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# Assessment of Joint Improvised Explosive Device Defeat Organization (JIEDDO) Training Activity

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## Preface

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The Joint Improvised Explosive Device Defeat Organization (JIEDDO) was created in 2006 to focus efforts to counter this asymmetric threat. Its charter included direction to train the force on the improvised explosive device (IED) threat and countermeasures, as well as ensure that training on new equipment and systems is conducted correctly. JIEDDO was formed with unique authorities and capabilities, and there has been concern about its potential for duplicating programs and functions carried out by the Services and other agencies in the Department of Defense. The 2013 National Defense Authorization Act directed the Secretary of Defense to carry out an assessment of training programs and functions to assess duplication. In support of this effort, the RAND study team was asked to assess whether JIEDDO duplicated or showed close similarity to the training programs and functions already conducted by the Services and U.S. Special Operations Command. If duplication were observed, RAND was also asked to provide a statement of value. This report will be of interest to organizations and people assessing responses to asymmetric challenges, organizational change, and decisions on programs that may lack clear sponsorship.

This research was sponsored by the Office of the Under Secretary of Defense for Personnel and Readiness and funded by JIEDDO. It was conducted in the Forces and Resources Policy center of the National Defense Research Institute, a federally funded research and development center sponsored by the Office of the Secretary of Defense, the Joint Staff, the Unified Combatant Commands, the U.S. Navy, the Marine Corps, the defense agencies, and the defense Intelligence Community.

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# Summary

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## Introduction

In reaction to the growing threat posed by improvised explosive devices (IEDs) deployed by the Iraqi insurgency in 2003, GEN John Abizaid, Commander of U.S. Central Command at the time, asked the Department of Defense (DoD) to initiate a “Manhattan like-Project” to glean the expertise of all Services involved directly with countering IEDs. Ultimately, this led to the founding of the Joint Improvised Explosive Device Defeat Organization (JIEDDO), on February 14, 2006. As specified in its foundational document,<sup>1</sup> JIEDDO’s mission is to focus (i.e., lead, advocate, and coordinate) all DoD actions in support of the Combatant Commanders’ (CCDRs’) and their respective Joint Task Forces’ efforts to defeat IEDs as weapons of strategic influence.

To execute this mission, JIEDDO was given broad authority to identify threats, generate and validate requirements, develop solutions, and apply resources along three lines of operation (LOOs): Attack the Network (AtN), Defeat the Device (DtD), and Train the Force (TtF). While TtF directly involves training, all the LOOs involve training to some degree. The goal is speed and relevance. Speed allows rapid adaptation to a threat that is also evolving quickly. It allows solutions to be fielded when needed, not when slower development processes finally generate them. Although some longer process might be needed for enduring capability, JIEDDO’s charter is to provide solutions that Services can then decide whether to sustain or substitute with their own solutions once developed. Inherent in this charter is the natural tension between speed and oversight. Oversight is necessary to avoid waste or misdirection but it also adds steps and time to the process, which could result in ceding the speed advantage to the enemy.

This study examined training programs to see if there was evidence of duplication with Service initiatives and training functions to assess whether they are duplicative with Service or other agency functions. Training programs are discrete initiatives that are identified through a requirements process, are developed as a capability, and have a definite point of termination. Training functions are ongoing activities inherent to the organization, such as developing intelligence for inclusion in training or performing assessments.

The RAND team was asked to study whether there is duplication in training programs and functions and, if so, whether such duplication provides value. To examine training programs, the team first developed a list of attributes associated with training activities (e.g., the training objective, training audience, location), which were organized as a taxonomy. The team then

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<sup>1</sup> See Department of Defense Directive Number 2000.19E, *Joint Improvised Explosive Device Defeat Organization* (JIEDDO), February 2006

identified all the training programs being carried out by JIEDDO. It then provided the list of programs, along with the set of attributes, to subject-matter experts (SMEs) from Services and U.S. Special Operations Command (USSOCOM). These SMEs were asked to assess whether these programs were duplicative—shared key attributes—with programs they sponsored. The RAND study team then took these inputs and performed its own assessments. For programs, the RAND team compared the attributes of the JIEDDO initiative with the identified Service program. In cases where enough program attributes were identified as common to constitute complete or near duplication, the RAND team assessed whether the duplication was limited in scope and duration—and likely to terminate in accordance with existing processes—and whether the duplication, even if sustained, might have value. Value was assessed by the simple metric of use. If some Service or agency requested and/or used the JIEDDO product, it was evidence of value.

Since training functions may have similar attributes but result in different outcomes, the RAND team used a different methodology for assessing duplication, similarity, and value among training functions. Rather than focusing on attributes, the team focused on the processes and activities within the broad functions, assessing whether these led to a duplication of output. Based on a review of JIEDDO’s mission statement and foundational documents and in conjunction with JIEDDO and the Services, the RAND team identified the following three broad functions:

- Advise and assist the Office of the Secretary of Defense and the Services on all matters related the IED threat and its defeat
- Provide support to Service and Combatant Command (CCMD) training activities
- Identify; develop; implement; and, as appropriate, transfer, transition, terminate, or continue (T3C) counter-IED (C-IED) training programs and initiatives.

We then gave the Services and USSOCOM the opportunity to comment on whether they believed that JIEDDO training functions were duplicative of those performed by their organizations. We specified that an attribute-matching methodology would not be as appropriate for functions as for programs and so allowed a wider opportunity for identifying duplication. After receiving these inputs, we examined the functions JIEDDO performs for other agencies, specifically using fused intelligence to provide training products, providing support at centers of excellence, and responding to specific Combatant Command (CCMD) requests. We separately assessed the JIEDDO training functions that allow it to identify requirements, develop capabilities, and implement and assess these capabilities. These were assessed not in terms of their similarity to comparable Service processes, but in terms of their ability to prevent program duplication and add value.

## Key Findings

In terms of the analysis of training programs, the Services initially identified 20 program initiatives and Joint Asymmetric Threat Awareness Center (JATAC) courses as potentially duplicative, out of a total of 248 programs reviewed. This number was reduced to 13 after stakeholder meetings. USSOCOM and the Navy found no duplication, while the Army found four duplicative programs, the Air Force found two, and the Marine Corps found seven. RAND researchers then considered potential duplicative programs and concluded that while the programs did appear similar, they actually were not duplicative. Thus, the main conclusion of the analysis of duplicative programs is that there is little evidence of duplication among training programs or courses. Even in similarly named courses or activities, the RAND team's assessment shows that these are aimed at different training audiences and/or have different objectives. In cases where a JIEDDO-initiated training program is beginning and a Service effort is developed to take its place, the resulting overlap is temporary and serves to add needed capacity rather than to wastefully duplicate. Moreover, JIEDDO training initiatives were used by Services and USSOCOM, indicating some level of value. This is not the same as saying that Services might not have developed a similar capability had they received the same amount of money and the authority to use it for any account. But, the assessment shows that JIEDDO's training initiatives were used and did something different than what the Services and USSOCOM were doing. We did find that JIEDDO had only recently begun development of a comprehensive list of available products and initiatives, and that it lacks a taxonomy to describe these. In effect, RAND developed such a taxonomy to perform the current assessment. Developing this taxonomy more completely can greatly aid the assessment of what future training programs should address.

The assessment of training functions began with identification of the three broad JIEDDO functions described above. When the Services were asked to assess training functions they identified no duplication between the first and second functions and their own. JIEDDO is singularly focused on the C-IED mission—to a degree the Services generally are not—and exists to provide specialized advice and training. Whether this focus and support will continue to be appropriate is a policy decision, but neither the Services nor the RAND team found evidence that these functions were duplicative.

JIEDDO also performs a number of broader functions that are related to capability development. To a degree, these are similar to processes performed by the Services. Like the Services, JIEDDO assesses, plans, develops requirements, submits proposals to budget processes, and develops and fields training solutions. All these have elements that are intended to minimize chances of program duplication and to ensure added value. Our analysis indicates that JIEDDO's organizational capability and its processes are successful in doing this. Processes may look similar—and may even have many of the same steps—but they are more focused on C-IED outputs and result in different programs. The overall conclusion is that while many Service

organizations are developing and fielding C-IED training capabilities using functions and processes similar to JIEDDO, the processes in place provide effective coordination and integration and mitigate the risk of inefficiency. JIEDDO's success in this respect may also be a function of its ability to perform all the elements of capability development within a single organization, rather than spreading functions across several organizations, as is the case with the Service models. However, we did find that JIEDDO lacks a rigorous end-end assessment process for fielded capability and that, while assessments were performed, they could be improved by a more formal process.

## Concluding Thoughts

Whether JIEDDO should be continued and, if so, in what form, are questions beyond the scope of this report. Yet JIEDDO has developed organizational capabilities and a set of processes that allow responsive development of capability, minimize duplication, and provide benefit. As the future of JIEDDO is debated, now would be a good time to assess the lessons learned from the JIEDDO experience for the next stopgap organization that is created to address an asymmetric threat.

## Acknowledgements

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# Abbreviations

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ARDEC	Army Armament Research, Development, and Engineering Command
AtN	Attack the Network
BAA	Broad Agency Announcement
CCDR	Combatant Commander
CCMD	Combatant Command
C-IED	Counter-improvised explosive device
COE	Center Of Excellence
COIC	Counter-IED Operations Integration Center
CONUS	continental United States
CTC	Combat Training Center
DRCD	Directorate for Rapid Capability Delivery
DoD	Department of Defense
DtD	Defeat the Device
ECM	electronic countermeasures
EOD	Explosive Ordnance Disposal
FY	fiscal year
GPR	ground penetrating radar
GRF	Global Response Force
HMDS	Helmet-Mounted Display System
HME	homemade explosive
IED	Improvised Explosive Device
ISR	intelligence, surveillance, and reconnaissance
JATAC	Joint Asymmetric Threat Awareness Center
JCAAMP	JIEDDO Capability Approval and Acquisition Management Process
JCD	Joint Capabilities Document
JCDP	JIEDDO Capability Development Process
JCOE	Joint Center Of Excellence
JCE	JIEDDO COIC University
JDCP	JIEDDO Capability Development Process



JEON	Joint Emerging Operational Need
JET	Joint Expeditionary Team
JETC	Joint Exploitation Training Center
JFC	Joint Fusion Center
JIEDDO	Joint Improvised Explosive Device Defeat Organization
JOFG	JIEDDO Organization and Functions Guide
JORAB	JIEDD Operational Requirement Assessment Board
JUON	Joint Urgent Operational Need
LOO	line of operation
MTT	mobile training team
MWD	military working dog
NCO	Noncommissioned officer
NDAA	National Defense Authorization Act
NTC	National Training Center
OCONUS	outside the continental United States
OSD	Office of the Secretary of Defense
POI	Program of Instruction
RCD	Rapid Capability Development
RCP	Route Clearance Patrol
RDECOM	Research, Development, and Engineering Command
RFS	Requests from a Service
SOF	Special Operations Forces
SME	subject-matter expert
T3C	Transfer, Transition, Terminate, or Continue
TtF	Train the Force
TNS	Training Needs Statements
TSE	Tactical Site Exploitation
TTP	tactics, techniques, and procedures
TTPL	Tactics, techniques, procedures, and lessons learned
UAS	unmanned aerial system
UCBA	Urgent Capability Based Assessment
UHF	ultra-high frequency
USSOCOM	U.S. Special Operations Command

# 1. Introduction

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## Background on the Joint Improvised Explosive Device Defeat Organization

### *History*

On February 26, 2013, the White House released a policy statement on *Countering Improvised Explosive Devices* (IEDs), which stated that “IEDs remain one of the most accessible weapons available to terrorists and criminals to damage critical infrastructure and inflict casualties.”<sup>2</sup> The statement concluded that, “the threat from IED use is likely to remain high in the coming decade and will continue to evolve in response to our abilities to counter them.” However, as has been witnessed through the years—both in Operation Iraqi Freedom and Operation Enduring Freedom—this asymmetric threat is far from new.

In reaction to the growing threat posed by IEDs deployed by the Iraqi insurgency in 2003, GEN John Abizaid, Commander of U.S. Central Command (CENTCOM) at the time, asked the Department of Defense (DoD) to initiate a “Manhattan like-Project”<sup>3</sup> to glean the expertise of all Services involved directly with countering IEDs. Initially, this led to the establishment of the Army IED Task Force in October 2003, which rapidly evolved into the Army-led Joint Integrated Process Team (JIPT) in 2004 under former Deputy Secretary of Defense Paul Wolfowitz.<sup>4</sup> In June 2005, acting Deputy Secretary of Defense Gordon R. England established the Joint IED Defeat Task Force (JIEDD TF) in reaction to the rise of casualties related to the Iraqi insurgency. This task force was then followed by the Joint Improvised Explosive Device Defeat Organization (JIEDDO), which was established on February 14, 2006.

### *JIEDDO Mission, Enduring Capabilities, and Lines of Operation*

JIEDDO’s mission is to focus, lead, advocate, and coordinate all DoD actions in support of the Combatant Commanders’ (CCDRs’) and their respective Joint Task Forces’ efforts to defeat IEDs as weapons of strategic influence.<sup>5</sup> This mission was to be accomplished through five enduring capabilities.

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<sup>2</sup> The White House, *Countering Improvised Explosive Devices*, February 26, 2013

<sup>3</sup> John Barry et al. “Iraq’s Real WMD,” *Newsweek*, Vol. 147, No. 13, March 27, 2006, pp. 24–29.

<sup>4</sup> John Bokel, *An Asymmetric Threat Invokes Strategic Leader Initiative: The Joint Improvised Explosive Device Defeat Organization*, The Industrial College of the Armed Forces, National Defense University, 2007.

<sup>5</sup> See Department of Defense Directive Number 2000.19E, *Joint Improvised Explosive Device Defeat Organization* (JIEDDO), February 2006.

- **Rapid acquisition and fielding** is the scalable ability to employ authorities, flexible resources, streamlined processes, and effective oversight to drive the research and development community to rapidly anticipate, identify, develop, and integrate emerging technologies and concepts into effective fielded counter-IED (C-IED) solutions.
- **Operations-intelligence-information fusion and analysis** is an expeditionary and scalable network and analytical capability enabling DoD, other federal agencies, and coalition partners to understand threat-network activities globally. This fused, analytic capability leverages all available all-source information and intelligence to provide the most accurate, effective, time-sensitive information and counter-network support to CCDRs and, as authorized, other federal agencies.
- **Training** is the ability to develop, define, and set C-IED and attack-the-network training standards for Joint forces in response to CCDRs' requirements, as well as to integrate those standards into appropriate Joint and DoD concepts and doctrine in support of CCDCR requirements to provide training and to build partner C-IED and counter-network capacity.
- **Weapons technical intelligence** is the ability to conduct relevant and timely collection, analysis, and technical and forensic exploitation of current and emerging IED technologies to swiftly enable force protection, component and materiel sourcing, targeting, countering of threat networks, and expeditious support to prosecution.
- **Whole-of-government approach** is the ability to rapidly synchronize counter-threat network capabilities and actions among Joint, interagency, intergovernmental, international, and other Federal agencies' C-IED stakeholders. This is done through collaborative planning, information sharing, and cooperative capability development to reduce the impact of IEDs on operational forces and the threat to the homeland.

These five enduring capabilities support three lines of operation (LOOs): Attack the Network (AtN), Defeat the Device (DtD), and Train the Force (TtF). A LOO is defined as a line “that defines the directional orientation of a force in time and space in relation to the enemy and that links the force with its base of operations and objectives.”<sup>6</sup> JIEDDO uses these LOOs as a means of organizing initiatives and assigning responsibility for solutions. The main idea is to characterize activities by their contribution to C-IED efforts—either in preventing IEDs from reaching the battlefield, defeating devices placed on the battlefield, or specifically training the force in all aspects of C-IED operations. Although TtF deals most directly with training, all three have training aspects. The following sections will discuss each LOO in more detail.

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<sup>6</sup> See Army Doctrine Reference Publication, *Unified Land Operations*, No. 3-0, 4-22, May 16, 2012, p. 53: “Lines of operations connect a series of decisive points that lead to control of a geographic or force-oriented objective. Operations designed using lines of operations generally consist of a series of actions executed according to a well-defined sequence. A force operates on interior lines when its operations diverge from a central point. A force operates on exterior lines when its operations converge on the enemy. Combined arms maneuver is often designed using lines of operations. These lines tie offensive and defensive tasks to the geographic and positional references in the area of operations.”

### Attack the Network (AtN)

The AtN LOO enables offensive operations against complex networks of financiers, trainers, and their supporting infrastructure. JIEDDO states that “Attack the Network is focused on information fusion, extensive partner collaboration, and expanding analytical support to combatant commands.”<sup>7</sup> The intention is to disrupt networks that support IED use and prevent IEDs from reaching the battlefield.

### Defeat the Device (DtD)

Countering the IED threat once it has been deployed requires an evolving set of technologies to combat the asymmetric threat posed by IEDs. As such, JIEDDO “provides technologies to detect IED components, neutralize the triggering devices, and mitigate the effects of an IED blast to ensure freedom of maneuver and effective operations for commanders” in theater.<sup>8</sup>

### Train the Force (TtF)

TtF integrates elements of the other LOOs and focuses on improving the knowledge and proficiency of deploying forces. Initiatives in the AtN and DtD LOOs may drive a requirement for equipment training. Successfully carrying out AtN and DtD require a level of proficiency that TtF provides. Initiatives provided under TtF generally deal specifically with direct training programs or courses initiatives.<sup>9</sup> TtF is a multifaceted operation drawing both from lessons learned and from a working analysis of tactics, techniques, and procedures (TTPs). In addition, JIEDDO has planned to “enhance its information sharing to U.S. allies by expanding the capabilities of its Counter-IED Operations Integration Center (COIC) and products provided COIC analysts in Coalition forces fusion centers in Afghanistan.”<sup>10</sup> The TtF initiative incorporates AtN and DtD to better prepare warfighters with up-to-date information on specific operational theater asymmetric threats.

### *Organization*

JIEDDO has unique organizational features that bear on the development of training programs and execution of training functions. JIEDDO employs approximately 2,700 military, government civilian, and DoD personnel. It is organized into four directorates (see Figure 1.1): (1) Directorate for Operations/Intelligence; (2) Directorate for Rapid Capability Delivery (DRCDD); (3) Directorate for Training; and (4) Directorate for Information Enterprise

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<sup>7</sup> See JIEDDO Organization and Functions Guide (JOFG), April 2, 2013.

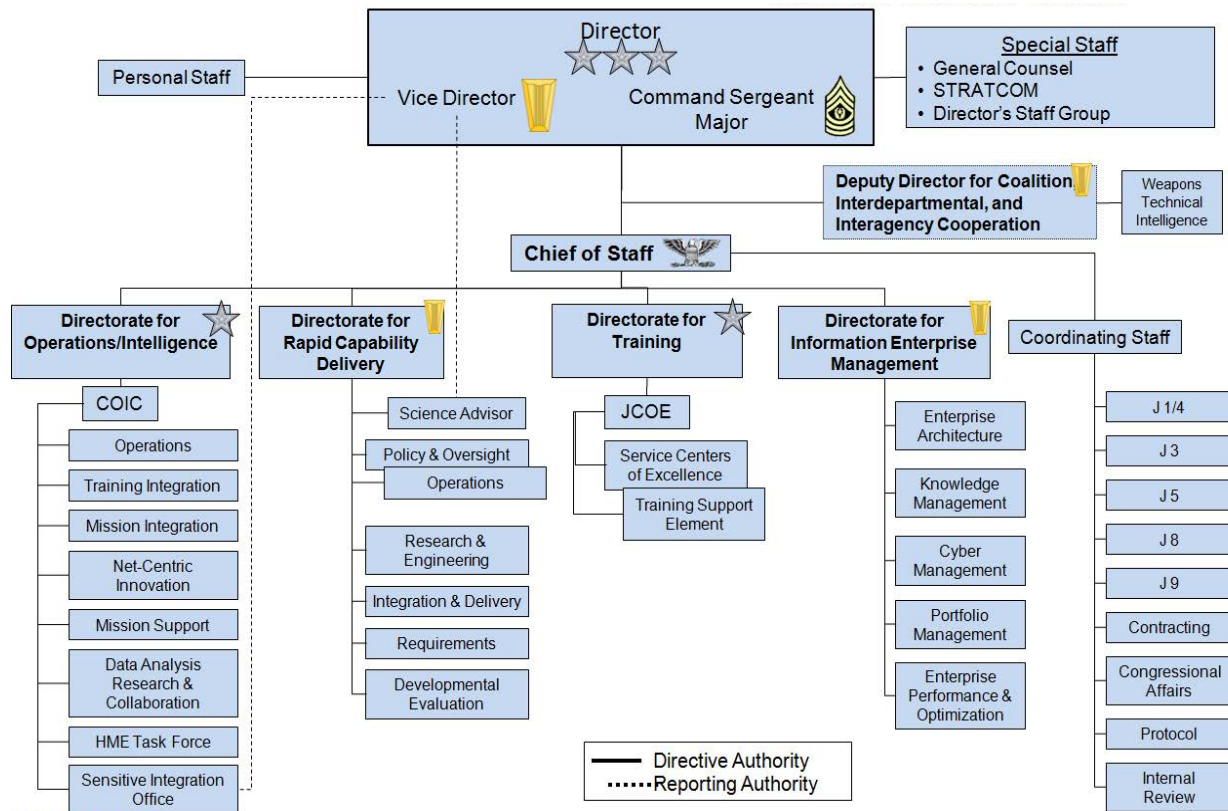
<sup>8</sup> JOFG, 2013.

<sup>9</sup> JOFG, 2013.

<sup>10</sup> JIEDDO, “JIEDDO Providing Training, Information & Technology Support to Coalition,” news release, April, 26, 2010.

Management.<sup>11</sup> The Directorate for Operations/Intelligence focuses on AtN. DRCD focuses on DtD but also supports TtF by managing and tracking C-IED solutions from beginning to delivery of capabilities. The Directorate for Training focuses on TtF through the Joint Center of Excellence (JCOE) and manages the delivery of C-IED training solutions with DRCD. A fourth directorate, the Directorate for Information Enterprise Management, provides JIEDDO-wide information technology infrastructure and support, while the coordinating staff provides synchronization and support throughout the organization.

**Figure 1.1**  
**JIEDDO Organizational Structure**



SOURCE: JOFG, 2013.

## Need to Find Balance Between Oversight and Speed

There is an inherent tension between processes that protect against duplication and ensure value and processes that can provide a quick solution. The more reviews and oversight, the longer it will take to field solutions. Too much oversight cedes the advantage of asymmetric

<sup>11</sup> JOFG, 2013.

warfare to the enemy. Training initiatives in particular need to reflect the latest information on enemy organization, tactics, and devices. Training is the major way to ensure that combatants do not go into harm's way with dated or inaccurate information. However, speed can also produce waste and/or ineffective solutions, and oversight is necessary to prevent this. The problem is in finding the right balance between oversight (to prevent waste and provide benefit) and speed (to prevent enemy advantage). JIEDDO uses the following processes to govern the organization and produce that balance.

### ***JIEDDO Capability Approval and Acquisition Management Process***

The JIEDDO Capability Approval and Acquisition Management Process (JCAAMP) is the overarching decisionmaking process that JIEDDO uses to select and approve initiatives. It was created “to respond to requirements and demands; to aggressively seek, acquire, and assess potential materiel, non-materiel, and training initiatives through extensive finding networks; to place proven C-IED capabilities in the hands of warfighters for evaluation and fielding; and transfer C-IED capabilities to Services or agencies.”<sup>12</sup> JCAAMP also contains a number of processes that function to prevent duplication. For example, a number of teams and boards with decisionmaking power include Service representation, in part to ensure that initiatives are not already being implemented. Further discussion of the underlying processes is in Chapters Two and Three.

### ***Transfer, Transition, Terminate, or Continue***

JIEDDO uses the transfer, transition, terminate, or continue (T3C) process to limit the time horizon of initiatives and ensure that plans are established early in initiative development for disposition. T3C planning begins as soon as the initiative is begun and fixes a time in which JIEDDO must make a determination about whether a program should be terminated or continued in some form. Of note, the T3C plan is JIEDDO's plan for what should happen to the program, not a commitment from the affected Service. Thus, even if the plan calls for continuing the program, the Service is under no obligation to continue the training.

### ***Joint Urgent Operational Need***

A Joint Urgent Operational Need (JUON) is a request by a combatant commander for an urgent need for additional warfighting capability critically needed by operating forces conducting combat or contingency operations. A JUON is used if failure to deliver the capability requested will likely result in the inability of the unit to accomplish its missions or an increase the probability of casualties or loss of life. Thus, the JUON process has a goal of rapidly

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<sup>12</sup> JIEDDO, *Directorate for Rapid Capability Delivery (DCRD)*, briefing, April 30, 2013, slide 4, not available to the general public.

delivering a solution. JUONs are the primary means by which CCDRs request rapid response from the DoD requirements and acquisition process and are a major source for many JIEDDO initiatives, including some associated with requiring training.

The JUON process is administered by the Joint Staff J8 and has mechanisms to prevent duplication and ensure that Service solutions are properly considered. In fact, it goes beyond the JCAAMP process, requiring oversight and reach-back into the other Services to ensure that duplication is minimal or absolutely necessary. It requires each Service to coordinate and ensure that there are no duplicative capabilities.

### *Roles*

Title 10 U.S.C. gives the Services the responsibility to organize, train, and equip for operations in different domains. The CCDRs define a requirement through the Joint Staff for the Services to prepare forces. The Services use the planning, programming, budget, and execution process; doctrine development; research; exercises; and several other functions to prepare forces to meet the needs of the CCDR. These are, by design, deliberate processes intended to preserve long-term Service investments, and they require a balance between portfolios. These processes—while effective for long-term force development—may not be rapid enough to respond to threats from a rapidly changing enemy and may not provide sufficient focus on immediate threats. JIEDDO was created with the capabilities and specific authorities to allow it to fill C-IED capability gaps.

### *Budgetary Authority*

Service budget processes have a deliberate design and are subject to many internal controls, including a restriction on account usage. Research and development funding, for example, typically cannot be used for procurement or operations without explicit permission to reprogram. In contrast, JIEDDO receives “colorless” funding, which means it has flexibility to spend funds across traditional accounts, wherever it thinks it is most appropriate. This gives JIEDDO the ability to rapidly provide U.S. forces with equipment and training to defeat an enemy’s asymmetric actions, but also reduces oversight over the larger process. JIEDDO funding processes reduce the possibility of duplication or waste by stipulating that the funds for an initiative expire after a three-year period.

### *Study Purpose*

The RAND study team was asked to study whether there is duplication in training programs and functions and, if so, whether such duplication provides value. Specifically, this study supports the DoD response to the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2013, which directed that “the Secretary of Defense shall prepare an assessment of the training-related activities of the Joint Improvised Explosive Device Defeat Organization

(JIEDDO) . . . [to] include all training programs and functions, both enduring and non-enduring, executed by the Joint Improvised Explosive Device Defeat Organization in support of the United States Armed Forces”; and to “identify any program or function that is similar to or duplicates other training activities conducted elsewhere within the Department of Defense; and assess the value of maintaining such similarity or duplication.”<sup>13</sup> For purposes of the study, training programs and functions are described below.

### *Training Programs*

Training programs are discrete activities that are requested or initiated, planned, funded, and executed and contain a definable end state. They may be programs whose sole purpose is to train or they may be the training component of an equipment or systems development program.

### *Training Functions*

Training functions are ongoing activities, as opposed to discretely initiated programs, inherent in JIEDDO’s mission. A function is an activity that some organization performs, rather than initiates and plans. These broad activities include development of C-IED training strategies and programs. These include services that JIEDDO performs for other agencies and activities that JIEDDO uses to assess and develop capability. These are generally funded as part of JIEDDO’s overall operational mission. Primary functions identified included the following:

- Advise and assist the Office of the Secretary of Defense (OSD) and the Services on all matters related to the IED threat and its defeat, including training.
- Support Service and CCMD training activities by providing direct support, analysis, and subject-matter expertise. A key difference between the activities under this function and a training program is that training programs are subject to T3C and JIEDDO generally expects to continue these as long there is a need.
- Identify, develop, implement, assess, and, as appropriate, T3C C-IED training programs. Included in this function are several sub-functions, which we will consider separately.

## Study Approach

To meet the study objective, the RAND team had extensive contact with OSD, the Services, and the different directorates within JIEDDO. The first task was to identify all the training programs and functions being carried out by JIEDDO. We requested this information from JIEDDO and received a comprehensive list of every initiative currently under way and separately developed a list of training-related functions being performed. The next task was to receive inputs from the Services on supposed areas of duplication and similarity. For programs, Service representatives were provided with the JIEDDO database and asked, based on their existing

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<sup>13</sup> Public Law 112-239, National Defense Authorization Act for Fiscal Year 2013, January 2, 2013.



Service programs and their attributes, whether the listed items constituted duplication. These representatives were drawn from the organizations within the Services specifically charged with C-IED capability development, as well as from the training establishments. They were nominated at the request of the Office for the Deputy Assistant Secretary of Defense for Readiness and required to have flag-level review before submitting the inputs for the study. These representatives took the database provided by JIEDDO (contained in the Appendix) and then compared these to their own programs based on the attribute list developed by the RAND team and validated by the Services, USSOCOM, and JIEDDO. The RAND team took these inputs and performed its own assessments using the attributes and comparing the programs provided. These assessments were then provided to the Services and USSOCOM to ensure a correct understanding of the programs and the outcomes. In cases where enough attributes were identified as common to constitute complete or near duplication, the RAND team also assessed whether the duplication was limited in scope and duration—and likely to terminate in accordance with existing processes—and whether the duplication, even if sustained, might have value. Chapter Two contains tables discussing these results.

To evaluate functions, the Services were also asked to evaluate activities within JIEDDO. However, it became apparent that the attribute-based methodology would be less applicable and would have to rely more on a detailed examination of how JIEDDO executes these functions. While functions may look the same and contain many of the same attributes, the relevant feature is not the structure or appearance but the outcome. The RAND team performed this detailed assessment and reports the results in Chapter Three.

## Organization of This Document

Chapters Two and Three contain our assessments of JIEDDO training programs and training functions, respectively, including a more detailed discussion of the methodology used. Chapter Four contains key findings from the two assessments and some overarching concluding thoughts. The Appendix is the list of JIEDDO initiatives either directed toward training or with training requirements associated with equipment or system development.

## 2. Assessment of Duplication/Similarity in Training Programs

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In this chapter, we discuss our assessment of the duplication and similarity in JIEDDO training programs, starting first with a discussion of the methodology used to do so.

### Methodology for Assessing Training Programs

The RAND study team first developed a list of attributes associated with training activities (e.g., the training objective, training audience, location), which were organized as a taxonomy. We note that JIEDDO does not currently have such a taxonomy or a systematic way of characterizing attributes. The team then identified all the training programs being carried out by JIEDDO. It then provided the list of programs, along with the set of attributes, to subject-matter experts (SMEs) from the Services and USSOCOM. These SMEs were nominated by the Services and USSOCOM at the request of the Deputy Assistant Secretary of Defense for Readiness and were drawn from the training and C-IED capability-development directorates within these organizations. The SMEs were informed that their input would be used as an initial basis for evaluating JIEDDO programs and that they must reflect an official Service position, not an individual opinion. These SMEs were then asked to assess whether these programs were duplicative—shared the complete set of attributes—with programs they sponsored. In cases identified as duplicative, the Services and USSOCOM were also asked to provide the Service activity that made it duplicative, identifying the common attributes in particular.

After receiving the inputs, the RAND study team held meetings with JIEDDO, the Services, and other stakeholders to clarify Service positions. We then independently assessed the programs and initiatives identified by the Services as duplicative and came to a determination based on degree of similarity. In cases where enough program attributes were identified as common to constitute complete or near duplication, the RAND team assessed whether the duplication was limited in scope and duration—and likely to terminate in accordance with existing processes—and whether the duplication, even if sustained, might have value. Value was assessed by the simple metric of use. If some Service or agency requested and/or used the JIEDDO product, it was evidence of value. In addition, the study team also gathered more details about potentially duplicative initiatives to determine who was receiving the training, whether it continued to be requested, and whether a Service had taken over the initiative as a permanent capability.

#### *Attributes Evaluated*

Attributes are descriptions of what a training program or initiative does. These attributes were arrived at through the discussions with SMEs and were vetted through stakeholders within the Services and at JIEDDO. The following were identified as relevant attributes:

- Type of program or function (e.g., course, range, seminar, new equipment training)
- Modality: how is it delivered?
- Why was it initiated?
- Who conducts it? Is it JIEDDO-run or JIEDDO-supported?
- What enduring C-IED capability and supporting operational task does the initiative support? (Note: This does not presume that the initiative is enduring, just that it supports an enduring capability)
- What is the target audience?
- What is the unit type: Ground maneuver, individual, leader, etc.?
- What time frame and where is it conducted: Initial skill, pre-deployment, in-theater, etc.?
- Periodicity: Recurring weekly? Annually?? One-time only?
- Is this course, new equipment/process, or training pending determination of the necessary periodicity?
- If a course or seminar, what is the throughput (i.e., number of students)?
- If not a course or seminar, who receives the information and to what level is it distributed (e.g., products given to everyone, to theater leadership only)?
- What are the topic areas and training objectives?
- What is the depth: Introductory, intermediate, or advanced?
- What is the level of specialization? Is it a general threat description? A leader's course? An explosive ordinance disposal (EOD) specialist's course?
- Was there feedback about the activity?
- Did that feedback change anything?
- Is there a continuing need?
- T3C status.

Of these, after examining the JIEDDO inputs the RAND team identified the following as “key attributes,” indicating that they make a significant difference in the quality and nature of training—as opposed to being a means of differentiation:

- Training audience
- Topics areas and training objectives
- Level of specialization
- Introductory, intermediate, or advanced knowledge level
- Location: in theater or continental United States (CONUS).

An activity is identified as “duplicative” when it has all the same key attributes as something else. “Similarity” is a matter of degree—the more common the attributes, the more similar.

### *What Training Programs Were Evaluated?*

JIEDDO compiled a list of all its open training initiatives. These included training activities associated with new equipment introduction supporting AtN, DtD, and all initiatives developed under TtF. Programs are characterized as those initiatives that have passed through an approval process, have a discrete output, and are subject to a T3C process. Also considered as programs were courses of instruction offered under the Joint Asymmetric Threat Awareness Center

(JATAC), which is a contract vehicle that allows courses to be developed. JATAC courses are products that are developed and offered when needed, but do not involve additional instructors or require other support. They are in the nature of an already prepared, on-the-shelf course of instruction, rather than a defined and maintained training initiative. JIEDDO also provides training programs in response to Training Needs Statements (TNS), which are low-cost initiatives that receive a review but are not required to go through the full JCAAMP process.

The following tables are derived from the original data provided by JIEDDO. JIEDDO identified 192 current training programs associated with AtN and DtD. It identified 37 TtF-specific initiatives. In addition, it identified 19 courses provided on the JATAC contract vehicle and four resulting from TNS (Table 2.1). Initiatives are listed in the Appendix. JIEDDO conducts the majority of the training (Table 2.2) and the majority of training occurs in CONUS (Table 2.3).

**Table 2.1  
Distribution of JIEDDO Programs**

<b>AtN and DtD</b>	<b>TtF</b>	<b>JATAC</b>	<b>TNS</b>
192	37	19	4

Source: JIEDDO.

**Table 2.2  
Organization Conducting the Training**

<b>JIEDDO</b>	<b>Services or Defense Agency</b>	<b>Others (Department of Energy, Labs)</b>
76%	23%	1%

Source: JIEDDO.

**Table 2.3  
Where Training is Located**

<b>CONUS or Home Station</b>	<b>In Theater Only</b>	<b>Both</b>
67%	16%	17%

Source: JIEDDO.

## Training Program Assessment Findings

Service representatives initially identified 20 program initiatives and JATAC courses as potentially duplicative. This number was reduced to 13 after stakeholder meetings.<sup>14</sup> USSOCOM and the Navy found no duplication, while the Army found four duplicative programs, the Air Force found two, and the Marine Corps found seven. Tables 2.4, 2.5, and 2.6 provide the list of Service-identified duplications for the Army, Air Force, and Marine Corps, respectively. The Air Force also identified four functions as duplicative, which are identified and assessed in Chapter Three. RAND researchers then considered these and concluded that while the programs did appear similar, they actually addressed different audiences or were in the process of being phased in as Services built their capability. The RAND research team’s assessment is also included in the respective tables.

**Table 2.4**  
**Army-Identified Duplicative Programs and RAND Study-Team Assessment**

<b>Program/Description</b>	<b>Reason for Identifying Program as Duplicative</b>	<b>RAND Assessment</b>
1. Dismounted C-IED Pre-deployment Training Equipment  This was an equipment purchase to equip Army units with gear for training pre-deployment. JIEDDO purchased the equipment and provided it to Army	Army maintains that it could have purchased the equipment but does not deny that it used the equipment when provided. JIEDDO plans to terminate the effort when the equipment purchase is complete.	Not Duplicative. JIEDDO provided equipment that Army could have purchased but did not have the resources to do so. Army is using the equipment in its training center and plans to initiate programs of record.
JATAC courses: items 2–4 2. Tactical Site Exploitation 3. IED Awareness Train the Trainer 4. Weapons Tactical Intelligence Level 1 Exploitation	Army thought that it had courses covering the same material. General comment on JATAC courses: these are developed, kept on the shelf, and then provided in response to demand.	Not Duplicative. JATAC courses are available to the Services and are used in response to capacity shortfall. They are similar, but used in different settings with different audiences.

<sup>14</sup> These were removed after meetings established that the Service did not understand, or JIEDDO did not sufficiently explain, some aspect of the JIEDDO initiative. An example was a JIEDDO program named similarly to a Service program, but did not in fact have any content beyond a funding line. These were removed by mutual agreement.

**Table 2.5**  
**Air Force–Identified Duplicative Programs and RAND Team Assessment**

<b>Program/Description</b>	<b>Reason for Identifying Program as Duplicative</b>	<b>RAND Team Assessment</b>
1. Inter-Service Advanced K9 course  JIEDDO course focuses on detection of IEDs	Air Force suggested (but did not include on its spreadsheet) in one of the meetings that this might be duplicative with its military working dog (MWD) courses.	Not Duplicative. Air Force MWD course does not have sufficient capacity to meet the demand, and the JIEDDO course is being used extensively by other Services. The course is expected to transition to the Marine Corps in late 2013. The program is similar in audience—dogs and dog handlers—but aimed at a different skillset than the overall MWD assessment.
2. ATAC: Advanced EOD Training Course  Provides EOD technicians current information on projected operating environments	Air Force states that Combat Battlefield Ready Airman training provides the same training.	Not Duplicative. Air Force has limited requirement for this kind of training and thus may be providing it adequately with its own resources. No other Service identified this as duplicative and Special Operations Forces (SOF) stated that it received no other training besides JIEDDO. Programs are similar but aimed at a wider audience.

**Table 2.6**  
**Marine Corps–Identified Duplicative Programs and RAND Team Assessment**

<b>Program/Description</b>	<b>Reason for Identifying Program as Duplicative</b>	<b>RAND Team Assessment</b>
1. Joint Exploitation Training Center (JETC)—Tactical Site Exploitation (TSE)	Course offered at the JETC is oriented toward USSOCOM deployers and is at a higher level of sophistication than the TSE training offered at JATAC. Marine Corps also offers a Training and Education Command–funded TSE course as part of its training.	Not Duplicative: JETC and Marine Corps TSE training are aimed at different audiences and involve different levels of expertise.
2. Compact Metal Detector/Metal Detector Operator’s Course	Associated with new equipment introduction and offered across Services.	Not Duplicative: These are finite initiatives associated with introduction of particular systems that are due for T3C in FY15. They are not the same as ongoing Marine Corps training in metal detector use.
JATAC courses: items 3–7	Same general comment as applied to Army: courses are developed, put on the shelf, used as needed in response to demand.	Not Duplicative: These are available to Services and used in response to capacity shortfall. They are similar but used in different settings with different audiences.
3. TSE (platoon level, non-SOF)		
4. Dismounted C-IED tactics		
5. Attack the Network		
6. Outside the continental United States (OCONUS) C-IED Awareness Train the Trainer		
7. OCONUS Hand-held detectors		

In short, there is little evidence of duplication among training programs or courses. Even in similarly named courses or programs, assessment shows that these are aimed at different training

audiences and/or have different objectives. Moreover, in cases where a JIEDDO-initiated training program is beginning, and a Service effort is developed to take its place, the resulting overlap is temporary and serves to add capacity, not wastefully duplicate it.

The tasking called for an assessment of value when something was identified as duplicative or similar. We note that there are essentially no instances of complete duplication and relatively few cases of close similarity. We also note that Services or CCMDs did use the programs provided and indicated that they used these to fill gaps or add capacity. Put another way, the initiatives provided value to the end user—to the extent that they were used when offered. This is not to say that the Services might not have been able to provide the same training with equivalent resources and authorities, nor does it give a specific value metric that allows a comparison between JIEDDO training and some alternative. It does say that the products were used either as a bridge or as an addition to capacity.

### 3. Assessment of Duplication in Training Functions

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Functions are inherent to an organization, while programs are specific outputs. In this chapter, we discuss our assessment of JIEDDO training function duplication.

#### Methodology for Assessing Training Functions

We started by identifying JIEDDO training functions. We identified these by review of foundational documents and validated the list with JIEDDO, the Services, and USSOCOM representatives. At the highest level, there are three primary training-related functions:

- Advise and assist OSD and Services on all matters related to the IED threat and its defeat, including training
- Support Service and CCMD training activities by providing direct support, analysis, and subject-matter expertise
- Identify, develop, implement, assess, and, as appropriate, T3C C-IED training programs. Included in this overall function are several sub-functions, which we will consider separately.

To assess these functions, we first provided the Services and USSOCOM the opportunity to comment on whether they believed that JIEDDO training functions were duplicative to ones performed by their organizations. While for the assessment of training programs we requested that the Services identify the program attributes that the JIEDDO and the Services had in common, with the assessment of training functions we asked only for a subjective assessment, to be submitted as commentary along with the more formal assessment of training programs. After receiving these inputs, the RAND team examined in detail the functions JIEDDO performs for other agencies, specifically using fused intelligence to provide training products, providing support to Service-conducted C-IED training activities, and responding to specific CCMD requests. The purpose was not to examine whether the Services or any other agency did or did not conduct similar activities. In general, they did and do. Instead, we looked at whether JIEDDO's activities were at a different level of analysis or had a greater degree of focus than existing counterparts. In addition, we separately assessed the training functions that JIEDDO conducts that allow it to identify requirements, develop capabilities, and implement and assess these capabilities. These functions were assessed not in terms of their similarity to comparable Service processes but in terms of the resulting products. The fact that two processes may look similar or have similar parts does not mean they are the same. They should instead be evaluated in terms of their output.



## JIEDDO Training Functions

### *Advise OSD and the Services on IED-Related Matters (Including Training)*

The first broad function—advising and assisting—has a training component; specifically ensuring that C-IED training across Services and USSOCOM receives the appropriate focus. The Deputy Secretary of Defense is the department’s proponent for C-IED and IED defeat and the Director of JIEDDO reports directly to the Deputy Secretary to support this proponenty. The Director of JIEDDO serves “as the principal advisor to the Deputy Secretary of Defense and the principal advisor to the Chairman of the Joint Chiefs of Staff on IED Defeat matters.”<sup>15</sup> The JIEDDO Director’s responsibilities include identifying innovative near-term C-IED solutions, serving as the DoD point of coordination and catalyst for initiatives across the full range of efforts necessary to defeat the IED threat, and integrating all IED defeat solutions throughout DoD.<sup>16</sup> JIEDDO is unique in being specifically created to provide high-level capability to focus on the threat. The decision to create such an organization puts it in a position of being a focused advocate and advisor in ways that other organizations do not duplicate. The question of whether singular focus is appropriate, given the range of other potential threats, is a different issue. Given a desire for singular focus, JIEDDO is bringing that focus in ways other organizations do not.

### Overall Assessment

This function is not duplicative with any Service or USSOCOM function. No other organization has a specific charter for C-IED, and no Service or other organization has the latitude or focus of JIEDDO. No single Service looks at IED issues across DoD; no Service reported this as a duplicative function when asked; and, as summarized in the previous chapter, we found no duplication in the training programs proposed.

### *Support Service and CCMD Training Activities*

This function includes such activities as C-IED SME support to train trainers, develop scenarios, and assess training exercises. It also includes activities that provide access to intelligence data on current IED threat developments and to JIEDDO-developed C-IED tactics, techniques, procedures, and lessons learned (TTPL) information to allow Services, USSOCOM, and units to execute their own C-IED training activities and programs.

There are two major differences between the activities that fall under this function and those in the training programs described in the previous chapter. The first is that these are Service/CCMD-conducted training activities that JIEDDO *supports*, whereas the training programs discussed in the previous chapter are ones that JIEDDO *conducts*. The second is that

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<sup>15</sup> Department of Defense Directive Number 2000.19E, 2006.

<sup>16</sup> See Department of Defense Directive Number 2000.19E, 2006.

these activities are ones that JIEDDO will continue to provide as long as there is a need, while the training program initiatives are ones JIEDDO develops and implements with the intent of turning them over to the Services if the Service desires.<sup>17</sup> Three JIEDDO organizations have major roles in regard to this support function. We discuss these next:

#### Counter-IED Operations Integration Center

The COIC is an organization within JIEDDO that attempts to take a holistic view of the IED threat, particularly as it relates to attacking networks. It uses information from ongoing operations and multiple intelligence feeds to develop a picture of the C-IED environment that works to stay ahead of—rather than react to—the threat. It has two major training functions. One is internal, to train its analysts and the users of its products in specific techniques. The second is to provide up-to-date training on the results of the fused analysis. This is accomplished by providing both products and on-site advisers, who are embedded in tactical units and rotate into theater.

COIC directly supports real-world warfighter support operations by fusing operational information, intelligence, and technology and conducting analysis to enable the defeat of threat networks that employ IEDs. Another important activity is establishing and maintaining an up-to-date global operational and intelligence picture of threat networks. An extensive set of relationships with the key organizations in the C-IED and larger intelligence communities and other organizations supporting and benefitting from the COIC activities has been established. An important component is embedding COIC SMEs in deployed units to support their C-IED operations and providing them real-time “reach-back” support from the non-deployed COIC elements. The embedded COIC personnel rotate between time with deployed units and with the COIC. This real-world, real-time support not only benefits operational forces, but also gives COIC (and JIEDDO) a constantly updated understanding of the IED threat, best practices/solutions for defeating that threat, and an understanding of areas needing improvement.

COIC has established a network capability to support effective AtN collaboration across the C-IED community. This allows the full community to benefit from COIC’s efforts and facilitates COIC’s ability to collect, fuse, and analyze C-IED and AtN information and to vet possible gaps and potential solutions across a wide range of sources.

COIC also performs direct and indirect training support activities. Direct training includes providing SME support for service and CCMD training exercises. This support to exercises includes updating IED aspects of training scenarios, providing train-the-trainer support, and providing C-IED–related training feedback during the exercises. As with the support to deployed warfighters’ planning and operational execution, this not only supports the real-world operational

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<sup>17</sup> The exceptions are the training programs that are conducted in theater. Currently, there is no intent to turn these over to the Services or CCMDs.

effort, but also gives JIEDDO an understanding of current on-the-ground operational practices, constraints, and possible areas for improvement.

Another COIC training support activity is the “Attack the Network” University (JIEDDO COIC University [JCU]). JCU offers a wide range of modular AtN-related training courses, which support JIEDDO internal training and provide training for CCMD; conventional and special operational forces; DoD; other federal agencies; and NATO and (through U.S. elements) coalition partners, leaders, and staff members. JCU modules can be delivered at the COIC or at off-site locations. E-learning and distance learning modalities are available for portions of selected courses and course modules and to provide refresher training for graduates.

#### Joint Center of Excellence

The JCOE training efforts also include development, dissemination, and integration of new TTPs and best practices to enable units to be more effective in the C-IED fight. To support this activity, JCOE conducts post-deployment unit C-IED debriefings and maintains an on-line repository.

JCOE has four Service C-IED Centers of Excellence (COEs)—Air Force, Army, Marine Corps, and Navy—that support the integration of C-IED training efforts across DoD. These Service COEs are located in high-throughput training locations to support sharing and incorporation of relevant TTPs and best practices into C-IED training across the Services. They also provide functional JIEDDO C-IED training expertise to support Service development of C-IED training capabilities and to support execution of Service training exercises. These Service COEs also support JIEDDO efforts to identify C-IED training gaps and solutions and to maintain situational awareness of the status of C-IED training programs across the Services.

#### Joint Fusion Center/Joint Expeditionary Team

The Joint Fusion Center (JFC) maintains situational awareness of global IED events and trends and the range of JIEDDO, coalition, and interagency C-IED efforts, synchronizing JIEDDO and C-IED information and analysis. JFC supports training by facilitating situational awareness among JIEDDO training developers.

The Joint Expeditionary Team (JET) operates under the JFC. JET provides SME teams to units to train, advise, observe, analyze, collect, and disseminate TTPLs and best practices to mitigate the IED threat using material and non-material solutions. JET support is provided to U.S. military elements, other federal agencies, U.S. coalition partners, and other entities as authorized. Support to U.S. forces is provided both during pre-deployment training and in theater. These teams rotate between the supported elements and JIEDDO headquarters.

#### Overall Assessment

The function to support Service and CCMD training is not duplicative with the C-IED efforts of Services or CCMDs. These activities are focused on the C-IED mission. They exist in

conjunction with Service programs and contribute focus and heightened levels of attention. They are provided either in response to need or as a result of sensing mechanisms embedded in relationships with theater units. The activities continue only as long as requested by Services. When asked, Services did not identify activities performed under this function as duplicative.

### *Identify, Develop, Implement, Assess, and T3C C-IED Training Programs*

This last function refers to the processes JIEDDO employs to ensure that requests for training capability development are considered in a timely manner and rigorously reviewed, and that a framework is in place to assess the resulting capability. This function included a number of sub-functions, which are as follows: <sup>18</sup>

- Respond to CCMD/Service requests for C-IED training and training enablers.
- Collect, fuse, and analyze IED threats to determine C-IED capability gaps and potential training solutions.
- In coordination with the Services/OSD staff, assess and prioritize potential C-IED training programs (and solutions) for JIEDDO implementation.
- Develop and implement training programs selected for JIEDDO implementation.
- Assess JIEDDO-implemented training programs/initiatives and support T3C.

Collectively, these sub-functions ensure that JIEDDO training initiatives are based on a focused and comprehensive assessment of the threat, have well-developed requirements, are properly prioritized, and pass through a process to determine whether the initiatives meet an enduring need. JIEDDO has developed a number of processes to properly review, assess, initiate, and develop programs.

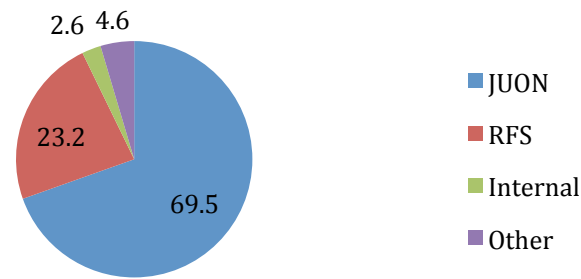
### *Respond to CCDR/Service Requests*

The first step in responding to requests is to establish and validate the requirement for a training capability. If the requirement is not correctly understood or specified, the resulting capability is unlikely to be useful or effective. CCDR requests generally flow through the well-established JUON process, which provides sufficient oversight and reach-back into the other Services to ensure that the requirement is understood. It requires each Service to coordinate and ensure that there are no duplicative capabilities. Figure 3.1 shows that 69.5 percent of the requests for all JIEDDO initiatives with some kind of training connection (including those associated with AtN and DtD as new equipment or system development training) come through JUONs. Requests from a Service (RFS) account for 23.2 percent, JIEDDO internally initiated 2.6 percent of the requests, and the other 4.6 percent represents a variety of singly initiated projects.

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<sup>18</sup> See Department of Defense Directive Number 2000.19E, 2006; and JOFG, 2013.

**Figure 3.1**  
**Why Was the Program Initiated?**



SOURCE: JIEDDO.

NOTE: "Other" is a number of singly initiated programs with no repeated process.

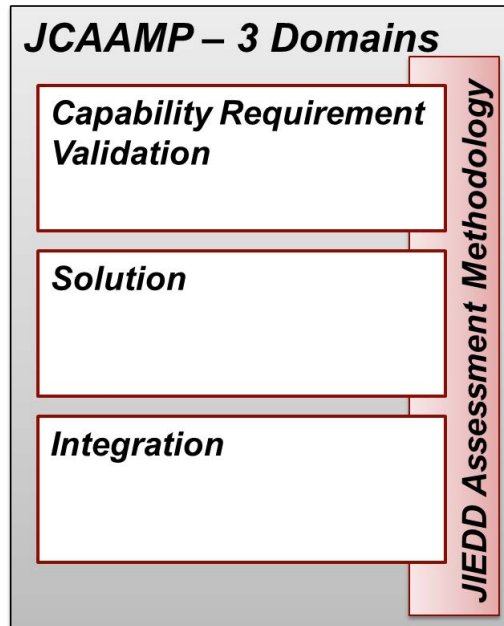
While the JUON process involves a level of review before even being assigned to JIEDDO, RFS have only the safeguards that the originating organization imposed, for which there is no single model. Since several TtF and JATAC initiatives are received through RFS, this issue has particular relevance to this study. To ensure that these initiatives receive some level of review, JIEDDO uses an alternative process: JCAAMP. JCAAMP is the overarching process that JIEDDO uses to determine C-IED capability gaps; to identify, validate, and prioritize potential material and non-material training and non-training solutions; to place promising C-IED capabilities in the hands of warfighters for evaluation and fielding; and to support transfer of proven C-IED capabilities to the Services.

DRCD leads the JCAAMP. This aligns with DRCD's charter to lead efforts to identify C-IED capability gaps and to rapidly develop, acquire, integrate, assess, and field proven materiel and non-materiel, training and non-training C-IED initiatives. For non-training initiatives this means ensuring that each includes the needed training elements. For training specific initiatives the JCOE plays a key role in supporting these DRCD efforts.

While the JCAAMP has areas for input from the other Services, it depends on Service involvement to be effective. If Service representation is lacking, duplication could occur. As a complication, not all RFS go through formal Service channels, and it may be possible for duplication to occur in those cases. Units can request that JIEDDO develop and implement a low-cost solution, and this is often done through TNS. Because these are low-cost initiatives, JIEDDO normally uses more informal processes to validate and initiate development than the ones outlined below, thus increasing the chance of duplication. We did not observe any instances of such duplication, but only postulate the possibility.

JCAAMP includes three domains: a capability requirement validation domain, a solution domain, and an integration domain (see Figure 3.2). We will first consider the capability requirement validation domain.

Figure 3.2  
JCAAMP Domains



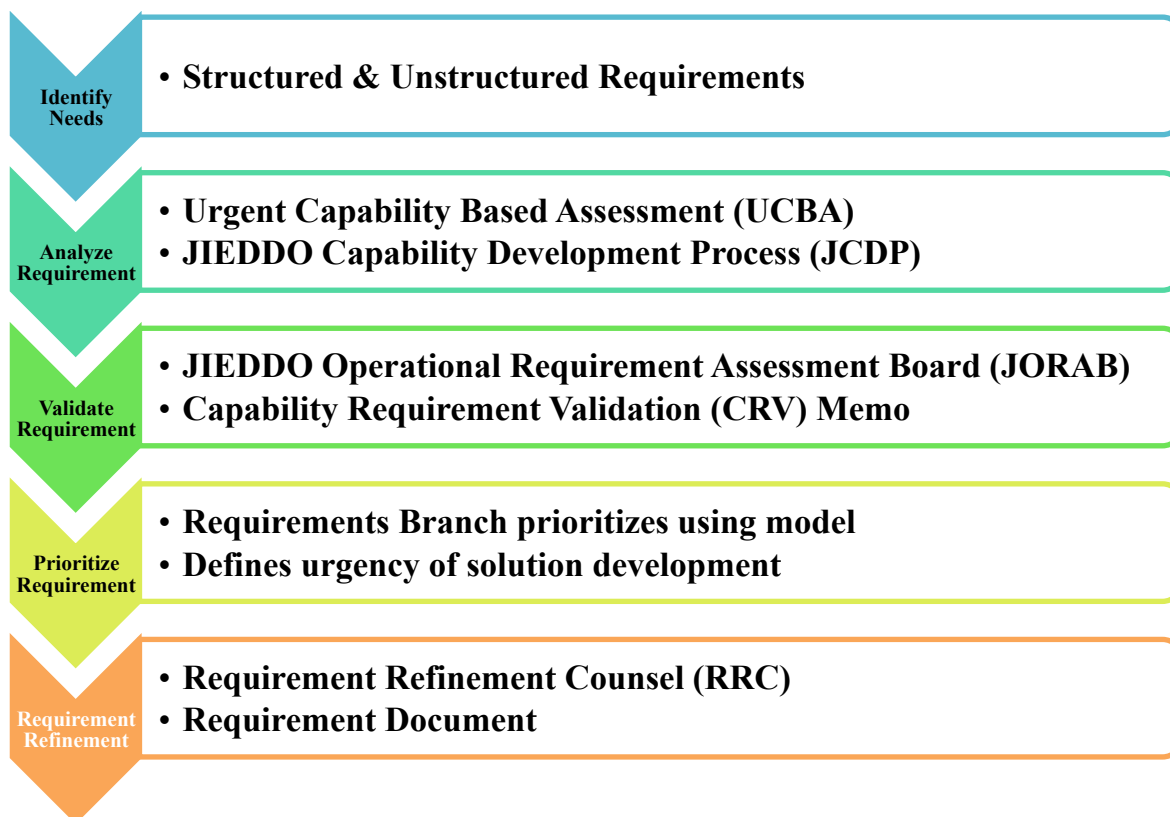
NOTE: The chart is a graphical adaption of the process described in the JIEDDO, 2013, slide 4.

Within the Capability Requirement Validation domain are three phases: identify, prioritize, and validate. In the JCAAMP overview, the requirement process is defined with the following tag line: “JIEDDO works concepts and capabilities to answer immediate warfighter requirements and mitigate risk to Joint Force ahead of the JUON.”<sup>19</sup> But what if a JUON never comes about? How are Service requests handled? The JCAAMP overview describes two sub-processes within the “Analyze Requirement” process (see Figure 3.3).

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<sup>19</sup> JIEDDO, 2013, slide 10.

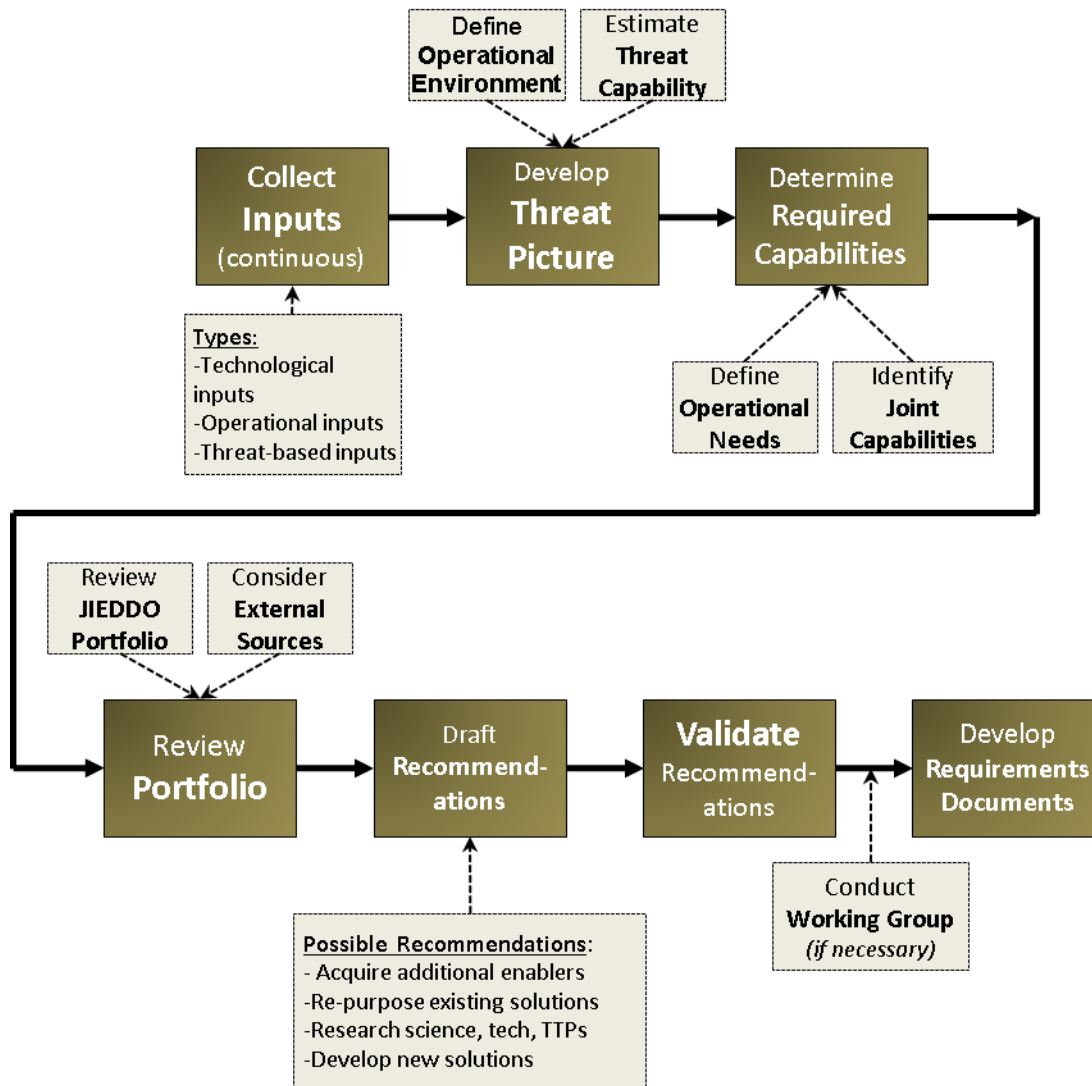
**Figure 3.3**  
**JIEDDO Requirements Process**



SOURCE: JIEDDO, 2013, slide 11.

The JIEDDO Capability Development Process (JDCP) is illustrated in Figure 3.4. The Urgent Capability Based Assessment (UCBA) looks at the structured or unstructured requirement and assesses the requirement relative to identified capability. This UCBA then serves as an input into the JCDP. While the JCDP is not well explained in terms of where it fits, it is used to inform organizational investment decisions, support JIEDDO strategic planning, develop future C-IED capabilities, and facilitate other JIEDDO processes (Figure 3.4). Ultimately, JCDP enables JIEDDO's responsible resource allocation to address IED threats and capability shortfalls in an effective manner. From Figure 3.3 and discussions with JIEDDO, we know that there are a number of working groups and boards with Service representation that also support this sub-function.

**Figure 3.4**  
**JIEDDO Capabilities Development Process**



NOTE: This is a RAND version of JIEDDO, 2013, slide 8.

The key group for needs analysis or requirement analysis is the JIEDD Operational Requirement Assessment Board (JORAB). The JORAB has Service representation, to the degree each Service supports the effort. This is a key opportunity for the Services to identify duplicate or similar efforts and to ensure that initiatives support their C-IED training needs. The Services can provide input and have a vote, but not a veto. Following this board is an O-6-level board (the JR2AB—JIEDDO Requirements, Resources, and Acquisition Board) and an O-7-level group (the SRS—Senior Resource Steering Group), depending on the funding threshold. Each group is an opportunity to raise issues of duplication and to ensure that the initiative has value.



Collectively, these processes provide a framework for assessing and responding to CCDR and Service requests for support. There are formal mechanisms through the established JUON process and mechanisms for considered unstructured requirements originating from operating units. While some initiatives have fewer opportunities for review than others, all receive some level of review.

#### Collect, Fuse, and Analyze IED Threat to Determine C-IED Capability Gaps and Potential Solutions (Including Training)

This sub-function relates less to direct intelligence support of operating units—which parts of JIEDDO do—and more to correct identification of threats requiring some kind of response and developing training options for dealing with capability shortfalls. To a degree, these originate from shortfalls identified by CCMDs, Services, and units and are considered as initiatives. JIEDDO directly contributes to identification of current shortfalls both through its own organic analysis and synthesis capability and its ability to directly monitor events at the tactical level. All these inputs are reflected in the JCDP.

However, these are somewhat reactive processes, reflecting that something has happened. JIEDDO wants to not just meet but also anticipate future threats. For this, it also uses the insights provided by the JFC and COIC. COIC's charter does not work on the same requirements-solutions timeline typically seen in addressing issues, and its charter calls for it to get ahead of problems rather than wait for them to develop. This means it must anticipate requirements, rather than react to them, so there may not be a clear requirements development path. COIC's institutional understanding of the current IED threat, C-IED capabilities, and needed areas for improvement and effective C-IED practices enables it to provide important support to the identify, develop, implement, and T3C C-IED training programs function. An important aspect is the ability to responsively support content update of JIEDDO's training programs, activities, and products. This is not a capability replicated anywhere in DoD. Moreover, JIEDDO's direct involvement in supporting C-IED operational planning and execution, as well as ongoing Service and CCMD C-IED training, provide a high level of C-IED situational awareness and understanding, which is again a capability not replicated anywhere else in DoD.

#### Assess and Prioritize Potential C-IED Training Programs (Solutions)

After identifying potential gaps and developing solutions, JIEDDO uses the JCAAMP to both assess the effectiveness of proposed solutions and to prioritize among those possible solutions. The specific tool for doing this is the Joint Assessment Methodology, which provides specific procedures for ranking and scoring initiatives. This tool, in addition to JIEDDO's situational awareness of the C-IED problem and continued Service input, helps ensure that the most important and effective initiatives receive highest priority.

## Develop and Implement Training Programs

Once requirements are validated and potential solutions prioritized, the next step is to develop and implement programs. JIEDDO uses well-developed processes to execute these sub-functions. Like the Services, JIEDDO uses Broad Agency Announcements (BAAs) to solicit proposals in response to C-IED requirements. BAAs provide the vehicle for competitively selecting and developing a specific system or hardware procurement. JIEDDO follows the procedures prescribed by the Federal Acquisition Regulations, subpart 35.016, to prepare and publish BAAs and to evaluate the proposals received as a result. The DRCD Research and Engineering Division BAA Branch is responsible for managing the JIEDDO BAA process with the support of the Research and Engineering Development Branch. The JIEDDO BIDS Portal enables the BAA process and records the receipt, evaluation, and initial disposition of every proposal submitted in response to a JIEDDO BAA.

## Assess JIEDDO-Implemented Training Programs/Initiatives

Once programs are begun and capability fielded, JIEDDO performs assessments to ensure that the capabilities have been correctly delivered and actually meet the requirement. The Joint Assessment Methodology is used to score initiatives during the prioritization stage and during the program development.

JIEDDO does require that every program have a T3C plan. This plan is intended to force an assessment and a decision concerning a program's status after the period of its initial development and fielding. Note that the T3C plan is not a commitment from the affected Service, but rather JIEDDO's plan for what should happen to the program. The process identifies four potential future states, as listed below:

1. **Transfer.** The training transfers to a Service. Funding also transfers to the Service, but not with the intent of being funded through the Service Program Objective Memorandum.
2. **Transition.** The training transitions to a Service. In this case, funding is also transferred to support the program for one to two years. After which, the Service is responsible for funding the program through their planning, programming, budgeting, and execution process.
3. **Terminate.** The training will be terminated at the end of the JIEDDO-run program. In essence, the program was important at some phase during the contingency but is no longer needed.
4. **Continue.** JIEDDO will continue to run the program after its initial start but will not transfer it because of its limited applicability outside the current contingency.

The T3C process functions as a tool to ensure that priority programs have the opportunity to be sustained and to prevent the continuation of duplication. If a capability has functioned as a stopgap but is no longer needed because Services have filled the gap, it can be terminated. If a capability is worthwhile, there are mechanisms for keeping it in service. If it is wholly duplicative, it will last no longer than three years and will likely be identified earlier in the process as the T3C plan is developed.

We observed a lack of effectiveness measures that related metrics to individual programs and their effect on reducing casualties. There were statistics at the strategic level—relationships between overall casualties and level of overall effort—but nothing at the tactical level to measure the performance of the individual initiatives. Assessment of these initiatives took place to support T3C, but it does not appear to be as rigorous as it might be. We recommend developing a more formal end-end assessment process.

#### Overall Assessment on Identify, Develop, Implement, Assess, and T3C C-IED Training Programs

JIEDDO has established and implements a number of processes to ensure its C-IED training programs meet requirements, are delivered, and are assessed, both in solutions development and after delivery. Collectively, these sub-functions are intended to ensure that programs add benefit and do not duplicate those of Services or USSOCOM. While it is true that every Service and CCMD has within its organizations some capability to identify threats, fuse intelligence, develop requirements, and develop and implement capabilities, similarity in structure or appearance does not necessarily imply similarity in results. To the degree that JIEDDO looks at the same issues, these functions will overlap and processes for addressing such issues will at least appear highly similar. In some cases, there will even be duplication between requirements validation in a JUON or in a Service process and the output of the JCAAMP. The question is thus whether these similar-looking processes serve different purposes.

We know from the work on training programs that there is little duplication of programs between JIEDDO and other providers. We found that Services requested initiatives and that delivered initiatives were used for at least some period of time. This result would suggest that JIEDDO performs the function of identifying, developing, fielding, and assessing these programs effectively through the processes we have described. In particular, the T3C process, which is part of this overall function, does an effective job of minimizing duplication even if some initiative makes it through the requirements validation process. So it is safe to say that if there is similarity between JIEDDO and Service or USSOCOM training development and assessment functions, it is a useful similarity in which different organizations are looking at different aspects of a problem. There are, however, some risks and process shortfalls.

First, JIEDDO has a number of ways for requirements to enter its process, but does not ensure that Services have validated the requirements, except by encouraging participation in the JORAB and other boards. If a request comes from a unit—potentially at a low level—it might go through JCAAMP before the Service responsible for sustainment and integration becomes aware of it. This could lead to training that meets the needs of an individual unit but does not meet overall Service goals. Moreover, Services have a vote in JIEDDO processes, but not a veto. While our interviews indicate that JIEDDO generally does not go against stated Service positions, the possibility remains, especially when the request comes in from a local commander or from one of the JIEDDO organizations claiming anticipated rather than current need. One

consideration might be to give the Services a veto, rather than just a vote, with only the CCDR having the ability to override a Service veto.

Second, JIEDDO has only recently begun development of a comprehensive list of available products and initiatives, and does not have a taxonomy to establish what training programs should address. Services have different course catalogs kept in different formats, making it difficult to assess content. Related to this is the lack of a formal, program-based end-end assessment tool that captures individual performance. Assessments occur as part of the T3C process, but the assessments would be improved by a more formal approach.<sup>20</sup>

## Training Function Conclusions

JIEDDO is a unique organization with unique authorities and capabilities. It brings focus and raises the visibility of the IED threat and provides specialized advice and insight to DoD's leadership and support to Service and USSOCOM training programs. These functions are not duplicative, but as a matter of policy, DoD has to decide the relative priority of this threat versus others.

In terms of training capabilities, JIEDDO and Service C-IED training functions have the same general goal—improving C-IED training—but they have generated different capabilities. The review of training program duplication among JIEDDO, USSOCOM, and the Services documented in Chapter Two shows little practical duplication in terms of training objectives, training audiences, and modalities. Moreover, the T3C process acts to limit the possibility of any long-term duplication even further. Given the consideration that many different organizations were placing emphasis on responsively supporting a major operational need, this lack of training capacity duplication is a positive finding. The consideration that many different Service organizations are developing and fielding C-IED training capabilities using similar functions and processes means that there is a possibility for inefficiency, but the processes in place provide effective coordination and integration to mitigate this risk. This does not mean that the processes are flawless, nor does it imply that the JIEDDO model would have been the only way to deliver the capability or that the training was optimal for the threat. Instead, it means that the JIEDDO model was different than what Services provided and that the Services and CCMDs used the JIEDDO products.

It is worth noting that, unlike some Services, threat assessment, requirements generation, solution implementation, and solution execution were common to one organization. This may be

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<sup>20</sup> To carry out this study, the RAND team was required to both develop a taxonomy and then develop a methodology to indicate whether a program was duplicative and had value. These are functions that organizations normally would provide for themselves and thus be readily capable of answering questions such as those posed in the NDAA. A taxonomy and development of assessment metrics will likely be necessary for JIEDDO or for whatever organization takes up JIEDDO's functions.

another place where JIEDDO's unique authorities and organization allow it to respond more rapidly.

## 4. Findings and Concluding Thoughts

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In this chapter, we provide the key findings of our analyses of training program duplication and training function duplication. Then, we offer some overarching concluding thoughts.

### Key Findings on Training Program Duplication

There is little evidence of duplication among training programs or courses. Even in similarly named courses or programs, assessment shows that these are aimed at different training audiences and/or have different objectives. Moreover, in cases where a JIEDDO-initiated training program is beginning and a Service effort is developed to take its place, the resulting overlap is temporary and serves to add capacity rather than to wastefully duplicate.

This is not the same as saying that Services might not have developed a similar capability had they received the same amount of money and the authority to use it for any account. Rather, it is to say that JIEDDO training programs addressed problems that the Services were not separately addressing.

### Key Findings on Training Function Duplication

The function of advising OSD, CCDRs, and the Services and focusing DoD C-IED efforts is not duplicative. No other organization has such a charter. Likewise, JIEDDO's function of supporting Service and USSOCOM training activities is not duplicative. Whether such a singular focus or support level is beneficial overall is a policy matter for DoD to consider as it looks at the range of asymmetric threats and responses. But there is no evidence pointing to duplication.

JIEDDO also performs a number of functions that are related to capability development. To a degree, these are similar to processes performed by the Services. Like the Services, JIEDDO assesses, plans, develops requirements, and submits proposals to budget processes, and develops and fields training capabilities. However, our analysis indicates that JIEDDO has successfully developed organizational capabilities and processes to minimize chances of program duplication and to ensure added value. Processes may look similar—and may even have many of the same steps—but they result in different, more C-IED focused outputs. There are risk areas, however, and these should be considered for correction. Specifically, processes must be in place to ensure that Service concerns or objections to an initiative are identified early in the development process and that Service participation is more than a formality. Finally, JIEDDO should consider improvements in its process for assessing fielded capabilities, with more program-specific details relating mission performance to actual capability delivered. An assessment does take place as part of JIEDDO's capability process, but it would be improved by more formal ongoing collection and analysis of data.

## Concluding Thoughts

JIEDDO has capabilities and a set of processes that allow responsive development of capability, minimize duplication, and provide benefit. As the future of JIEDDO is debated, now would be a good time to assess the lessons learned from the JIEDDO experience for the next stopgap organization that is created to address an asymmetric threat.

DoD's current plan for transforming training emphasizes the need for institutional adaptability for achieving operational success against adaptive adversaries.<sup>21</sup> Given that IED are expected to remain a significant part of that threat, a DoD capability to quickly evolve training solutions tailored to meet the specific C-IED needs of deploying forces would logically be an important component of this future training system.

Whether JIEDDO should be continued—and, if so, in what form—are questions beyond the scope of this report. Yet assuming that the nation wants to maintain the ability to rapidly respond to rapidly evolving threats, JIEDDO as an organization that has shown the capability to respond to evolving threats by generating non-duplicative training products used by the Services. JIEDDO brought (1) the ability to rapidly respond to asymmetric challenges, (2) ability to assess specific asymmetric threats and provide tailored training capability in a timely way, and (3) a supplement to Service capacity to respond to CCDRs' and components' urgent needs. During its short lifespan, JIEDDO evolved processes and organizational capabilities to deliver training programs while minimizing potential duplication. Other organizations might have been able to bring the same capabilities, but it can be stated that the JIEDDO model does work in several key dimensions, with limitations and potential improvements as previously noted.

However, no JIEDDO process includes a continuing review of whether the threat identified warrants a degree of attention greater than every other threat. JIEDDO will act against IEDs with intensity and focus. Nothing in its charter or processes will cause it to look at anything else. DoD will have to make such a determination at a different level. Certainly, there is reason to suspect that IEDs will remain weapons of choice in asymmetric campaigns and that the U.S. military will likely need to retain ability to rapidly and effectively respond. This study suggests that JIEDDO has the organizational capabilities and processes to do this.

DoD could use the JIEDDO model, or some variant of that model based on what has been learned, as a basis to respond to other asymmetric, contingency-based challenges that require a rapid response not covered by Service core programs. This project looked specifically at training and did not attempt to assess the battlefield effectiveness of the training delivered. It did show that the organization is capable of assessing need and providing capability that was not being generated anywhere else in the time frame requested. Additional assessment across all of

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<sup>21</sup> See Department of Defense, *Strategic Plan for the Next Generation of Training for the Department of Defense*, September 23, 2010.

JIEDDO's LOOs would be needed to evaluate the relative benefits of speed versus effectiveness versus efficiency.



## Appendix: JIEDDO Initiatives

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This appendix contains the list of initiatives currently being pursued by JIEDDO. There are three tables. Table A.1 lists separate program initiatives that either directly provide training (TtF) or require training as part of an equipment or system development initiative (AtN and DtD). These have been identified and evaluated through the JCAAMP system. Table A.2 provides the courses currently being offered under the JATAC contract. Table A.3 lists initiatives submitted under a TNS, a less formal process for low-cost initiatives. The RAND team did not edit JIEDDO's submissions, so the inputs on the table are JIEDDO's. This information was provided by JIEDDO to the RAND study team and to Service C-IED and training representatives, as well as to USSOCOM and the Office of the Assistant Secretary of Defense Readiness, for comparison with Service programs, with results as discussed in the report.

Columns are divided as follows:

- Name of the initiative
- Objective. Goal that the initiative is intended to satisfy. If the initiative is a TtF effort, the training objectives are listed. If the training is associated with a system or equipment development, the terms used are "Training in support of development initiative."
- Level/Depth. Level of expertise required to receive the training, from "introductory" to "intermediate" to "advanced." Introductory training programs are for non-specialists and serve to provide broad familiarity. Intermediate programs are directed at audiences that require familiarity with C-IED operations but are not themselves C-IED specialists. Advanced programs are for C-IED specialists, such as EOD technicians. "TBD" cases are generally associated with AtN or DtD new equipment or systems development and indicate that no decision has yet been made on the training audience or some other aspect of the program. There are a number of such cases in the database. They were not identified as duplicative in the review.
- Audience. Individual or unit intended to receive training.
- Location. Where the training is conducted, in particular whether the training is in CONUS prior to deployment or in theater, or both.

**Table A.1. JIEDDO's Three Lines of Operation: Attack the Network, Defeat the Device, and Train the Force**

<b>Current Initiative</b>	<b>Objective</b>	<b>Level/Depth</b>	<b>Audience</b>	<b>Location</b>
JKnife	To provide a web-based vehicle to exchange information, consolidate best practices, and respond to requests for information related to IED defeat efforts. J-6 manages mapping of the JKnife network architecture.	Intro thru advanced	Mounted/Dismounted/ SOF/Naval/Aerial	Continuous worldwide
(Stalker) 3D Microwave Imaging	Training Support to Developmental Effort	TBD	TBD	TBD
3-Band Long-Wave Infrared Camera for Disturbed Soil (3BLDS)	Training Support to Developmental Effort	TBD	TBD	TBD
3-Band Long-Wave Infrared Camera for Disturbed Soil (3BLDS)	Training Support to Developmental Effort	Advanced	TBD	TBD
3D Cameras	Train units on the deployment and usage for the Leica 3D camera	Intro thru advanced	Tactical level, EOD units	Training conducted stateside at Aberdeen Proving Ground prior to deployment
Advanced Situational Awareness Training (Resident & Mobile Training Team [MTT] only)	To create a mindset through the integration of enhanced observation and human behavior pattern analysis	Intermediate	Deploying units	Resident Fort Benning & MTT Home station
Airborne Gradiometer	Training Support to Developmental Effort	TBD	TBD	TBD
Airborne Ground Penetrating Radar	Training Support to Developmental Effort	TBD	TBD	TBD
Airborne Hostile Detection System (AHDS) "Spectral Bat"	Operators will be supplied with technical manuals for training, maintenance, and operations. Operator training includes hands-on training with actual SPECKLES Silver Fox hardware and covers: Mission planning; unmanned aerial system (UAS) assembly and maintenance (unmanned aerial vehicle and ground control system); Launch operations (ground and vehicle); Flight management (static simulation and dynamic); Recovery operations; Payload operation (moving and target tracking)	Advanced	TBD	TBD
AN/PLT-5 Backpacks	Training Support to Developmental Effort	TBD	TBD	TBD
ANVIL JIEDDO IED Training and Education	To arm JIEDDO personnel with better understanding of the enemy to more effectively attack the network. Naval System Management Agency	Intro thru advanced	Individual	Home station

<b>Current Initiative</b>	<b>Objective</b>	<b>Level/Depth</b>	<b>Audience</b>	<b>Location</b>
Army Research Laboratory Airborne Ground Penetrating Radar (GPR) Exploration Support	Training Support to Developmental Effort	TBD	TBD	TBD
Arrow-Lite	New equipment will be integrated into existing Program of Instruction (POI)	Advanced	Battalion	Theater
AtN Training Simulator	Incorporate real-world TTPLs, and focus on Counterinsurgency operations with an emphasis on AtN for C-IED analysis and IED defeat.	TBD	TBD	TBD
Advanced Analytic Applications	Supplement existing Distributed Ground Common System–Army Standard Cloud training plan and update to include training material for plug-ins as they are delivered. Concentrate on the following three principal training goals: (1) Minimize impact on users, (2) Provide an understanding of key system capabilities, and (3) Enhance user abilities to access and analyze full-motion video data. User feedback will guide future training material. Expand and develop training plan in collaboration with the Fort Huachuca Experimentation and Analysis Element and the Training and Development Command Capability Manager.	Advanced	Unit	Home station
BABELFISH	The Hunter UAS deployment (phase 1) the contractor shall be responsible for providing fully trained operators to command and control the RF Emitter Mapper and RADAR payloads from the Mission Operations Facility at Hunter Army Airfield in Savannah, Ga. The contractor shall also be responsible for providing two fully trained personnel at an OCONUS location to perform payload pre- and post-flight actions and provide in-country payload maintenance and analysis support.	Advanced	Training for the system operators supporting military operational use of the system is expected to consist of a variety of training methodologies with a heavy reliance on on-the-job training. The system payload operators/maintainer will have ready access to the contractor's CONUS-based engineering SMEs.	Home station
Bane [Pre-Det]	Training Support to Developmental Effort	TBD	TBD	TBD
Beagle	Training Support to Developmental Effort	TBD	TBD	TBD

<b>Current Initiative</b>	<b>Objective</b>	<b>Level/Depth</b>	<b>Audience</b>	<b>Location</b>
Bistatics	The first component involves installation, optimization, and maintenance of the system. The second component of training for the bistatic surveillance system involves the exploitation, analysis and reporting of bistatic surveillance system-derived information.	Advanced	Individual	Theater
Bitter Wind	Training Support to Developmental Effort	TBD	TBD	TBD
Black Kite	Training Support to Developmental Effort	TBD	TBD	TBD
Black Sand	Training Support to Developmental Effort	TBD	TBD	TBD
Building Block	Training Support to Developmental Effort	TBD	TBD	TBD
Building Tactical Acuity for C-IED Operations	Provide EOD teams with ground sign awareness training focused on their unique mission of locating and neutralizing IEDs	Advanced	EOD team members	Home station
Bulk Homemade Explosive (HME) Detection Kit	Operators will receive instructions upon issuance of the kit. Army Armament Research, Development, and Engineering Command (ARDEC) is developing a training support package that includes the Research, Development, and Engineering Command (RDECOM) HME sample kit.	Intro	Individuals	Combat Training Center (CTC), Theater
Canine HME Detection Aids	Training Support to Developmental Effort	Advanced	TBD	TBD
Canine Improvement Monitoring Sensor	Training Support to Developmental Effort	TBD	TBD	TBD
CEASAR Fixed Wing	Understand and employ system Concepts of Operation/Capabilities	Advanced	Individual (electronic warfare officer-specific)	Schoolhouse and Theater
C-IED Training Knowledgebase	Provides an array of multi-media presentations capturing C-IED TTPs from the theaters of operation for later application	TBD	TBD	TBD
C-IED Training Support Mission	Enhance the capacity to perform specific functions and tasks using institutional, operational, or self-development (to include distance learning) domains in order to improve performance of personnel, units, forces, and staffs. (Derived from CJCSM 3500.03B)	Intro thru advanced	All	Home station, CTC, and Theatre
CJTF PALADIN TRAINING SUPPORT TEAM	Training Support to Developmental Effort	TBD	TBD	TBD
COBIT	Training Support to Developmental Effort	TBD	TBD	TBD
COCOM Exercise and Training Support	Supports exercise development, pre-exercise academics, execution, and after action follow-up. Provides both military and contracted SMEs, travel, automation support, and other associated costs	Intro thru advanced	Unit-Platoon Commander, Battalion/Leaders	CCMD and component headquarters

<b>Current Initiative</b>	<b>Objective</b>	<b>Level/Depth</b>	<b>Audience</b>	<b>Location</b>
Compact Metal Detector (CMD) v2.0	Army Research Laboratory is using a modified Marine Corps contractor-provided POI for training.	Intro, intermediate	Individuals	Training is CONUS and OCONUS. JIEDDO provided systems for CONUS and OCONUS training.
Compact Metal Detector (CMD) v2.0	Procure 268 CMD v2.04 for SOF training	Introductory	Deploying units	Home station
CONESTOGA	Training Support to Developmental Effort	TBD	TBD	TBD
Contego	Training Support to Developmental Effort	TBD	TBD	TBD
Copperhead (All Systems)	Host Unit Training. A training package will be provided by the Copperhead team. This training package will include mission-required airspace, declaration package, and tasking, processing, exploitation and dissemination (TPED). TigerShark Support/Maintenance Training. Aircraft Technicians will be thoroughly trained in aircraft systems, troubleshooting, repair, overhaul, logistics, and inventory competencies. Radar Support/Maintenance Training. Radar Technicians will be thoroughly trained in radar electrical and mechanical systems, troubleshooting, repair, overhaul, logistics, data download and archival, and inventory competencies.	Advanced	Individual	Theater
C-IED Dismounted Instrumented Squad Trainer	Training Support to Developmental Effort	TBD	TBD	TBD
Covert Electronic Countermeasures (ECM) Antenna	Training Support to Developmental Effort	TBD	TBD	TBD
Detonator Purchases	Training Support to Developmental Effort	TBD	TBD Effort	TBD
Dismounted CIED Tactics-Master Trainer (DCT-MT)	This course will produce a SME within the Battalion formation that the commander can use to assist in developing home station training and be a "ready resource" within the tactical formation to work solutions to C-IED problems and issues. Therefore, this initiative will fill the identified training requirement, which will increase the effectiveness of C-IED systems ensuring their full potential use for the current fight and future conflicts.	All	Individual/Unit-Platoon Commander, Battalion/Leaders	MTT
Dismounted Interactive C-IED Environment for Training	Interactive training tool for dismounted troops to aid in the recognition of an emplaced IED in a variety of dismounted scenarios.	TBD	Individual	Home station/Theatre

<b>Current Initiative</b>	<b>Objective</b>	<b>Level/Depth</b>	<b>Audience</b>	<b>Location</b>
Dismounted Surge Capability - Equipment	Training Support to Developmental Effort	TBD	UNIT	TBD
Disturbed Earth Viewer (DEV)	Training Support to Developmental Effort	TBD	TBD	TBD
Disturbed Ground Sensing System (DiGSS)	Training Support to Developmental Effort	TBD	TBD	TBD
Disturbed Nuclear Quadropole Resonance	Training Support to Developmental Effort	TBD	TBD	TBD
DRAKO	Training Support to Developmental Effort	TBD	TBD	TBD
DREAMSTALKER	NATO Support Agency C-IED members are trained to absorb DREAMSTALKER analysis mission once capability transitions.	Advanced	Unit	Home station
DRS Fisher	Training Support to Developmental Effort	TBD	TBD	TBD
DSP-27	The user requires no additional skills in order to operate Goldie.	Intro, intermediate	Individuals	JIEDDO provided systems for CONUS and OCONUS training.
EOD Post-Blast Training Course	Provided training to EOD in post-blast analysis.	TBD	TBD	TBD
Expendable Unattended Ground Sensor (E-UGS)	Network exploitation tools training consists of operator checks, system implementation, and maintenance training.	Intro	Unit	CTC, Theater
Exploitation Analysis Center (EAC) USAJFKSWCS Fort Bragg NC	Training Support to Developmental Effort	TBD	TBD	TBD
Explosive Detection Equipment–User Scenario Evaluation (EDE-USE)	Training Support to Developmental Effort	TBD	TBD	TBD
Fisher	Training Support to Developmental Effort	TBD	TBD	TBD
Flaxy Mare	Training Support to Developmental Effort	TBD	TBD	TBD
Forgersnoop	Training Support to Developmental Effort	TBD	TBD	TBD
Forseti	Training Support to Developmental Effort	TBD	TBD	TBD
Future Afghan Man-packable ECM (FAME)	Training Support to Developmental Effort	TBD	TBD	TBD
Gatekeeper On The Move–Biometrics (GOTM-B)	Train in the usage of the device and deployment to forward operational locations	Advanced	Operational level at base checkpoints.	Worldwide
Ghost Ship	Training Support to Developmental Effort	TBD		
Glasswave	The training courses in PED and integration of the GW into unit operations will be modeled on the lessons learned validated during the operational assessment in FY2010/11 and improved afterwards.	Advanced	Individuals	Theater
Golden Breeze	Training Support to Developmental Effort	TBD	TBD	TBD

<b>Current Initiative</b>	<b>Objective</b>	<b>Level/Depth</b>	<b>Audience</b>	<b>Location</b>
Gremlin	Training Support to Developmental Effort	TBD	TBD	TBD
Grey Ghost	Training Support to Developmental Effort	TBD	TBD	TBD
Groundhog	Training Support to Developmental Effort	TBD	TBD	TBD
GUIDE (Global Undisturbed/Disturbed Earth Soil Sampling)	Training Support to Developmental Effort	TBD	TBD	TBD
H Waveguide	Training Support to Developmental Effort	TBD	TBD	TBD
HARD IMPACT (SPIRAL II)	Installs and monitoring	Intro	Installers/Tactical Operations Center	Theater/National Training Center (NTC)
Heimdall	A user manual will be delivered along with the ruggedized system. Provided between system delivery and deployment. Critical Spare parts on hand in theater; will deploy with extra; establish reach back to CONUS	Advanced	Route Clearance Patrol (RCP) Units	Field Support Representatives and Program Managers will be trained via participation in CONUS field testing and trained to provide any OCONUS training. Some of the data from CONUS testing will be used to put together a training video consisting of video clips and snap shots to train system use.
Hiawatha I	Training Support to Developmental Effort	TBD	TBD	TBD
HME Interdiction Concept Exploration (HICE)	Training Support to Developmental Effort	TBD	TBD	TBD
HIGHLAND 2	All crews are fully trained before deploying to theater.	Advanced	Individual	Home station/theater

<b>Current Initiative</b>	<b>Objective</b>	<b>Level/Depth</b>	<b>Audience</b>	<b>Location</b>
Helmet-Mounted Display System (HMDS) Training Program (Infrared Motion Illuminator, Virtual Clearance Training Suite, Surrogate, iPad Image Library IED)	<p>1) Infrared Motion Illuminator. To afford certified operators a self-paced foundational and sustainment individual training program prior to RCP Operations, accessible via computer and web-based training focused on PMCS, system start up, and target recognition.</p> <p>2) To provide 55 GPR training surrogate devices (46 Army and 9 Marine Corps) for operator training at Home stations.</p> <p>3) Virtual Clearance Training Suite to integrate RCP mock-up vehicles into a suite accelerating capability to train at home station while reducing funding required for vehicles and infrastructure.</p> <p>4) iPad and IED Image Library to provide the HMDS GPR Operators the ability to learn and refresh their individual and collective HMDS skills.</p>	Intro thru advanced	Individual/RCP Units	RCPs Home station/CTC/CEHC/Marine Corps EOD School
Hazardous Material Transportation Officer	Training Support to Developmental Effort	TBD	TBD	TBD
Holographic Radar Image Feasibility Study	Training Support to Developmental Effort	TBD	TBD	TBD
Hovering Eagle	Training Support to Developmental Effort	TBD	TBD	TBD
Emitter Location in Multipolar Channels	Training Support to Developmental Effort	TBD	TBD	TBD
HUNTER	Training Support to Developmental Effort	TBD	TBD	TBD
Improvised Blasting Cap Characterization	Training Support to Developmental Effort	TBD	TBD	TBD
ICIP Integrated C-IED Platform Protection	Training Support to Developmental Effort	TBD	TBD	TBD



<b>Current Initiative</b>	<b>Objective</b>	<b>Level/Depth</b>	<b>Audience</b>	<b>Location</b>
iCREW	Instruct individuals and units on the capabilities, employment, immediate actions associated with utilizing the iCREW systems	Intermediate	TBD, likely IND & Unit ACOE 24 AFCOE 4 NCOE 4 JCOE 8 MARDET 8 MCoE 16 MSCoE 8 FCoE 8 USSOCOM 8 USARPAC 8 EUCOM 8 EOD/Redstone 8 CP LeJuene 8 HSLT/CI2C 168 PM CREW 8	TBD, likely all
iCREW Training	Man-packable, small form, individual electronic countermeasure device capable of augmenting existing squad-level dismounted CREW systems when operating outside existing Squad CREW protection	Introductory	Individual	Home station
IED Detector Dogs 2.0	11 weeks of training for handlers: Canine Overview, Classroom Instruction, Anniston Facility, Yuma, AZ, Auburn University.	Advanced	Individuals (15 U.S. Army Special Forces Command Handlers; 5 Marine Special Operations Command Handlers)	All (majority CONUS)
IED Training Support for Emerging Threats	Training Support to Developmental Effort	TBD	TBD	TBD
Injured Military Personnel Assisting Combat Troops	Two Phased approach: Phase 1: Platform for SOF Wounded Warriors Lessons Learned, 20 SOF-focused videos Phase 2: 20 additional SOF videos with transition demonstration and acceptance by SOF	Wounded Warrior Lesson Learned Videos	Wounded Warriors	Home station
Integrated Checkpoints	Training Support to Developmental Effort	TBD	TBD	TBD
Integrated Signatures	Training Support to Developmental Effort	TBD	N/A - Developmental Effort	TBD

<b>Current Initiative</b>	<b>Objective</b>	<b>Level/Depth</b>	<b>Audience</b>	<b>Location</b>
Inter-service Advanced Skills K-9 Course	1. Provide advanced skill training for MWD/Tactical Explosive Detector Dog/IED Detector Dog canine teams. 2. Realistic scenarios with live-fire exercises and animal distractors to prepare handlers and canines for deployment.	Advanced	Individual	Yuma Proving Grounds
INVESTIGO	Training Support to Developmental Effort	TBD	TBD	TBD
IRIS	Training Support to Developmental Effort	TBD	TBD	TBD
ISR Emulation	Develops surrogate systems to emulate selected intelligence, surveillance, and reconnaissance (ISR) platforms within the combat training center framework. Facilitates the integration of ISR capabilities used in theater, which may include mobile training teams.	TBD	TBD	TBD
J REDLINE (Omen)	Training Support to Developmental Effort	TBD	TBD	TBD
JAVELIN	Training Support to Developmental Effort	TBD	TBD	TBD
Jawbreaker	Training Support to Developmental Effort	TBD	TBD	TBD
JCOE Directors	Training Support to Developmental Effort	TBD	TBD	TBD
JCOE TTP Development Team	The JCOE TTP Development Team provides four contractors that directly support the JCOE mission to improve Opposing Forces (OPFOR) capabilities at the CTCs as well as develop, disseminate, and maintain relevant C-IED TTPs to improve BLUFOR training.	TBD	TBD	TBD
Joint & Coalition Warfighting Center Support (JCWC) (COIC Support)	JCOE in coordination with COIC, to support Joint Coalition Warfighting Center (JCWC) AtN training and scenario development for CCDR-level exercises.	TBD	JCWC AtN Training	JCWC Suffolk VA
Joint Asymmetric Threat Awareness and C-IED Program	Allows JIEDDO to support MTTs to provide Blue force IED Awareness, Weapons Intel Teams, OPFOR IED Network, TSE, and Advanced EOD Training. JCOE program that provides MTTs and other training to emerging requirements	TBD	TBD	TBD
JTCOIC Fee For Service	The JTCOIC provides support to National Guard/Reserve component Mobilization Readiness Exercises (MRE/MRX), CTC exercise rotations, JFCOM's United Endeavor (UE) exercises and active component home station exercise requirements (HSTEX)	TBD	Individual/unit	Home station (mobilization center)
Linefinder	Training Support to Developmental Effort	TBD	TBD	TBD
Radar	Training Support to Developmental Effort	TBD	TBD	TBD
Long Branch	Training Support to Developmental Effort	TBD	TBD	TBD
LOO Chairs S&I Funds	Training Support to Developmental Effort	TBD	TBD	TBD

<b>Current Initiative</b>	<b>Objective</b>	<b>Level/Depth</b>	<b>Audience</b>	<b>Location</b>
Last Tactical Mile Detection Equipment (LTM-DE)	Train units on the SEEK II device as well as upload procedures to the Automated Biometric Identification System database	Advanced	UNK	Theater/Afghanistan
Millimeter Wave Focal Plane Array Imager	Training Support to Developmental Effort	TBD	TBD Effort	TBD
Man Portable Line Charge (MPLC)	train the trainer	Intro	TBD	Theater/Home station
Man Portable Multicycle	Training Support to Developmental Effort	TBD	TBD	TBD
Man Portables	Training Support to Developmental Effort	TBD	TBD	TBD
MANTiSS	Training Support to Developmental Effort	TBD	TBD	TBD
MAX POWER	Driver and operator training for MAX POWER system (2 courses)	Advanced	Unit	Theater
MELROSE RANGE TRAINING SUPPORT	Dedicated training operational capability with an operational AFSOC unit (27 SOW) to support C-IED training requirements. Unique training opportunity for units include: Live Fire in terrain/caves Instrumented Military Operations on Urban Terrain adjacent to AC-130 range Ground actions near AC-130 fire in an IED environment Airborne ISR detection of IEDs in village	Advanced	Battalion	Integrated range facility at Cannon AFB NM
Micro Tactical Ground Robot (MTGR)	Training Support to Developmental Effort	Intro	TBD	Theater/Home station
Minehound	Training Support to Developmental Effort	Intro, intermediate	Individuals	CTC, Theater
MINION	Instruct individuals and units on the capabilities, employment, immediate actions associated with utilizing the MINION systems	Intermediate	IND	TBD, likely all
Mobile Cueing with In-Volume & Bottom Search (MCIBS)	Contractor operated thru T2	TBD	TBD	TBD
Molecularly Imprinted Polymers (MIPS)	Training Support to Developmental Effort	TBD	TBD	TBD
MOORISH EMPIRE	Training Support to Developmental Effort	TBD	TBD	TBD
Mountaineering Kits for Karez Exploitation	Training Support to Developmental Effort	TBD	TBD	TBD
Multi Frequency Oscillator	Training Support to Developmental Effort	TBD	TBD	TBD
Multicycle Laser Penetrator Hard	Training Support to Developmental Effort	TBD	TBD	TBD
Multicycle Laser Penetrator Soft	Training Support to Developmental Effort	TBD	TBD	TBD

<b>Current Initiative</b>	<b>Objective</b>	<b>Level/Depth</b>	<b>Audience</b>	<b>Location</b>
Multicycle Modeling Laser Penetrator Soft	Training Support to Developmental Effort	TBD	TBD	TBD
Multicycle SBS	Training Support to Developmental Effort	TBD	TBD	TBD
MultiFrequency Oscillator Mine Roller	Training Support to Developmental Effort	TBD	TBD	TBD
Multi-Hawk	Training Support to Developmental Effort	TBD	TBD	TBD
NAPS	Training Support to Developmental Effort	TBD	TBD	TBD
NARCISSUS	Training Support to Developmental Effort	TBD	TBD	TBD
Nauticas	Training Support to Developmental Effort	TBD	TBD	TBD
NAVSCHOOL EOD HME Training	1) To bridge the FY13/14 training gap, by sustaining EOD quotas at HME Course of Instruction thru FY14. 2) Fulfilling current training requirements while CENEODDIVE develops the COI via the NETC Course development and Revision Process. To allow CENEODDIVE to transition HME training into its domain IAW DoD Ordnance Disposal. 3) To fill this training gap until a Program of Record course is developed by CENEODDIVE.	Advanced	Naval EOD Units and EOD team leaders from all Services.	Labs
Neptune Testing Support	Training Support to Developmental Effort	TBD	TBD	TBD
Net Exploitation	Training Support to Developmental Effort	TBD	TBD	TBD
Network EW Remotely Operated (NERO)	Understand and employ system CONOPs/Capabilities	Advanced	Individual (electronic warfare officer-specific)	Schoolhouse and Theater
Next Gen Neutron Detection Development	Training Support to Developmental Effort	TBD	TBD	TBD
Next Gen Wireless Expl.	Training Support to Developmental Effort	TBD	TBD	TBD
Noncooperative Biometric ID	Training Support to Developmental Effort	TBD	TBD	TBD
NorEaster	Training Support to Developmental Effort	TBD	TBD	TBD
Nuclear Quadropole Resonance Handheld	Training Support to Developmental Effort	TBD	TBD	TBD
OneSAF Fair Fight Improvements for Dismounted Virtual Trainers	Support USA development a system to integrate the multiple simulations used for training.	Introductory and Intermediate	Individual, staffs	Home station
Pelvic Protection Systems	Training Support to Developmental Effort	TBD	TBD	TBD
Perseus	Analytical software training for sensor system results (airborne platform – data processors)	Advanced	Individual	Theater
PersonBorne IED Counter Architecture	Training Support to Developmental Effort	TBD	TBD	TBD
PIPPER	Understand system components and capabilities	Per JCOE Training Plan	IND	CTC

<b>Current Initiative</b>	<b>Objective</b>	<b>Level/Depth</b>	<b>Audience</b>	<b>Location</b>
Portable ISR	Teach users how to handle and keep tactical aerostats aloft	Intro	Forward Operating Base/Command Operation Post	Theater
Portable ISR for CTCs	Training Support to Developmental Effort	TBD	TBD	TBD
Powerhound	Program Managers will provide instruction manuals and other training materials as needed for use. Operators will receive instructions and operator manuals upon issuance of system. It is a battery adapter, not a unique handheld system, and the main concerns are safety and maintenance. Maintenance instructions included in the operator manual.	Intro	Unit	Theater
Precision Wide Area Surveillance	Field Support Representatives sustain the software OCONUS after training and fielding.	Advanced	Individual	Theater
PreDetonation Concepts Exploration	Training Support to Developmental Effort	TBD	TBD	TBD
Project Scorpion	Training Support to Developmental Effort	TBD	TBD	TBD—initiative in development
Quickhatch	Training Support to Developmental Effort	TBD	Individual	TBD
RASE	Training Support to Developmental Effort	TBD	TBD	TBD
RCP Sensor Data Interconnect Kit (R-VOSS)	Training includes overview and description of system operation, troubleshooting procedures, and preventative maintenance procedures.	Advanced	Training size should be – Not more than 10 Soldiers	CONUS training – Army (six systems): NTC, JRTC, and FLW (two systems per location); Marine Corps (two systems): Locations TBD
RCP Sensor Data Interconnect Kit (R-Voss) Training	Provide training sets for unit to use during predployment training. System comes with NETT	Introductory	RCP	Home station
RED DOT	Train end-users and operators to effectively implement the RED DOT capability to provide IED warnings to vehicles via Blue Force Tracker (BFT)	TBD	Unit	Home station and in theater
Red Fox (Phase II)	Training Support to Developmental Effort	TBD	TBD	TBD
REDSHIRT	Training Support to Developmental Effort	TBD	TBD	TBD
RELOC -Gen 2 [Pre-Det]	System operation and basic maintenance	TBD	TBD	TBD—initiative in development
Relocatable Vehicle and Cargo Inspection System (R-VACIS)	The training courses in PED and integration of the RVACIS into unit operations will be modeled on the lessons learned through theater usage	Advanced	Entry Control Points/units	Theater

<b>Current Initiative</b>	<b>Objective</b>	<b>Level/Depth</b>	<b>Audience</b>	<b>Location</b>
Remote Visualization for HMDS (R-VIS)	Training includes – Overview and description of HMDS software upgrades, troubleshooting procedures, and preventative maintenance and Services checks. Training manual description - TBD	Advanced	Training size should not be more than 10 soldiers	CONUS training – USA: Four CONUS R-Vis units will be provided to upgrade the current HMDS live training systems (Fort Leonard Wood) USMC: Six CONUS R-Vis units will be provided to upgrade the current HMDS live training systems (Camp Lejune)
Resonant RF Buried IED Detection	Training Support to Developmental Effort	TBD	TBD	TBD
RoadHawk (aka Hawkeye)	The Mission Commander will receive the same IA classroom training. Replacement personnel will receive the same training.	Advanced	Individual	Theater
Robotic Point Man	Training Support to Developmental Effort	TBD	TBD	TBD
S3V [Pre-Det]	TBD—initiative in development	TBD	TBD—initiative in development	TBD—initiative in development
SA'IR Semi Active IR (FORECHECK)	Training Support to Developmental Effort	TBD	TBD	TBD
Sand Dog	Train the trainer	Intro	TBD	Theater/CONUS
Scalable Modular Radar Strategy (SMRS)	Training Support to Developmental Effort	Advanced	TBD	TBD
Scissor	Training Support to Developmental Effort	TBD	TBD	TBD
Scissor-G	Training Support to Developmental Effort	Advanced	RCP	Theater
SDER	Training Support to Developmental Effort	TBD	TBD	TBD
Sensor Based Stabilized ROV for WBIED ID & Neutralization (SSR-WIN)	Contractor operated thru T2	TBD	TBD	TBD
SENTINEL HAWK	Training Support to Developmental Effort	Advanced	TBD	TBD
Shadow Ka-Band Radar	Training Support to Developmental Effort	Advanced	TBD	TBD
Shadow Synthetic Aperture Radar	Contractors, military, and government personnel (pilots and system operators) will receive realistic mission-specific instruction in CONUS. If required, crew rotation training will be accomplished by departing handover team.	Advanced	Individual	Theater
Shadow Surfer	Training Support to Developmental Effort	Advanced	TBD	TBD

<b>Current Initiative</b>	<b>Objective</b>	<b>Level/Depth</b>	<b>Audience</b>	<b>Location</b>
Sharp Target	Training Support to Developmental Effort	TBD	TBD	TBD
SHIVA	All crews are fully trained before deploying to theater.	Advanced	Individual	Home station
Sickle Sticks	Training Support to Developmental Effort	TBD	TBD	TBD
Slingshot	Training Support to Developmental Effort	TBD	TBD	TBD
Special Operations Force Exploitation (SOFEX) Virtual Training Modules	Develop SOF Exploitation (SOFEX) virtual training modules to augment the current Ft Bragg JETC courses. Make training available to wider Joint Force audience; increases throughput of exploitation training and execution of SOFEX TTP.	Introductory	Individual	TBD
SPIDER	Training Support to Developmental Effort	TBD	TBD	TBD
SpiderMan	Training Support to Developmental Effort	TBD	TBD	TBD
SPIDEX	Training Support to Developmental Effort	TBD	TBD	TBD
STARE	Training Support to Developmental Effort	TBD	TBD	TBD
Steel Hook	Training Support to Developmental Effort	TBD	TBD	TBD
Stingray	Training Support to Developmental Effort	Intro	TBD	Theater
Strider	Training Support to Developmental Effort	TBD	TBD	TBD
Susi	Training Support to Developmental Effort	Intro	TBD	Spiral 1:Theater Spiral 2: Ft Bragg
Sustainment Cost of FY06/07 Equipment Buys	Supports equipment purchased by JCOE	TBD	TBD	TBD
Swimmer Threat ID	contractor operated thru T2	TBD	TBD	TBD
Tanner 2D RAMAN	Training Support to Developmental Effort	TBD	TBD	TBD
Tarantula [Pre-Det]	TBD—initiative in development	TBD	TBD	TBD
Terra Angler	Training Support to Developmental Effort	TBD	TBD	TBD
Thor III Enhancements	Training Support to Developmental Effort	TBD	IND	TBD
Timber Wolf	Training Support to Developmental Effort	TBD	TBD	TBD
Tissue Stabilization	These initiatives augment and accelerate the transition of emerging technologies in burn treatment and tissue stabilization into effective treatments for wounded warriors suffering from IED-related injuries.	TBD	TBD	TBD
Trace HME Detection Kit	Operators will receive instructions upon issuance of the kit. ARDEC is developing a training support package that includes the RDECOM HME sample kit.	Intro	Individual	Theater
TRACER VHF	Training Support to Developmental Effort	Advanced	TBD	TBD
Training Support for Emerging Capabilities/Systems	Provides SEEK II Biometric systems for SOCEUR and the Global Response Force (GRF).	Introductory	Individuals	Home station

<b>Current Initiative</b>	<b>Objective</b>	<b>Level/Depth</b>	<b>Audience</b>	<b>Location</b>
Training Support for Emerging Capabilities/Systems (GRF SEEK II procurement)	48 portable Secure Electronic Enrollment Kit II (SEEK II) biometric enrollment devices for the GRF for pre-deployment and pre-mission training and train-the-trainer in support of C-IED training	Introductory	Deploying units	Home station
Transportable-Quick Checkpoint (T-Quic)	Training Support to Developmental Effort	TBD	TBD	TBD
TRIDENT SPECTRE Support	Training Support to Developmental Effort	TBD	TBD	TBD
Trivaldi	Training Support to Developmental Effort	TBD	TBD	TBD
TSE Kits	Training Support to Developmental Effort	UNK	Fielded Units, EOD	Theater/AFG
TTP Development, Publication, and Distribution	Training Support to Developmental Effort	TBD	TBD	TBD
Upper Limit of the Reference Range	Train the trainer	Intro	TBD	Theater/Home station; All Services
Ultra-Wide Band Ultra-High Frequency (UHF)	Training Support to Developmental Effort	TBD	N/A—Developmental Effort	TBD
Ultra-Wide Band UHF Synthetic Aperture Radar	Training Support to Developmental Effort	Advanced	TBD	TBD
U.S. Army John F. Kennedy Special Warfare Center and School JETC	Training program provides: Robust organic biometrics/forensics collection and analysis capability at the operator level, followed by an exploitation capability at the theater and strategic levels Current Army Training Requirements and Resource System courses with approved POIs	Intro to intermediate	SOF, Interagency	USAJFKSWCS JETC
USAJFKSWCS Physical Surveillance Course	Realistic, network-focused training POI for special forces and Joint Special Operation Forces to conduct full-spectrum surveillance and cooperative threat reduction missions worldwide—both unilaterally and by, through, and with host-nation forces	Advanced	SOF, Interagency	Raleigh, Charlotte, Baltimore
USMC Exploitation Analysis Cell Training (EAC)	Exploitation Analysis Center training for 23 Teams (92 Marine Corps personnel) at the National Forensic Science Technology Center (Largo, FL).	Introductory	Individual	Home station
Universal Test Set Band-C Upgrade	Training Support to Developmental Effort	TBD	IND	TBD
Visualization and Signature Technology (VAST)	Training Support to Developmental Effort	TBD	TBD	TBD
VBIED SoS	Training Support to Developmental Effort	TBD	TBD	TBD
Vector Sensor	Training Support to Developmental Effort	TBD	TBD	TBD



<b>Current Initiative</b>	<b>Objective</b>	<b>Level/Depth</b>	<b>Audience</b>	<b>Location</b>
Vector Sensor	Training Support to Developmental Effort	TBD	TBD	TBD
Vehicle Mounted Gradiometer	Training Support to Developmental Effort	TBD	TBD	TBD
Virtual Training Retrofit	The MCIT, DICE-T, HMDSS and I-Game products require a relevant, continuous, and updateable capability that allows individuals and small units to train C-IED recognition and TTPs in a mission rehearsal environment representative of their specific battlespace in theater prior to deployment.	Introductory	Individual	Fort Irwin Ca
Virtual Tutor (Videos)	Videos will provide stand-alone training curricula through virtual and computer-based instruction. Video and tutorial library will be based on multi-platform, multi-media training products identifying most effective TTPs for today's battlefield. Menu of videos and tutorials will allow for theater, region, and local area awareness by providing engaging tailored interactive modules.	TBD	ALL	Home station/CTC/ Theater
VISDeS	The expansion of KEYHOLE/Route Clearance Optic System/Marine Corps EOD Optic System efforts	Intro thru advanced	Deploying units	Home station/CTC/ Route Clearance Optic System/Marine Corps EOD Optic System in CONUS and OCONUS
VISDeS (NOTE: VISDeS HAS IT'S OWN TtF TRAINING INITIATIVE SEPARATE FROM THE OPERATIONAL KIT INITIATIVE)	Training Support to Developmental Effort	Advanced	IND	Home station, CTCs, and theater
War Eagle	Training Support to Developmental Effort	TBD	TBD	TBD
Water Digger	Training Support to Developmental Effort	Introductory	R2C2-S	CONUS: Fort Leonard Wood; Theater by Asymmetric Warfare Group
Well Camera	Training Support to Developmental Effort	TBD	TBD	TBD
Whistler	Training Support to Developmental Effort	TBD	TBD	TBD
White Oak	Training Support to Developmental Effort	TBD	TBD	TBD
Wireless Area Mapper (WAM)	Training Support to Developmental Effort	TBD	TBD	TBD
Wolverine	Training Support to Developmental Effort	TBD	TBD	TBD

NOTE: TBD = to be determined.

**Table A.2. JATAC**

<b>Current Initiative</b>	<b>Objective</b>	<b>Level/Depth</b>	<b>Audience</b>	<b>Location</b>
Search/TSE	Five-day course consisting of classroom and practical exercises.	Introductory	Platoon Commander	CTC and/or Home station
IED Awareness Train the Trainer	50% practical, 50% classroom.	Introductory/intermediate	Non-commissioned officers (NCOs), Trainers	Home station and/or CTC
Dismounted C-IED Tactics	25% classroom, 75% practical	Introductory	NCO, Staff NCO, and below	Home station and/or CTC
Special Operations C-IED Awareness Course (SOCAC)	Curriculum still being developed	Introductory	SOF NCOs, Staff NCOs	Home station as requested
AtN	Counterinsurgency/Network Analysis/Network Templating, Technical Enablers/C-IED Working Group /Targeting	Introductory	E5-O6, S2 and staff	Home station
IED Electronics	Electronic Countermeasure management, remote-controlled IED threats, Train the Trainer functionality	Intermediate	EOD personnel	Home station
HMEs	HME precursors, Nitrate-based, peroxide-based, chlorate-based explosives. Homemade detonators.	Intermediate	EOD personnel	Home station
Advanced EOD Training	ATTAC software training	Intermediate	EOD personnel	Home station
Weapons Technical Intelligence Level 1 Exploitation (WTI)	14 modules of instruction	Introductory	E4 to O6, COIST, S2 Staff personnel	Home station
Fabrication Initiation Training (FIT)	Refer to course description	Introductory	Commander-identified personnel	Home station
Supply and Emplacement Training (SET)	Refer to course description	Introductory	Commander-identified personnel	Home station

<b>Current Initiative</b>	<b>Objective</b>	<b>Level/Depth</b>	<b>Audience</b>	<b>Location</b>
C-IED	This course is designed to provide Coalition forces with C-IED training at their current location. This course is two days long. Trainers use classroom and practical application. Students return to their respective units with the following information: area of responsibility–specific IED awareness; Current TTPs, Basic U.S. and Coalition Force responses to IEDs.	Introductory	Platoon Commander, Battalion	In theater
Mission-Specific Training	TF Paladin J7 has the ability to conduct by-request training with customized course curriculums. Recent courses have included Tactical Post-Blast analysis, Coalition and host-nation forces.	Varies	Varies per specified training	In theater
SOF C-IED T3 (Train the Trainer)	This course is designed for SOF who may be required to conduct C-IED mitigation training and/or search and site exploitation to host-nation forces in the Afghan theater of operations. This course utilizes both classroom presentation and practical application exercises to present current and relevant instruction during the 24 hours of training. Training includes the following topics: IED review/Local TTP, Forensics, Collection and Packaging, Explosive Effects, Tactical Post-Blast Analysis Overview, Crater Search, Hook and Line Techniques, HME, Search Site exploitation planning, Vehicle Search, Area search, BombBot and practical exercises for all areas covered by classroom presentation.	Introductory	Platoon Commander	In theater

Current Initiative	Objective	Level/Depth	Audience	Location
TSE/SEARCH	This course can be conducted as a two, three-, or five-day course. As most units receiving training are actively engaged in combat operations, the two-day MTT course has been most popular. The course teaches basic AtN principles and what they mean to those conducting current search operations in Afghanistan. Personnel, vehicle, building, and area search techniques along with classes on forensics and evidence handling, packaging and shipping requirements. A brief on the current Afghan court system and its relationship with Coalition forces is conducted as well.	Introductory	Platoon Commander, Battalion	In theater
Evidence Collection and Processing	The C-IED evidence collection and processing course is designed for platoon- and company-level members who may be required to conduct evidence collection in the Afghan theater of operations. This course utilizes both classroom presentation and practical application exercises to present current and relevant instruction during the 16 hours of training. Training includes the following topics: skill evaluation practical, Forensics, IED components, HMEs, Evidence Collection Techniques, Building/Room Collection Techniques, and practical exercises for all areas covered by classroom presentation.	Introductory	Platoon Commander	In theater

Current Initiative	Objective	Level/Depth	Audience	Location
HME	The HME course discusses current variations of HMEs encountered in the Afghan Theater of Ops. Teaches a basic understanding of the processes used to produce HME and to visually identify the precursors and equipment used during HME production, along with the steps taken once an HME or an HME facility is discovered. This course utilizes both classroom presentation and practical application exercises to present current and relevant instruction during the 16 hours of training. This course does not teach render safe procedures.	Introductory	Platoon Commander	In theater
Handheld Detectors	Tactical implementation of handhelds MTT is a 16-hour course designed to build upon the C-IED awareness course and enable soldiers/marines at all levels to properly utilize handheld devices on patrol and in search operations within a high-risk/IED environment. This course focuses on theater-wide IED threat mitigation through implementation of proper search techniques, using available handhelds, and trained personnel. Training topics include: C-IED awareness refresher, handheld detector use, CREW, and search awareness. The one-day classroom portion will be reinforced through practical exercises on day two.	Introductory	Platoon Commander, Battalion	In theater
AtN	Course is designed to give student a thorough understanding of JIEDDO's AtN LOO. AtN enables offensive operations against a complex network of financiers, IED makers, trainers, and their supporting infrastructure by providing ISR, information operations, counter-bomber targeting, biometrics, and weapons technical intelligence capabilities.	Intermediate	Platoon Commander, Battalion	In theater

**Table A.3. Training Needs Statements**

<b>Current Initiative</b>	<b>Objective</b>
UHF/VHF Scanner Training and Support	Provides UHF/VHF scanner training to units headed to Afghanistan area of operations.
CREW UNIVERSAL TEST SETS/SUPPORT	Provides 14 CREW test sets and initial training to augment Marine Corps Engineering School
NTC IED Replication	Provides IED development to support C-IED training for rotational units at NTC.
ISR SCENARIO DEVELOPMENT SUPPORT AND TRAINING TEAM	Enabler bridges gap of current shortfalls in ISR operations and integration at the division and brigade level support to the planning, coordination, and execution of ISR into maneuver operations for CTC rotations at JRTC

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