Threat to U.S. and Global Security*. Ballston, VA: 2008.

Censer, Marjorie. “DOD Decides Against Institutionalized Anti-IED Organization, For Now.” *Inside the Army*, Vol. 19, No. 49, 10 December 2007.

Censer, Marjorie. “Pentagon Studying how to ‘Institutionalize’ Joint IED Defeat Shop.” *Inside the Army*, Vol. 20, No. 8, 25 February 2008.

Clagett, David. *Joint Rapid Acquisition Cell*. Briefing at NDIA Guns and Missile Systems Conference and Exposition on “Meeting Warfighter Needs for the Asymmetric Threat.” Charlotte, NC: 25 April 2007.

DiMascio, Jen. “Pentagon Transformation Priority Includes Acquisition, Energy Reforms.” *Defense Daily*, 24 August 2007. (Available at: http://www.oft.osd.mil/library/library_files/article_573_082407_defensedaily.pdf.)

—. “Congress Calls For Answers on IEDs.” *Politico*, 25 June 2008. Available at: (<http://www.politico.com/news/stories/0608/11321.html>.)

Eisler, Peter, Tom Vanden Brook, and Blake Morrison. “Anti-IED drills improve, but not every soldier goes through them.” *USA Today*, 17 October 2007. (Available at: http://www.usatoday.com/news/military/2007-10-17-ied-training_N.htm.)

Ellis, Richard F., Richard D. Rogers, and Bryan M. Cochran. “Joint Improvised Explosive Device Defeat Organization (JIEDDO): Tactical Successes Mired in Organizational Chaos; Roadblock in the Counter-IED Fight.” Joint Forces Staff College, 13 March 2007.

Fowler, Daniel. "Chertoff Stresses IEDs as [Department of Homeland Security] Unveils State, Local Grants." *Congressional Quarterly*, 25 July 2008.

Grant, Greg. "Homemade Bombs, High-Tech Response." *Government Executive*, 15 June 2007. (Available at: <http://www.govexec.com/features/0607-15/0607-15s3.htm>.)

Hughes, Christopher P. *War on Two Fronts*. Drexel Hill, PA: CASEMATE, 2007.

Hull, Cacli. "USJFCOM Joint Transformation Command-Intelligence (JTC-I) Collaboration with the Joint Improvised Explosive Device Defeat Organization (JIEDDO)." Information Paper for the O&I Subcommittee. 8 September 2008.

Joint Improvised Explosive Device Defeat Organization, *Annual Report, Fiscal Year 2006*. Washington, D.C.

Joint Improvised Explosive Device Defeat Organization, *Annual Report, Fiscal Year 2007*. Washington, D.C.

—. "Director's Policy Letter #34 on Manpower Definitions." Memorandum. 14 August 2008.

—. *Joint Improvised Explosive Device Defeat Capability Approval and Acquisition Management Process (JCAAMP)*. JIEDDO Instruction 5000.01. Washington, D.C.: 9 November 2007.

—. *Joint Improvised Explosive Device Defeat Organization, Quarterly Report to Congress*. 12 June 2006, 28 November 2006, 14 December 2006, 15 May 2007, 21 May 2007, 29 June 2007, 24 September 2007, 18 October 2007, 19 December 2007, 5 March 2008, 30 October 2008.

Kamiya, Jason. Statement before the U.S. House, Armed Services Committee, Subcommittee on Oversight and Investigations hearing on "Defeating the IED Threat: Today's Efforts and Tomorrow's Requirements." Washington, D.C.: 16 September 2008.

Keesee, Robin L. "Fiscal Year 2008 Annual Statement on Internal Controls and Compliance with [Office of Management and Budget] Circular A-123." Memorandum to the Assistant Secretary of the Army, Financial Management and Comptroller. 16 June 2008.

Krepinevich, Andrew F., and Dakota L. Wood. *Of IEDs and MRAPs: Force Protection in Complex Irregular Operations*. Washington, D.C.: Center for Strategic and Budgetary Assessment, 17 October 2007.

Larkin, Frank. "Attack the Network Operations: Counter-IED Operations Integration Center (COIC)." Briefing Slides, JIEDDO Cross Briefs Conference. 26-28 August 2008.

Londono, Ernesto. "Use Of 'Sticky IEDs' Rising In Iraq." *Washington Post*, 9 October 2008, 14.

Lorge, Elizabeth M. "Organization Leads Fight Against IEDs." *Army News Service*, 1 April 2008. (Available at: http://www.dcmilitary.com/stories/040308/pentagram_28278.shtml.)

Margetta, Rob. "[Department of Homeland Security] Division Working Multiple Avenues in IED Fight." *Congressional Quarterly*, 11 July 2008.

Marrs, Jim. *480th Intelligence Wing*. Mission Briefing. 4 September 2008.

Meigs, Montgomery C. *Joint IED Defeat Organization*. Briefing. 8 May 2007.

Mesic, Richard, Edward O'Connell, Walter Perry, and Fred Wehrey. "Informing, Influencing, and Disrupting: Information Operations Support to the Counter-IED Fight." Project Memorandum PM-1892-OSD. Arlington, VA: RAND Corporation, February 2006.

Michaels, Jim. "EFPs in Iraq Drop 70 Percent in 3 Months." *USA Today*, 18 July 2008. (Available at: http://www.marinecorpstimes.com/news/2008/07/gns_efp_071708/.)

National Academy of Sciences' National Research Council, Committee on Defeating Improvised Explosive Devices. *Countering the Threat of Improvised Explosive Devices: Basic Research Opportunities*. Washington, D.C.: The National Academies Press, 2007.

Nubgaard, Rod C., Stanley Thomas, Dwight Shepherd, Donald Bellah, Paul Ostrowski, and Shawn Bentley. "JIEDDO Organizational Review." Washington, D.C.: The Industrial College of the Armed Forces, National Defense University, Academic Year 2005-2006.

Osborn, Kris. "U.S. Seeks New Vehicle as Afghan IEDs Rise." *Defense News*, 20 October 2008, 1.

Perry, Walter L. "Minimizing the Threat from Improvised Explosive Devices (IEDs) in Iraq." Project Proposal No. 1372. Arlington, VA: RAND Corporation, May 2005.

Perry, Walter, Edward O'Connell, Richard Mesic, and Scott McMahon. "A Proposal for a Counter-IED Time-Sensitive Target Cell." Project Memorandum PM-1843-OSD. Arlington, VA: RAND Corporation, July 2005.

Rendleman, John. "Data as Defense Against IEDs." *Government Computer News*, March 2008. (Available at: http://www.gcn.com/online/vol1_no1/459231.html?topic=content_management#.)

Robson, Seth. "'Petting Zoo' Trains Troops to Spot IEDs." *Stars and Stripes*, 4 June 2008. (Available at: <http://www.military.com/features/0,15240,169176,00.html>.)

Roosevelt, Ann. "IEDs Are Strategic Weapons, General Says." *Defense Daily*, 20 June 2008. (Available at: <http://defensedaily.com/sectors/army/3054.html>.)

Scutro, Andrew. "Facing An 'Irregular' Future." *Army Times*, 30 June 2008, 28.

Sprenger, Sebastian. "DOD Ponders Future of JIEDDO'S Science and Technology Work." *Inside the Army*, Vol. 20, No. 20, 25 February 2008.

Steeb, Randall, Jon Grossman, Morgan Kisselburg, and Manuel Carrillo. "Quantitative Analysis of RSTA Options for the Counter-IED Fight Using Tools and Simulations to Explore and Assess Offensive Options." Memorandum DRR-3836-OSD. Arlington, VA: RAND Corporation, April 2006.

Sullivan, Thomas, Walter Perry, and Brian Jackson. "Measuring Progress: An Assessment Methodology for the IED Fight in Iraq." Project Memorandum PM-1865-OSD. Arlington, VA: RAND Corporation, August 2005.

"Senior Warfighter Forum (SWarF) on Operationalizing Counter-Improvised Explosive Device (IED) Capabilities," Memorandum CM-0201-08 from Vice Chairman, Joint Chiefs of Staff (19 March 2008).

Taylor, Dan. "DOD To Spend Up To \$300 Million This Year On Training To Defeat IEDs." *Inside the Navy*, Vol. 21, No. 5, 4 February 2008.

U.S. Army, Asymmetric Warfare Office. Briefing to HASC O&I Subcommittee staff. 11 July 2008.

U.S. Army, Training and Doctrine Command, Intelligence Support Activity. "Asymmetric Threats to Current and Future U.S. Forces." Briefing. 9 January 2008.

U.S. Department of Defense. *Joint Improvised Explosive Device Defeat Organization*. DOD Directive 2000.19E. Washington, D.C.: 14 February 2006.

U.S. Department of Defense, Joint Requirements Oversight Council. "Joint Counter-Improvised Explosive Device (IED) Attribute Prioritization SWarF." JROC Outbrief. 10 April 2008.

U.S. Department of Defense, Office of the Deputy Secretary of Defense. "DoD Transformation Priorities." Memorandum. 9 August 2007.

—. "Transfer of JIEDDO C-IED Initiatives to the Components." Memorandum. 14 August 2007.

U.S. Department of Homeland Security. *Combating Terrorist Use of Explosives in the United States*. Homeland Security Presidential Directive-19. Washington, D.C.: 12 February 2007.

U.S. Government Accountability Office. *A Strategic Plan is Needed to Guide the Joint Improvised Explosive Device Defeat Organization's Efforts to Effectively Accomplish Its Mission*." GAO 07-377C. Washington, D.C.: 28 March 2007.

—. *Defense Management: More Transparency Needed Over the Financial and Human Capital Operations of the Joint Improvised Explosive Device Defeat Organization*. GAO-08-342. Washington, D.C.: 6 March 2008.

—. *The Joint Improvised Explosive Device Defeat Organization Provides Valuable Intelligence Support But Actions Are Needed to Clarify Roles and Improve Coordination*. GAO-09-172C. Washington, D.C.: 6 November 2008.

U.S. Marine Corps. *USMC Irregular Warfare/Improvised Explosive Device Defeat Efforts*. Briefing to HASC O&I Subcommittee staff. 18 July 2008.

Vanden Brook, Tom. "IEDs Go Beyond Iraq and Afghanistan." *USA Today*, 3 April 2008. (Available at: http://www.usatoday.com/news/military/2008-04-03-IED_N.htm.)

—. "Roadside Bombs Decline In Iraq." *USA Today*, 23 June 2008. (Available at: http://www.usatoday.com/news/world/iraq/2008-06-22-ieds_N.htm.)

Wilson, Clay. *Improvised Explosive Devices (IEDs) in Iraq: Effects and Countermeasures*. Congressional Research Service Report to Congress, RS22330. Washington, D.C.: 10 February 2006.

Woodward, Bob. "Why Did Violence Plummet? It Wasn't Just the Surge." *Washington Post*, 8 September 2008, 9.

Zajac, Daniel L., Bissonnette, Brian A., Carson, Jr., John F., "First Army IED Training Methodology." *INFANTRY*, Vol. 94, No. 4, July-August 2005, 43.

