

STABILITY OPERATIONS AND EXPLOSIVE ORDNANCE INCLUDING HUMANITARIAN MINE ACTION (HMA)

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ABSTRACT

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A review of Explosive Ordnance Disposal and Humanitarian Mine Action (HMA) within Department of Defense and stability operations, and discusses proliferation of explosives and explosive material including mines, explosive remnants of war, and explosive ordnance promulgation as the pandemic root of human security threats, and subsequent worldwide instability. Explosive remnants of war directly contribute to worldwide instability. Control of explosives is an inherent national interest and essential to security and requires inclusion within strategy and service, and force utilization guidance and doctrine for explosive ordnance operations including humanitarian mine action (HMA). Explosive material kills and maims Soldiers and people around the world, and costs hundreds of millions of dollars annually. A review of international initiatives and agreements, as well as, U.S. structure, policies, and efforts on behalf of Soldiers during stability operations and indigenous people worldwide is included with highlights of the importance of control of explosive material during combat and stability operations,

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STABILITY OPERATIONS AND EXPLOSIVE ORDNANCE INCLUDING HUMANITARIAN MINE ACTION (HMA)

I think we do agree on one central goal, and that is the need to end the threat that landmines (e.g. explosive remnants of war and other explosive ordnance) pose to civilians. The best way to do that is to precede full speed ahead with the job of pulling mines from the soil like the noxious weeds that they are. I am proud that the United States is far and away the world leader in mine removal programs.'

—Madeleine K. Albright¹
Secretary of State
8 April 1999

Proliferation of explosives and explosive material including mines, explosive remnants of war, and explosive ordnance control challenges are the root of the pandemic of human security threats and the subsequent worldwide insecurity and instability. The current threat is the result of high explosive conventional munitions which are not under positive control or remain on the battlefield at the conclusion of conflicts and no longer utilized for their initial military purpose. Control of explosives, including explosive remnants of war and humanitarian mine action (HMA), is an inherent national interest and essential to our national security and requires inclusion within National Security Strategy and force utilization guidance in order to gain the required momentum essential to the Security of the United States at home and abroad.

Although our nation's most haunting and dangerous weaponized national security threat is the terrorist use of a nuclear device, its actual use is unlikely due to the fundamental lack of availability of fissile material.² Our nations', and the world's, continuing and enduring material threat is conventional explosives. Explosives residing in manufactured and improvised devices are strewn around the world in the form of explosive remnants of war, explosive ordnance, and mines including emplaced and abandoned submunitions.³ "This enduring and seemingly secondary threat affects over

75 countries, and claims over 6,000 casualties annually and maims many more around the world, and costs hundreds of millions of dollars annually. In 2009, there were mine action initiatives in 33 countries and territories, and peacekeeping missions costing in excess of \$459 million.”⁴ Explosive ordnance and associated material are used to construct improvised explosive devices, and are the largest cause of casualties in Iraq and Afghanistan. Improvised explosive devices are used by insurgents to achieve tactical advantage, while simultaneously achieving strategic affects.

The Army is manned, trained, and equipped to fight and win our nations wars. Historically, Army readiness and training have been focused on high intensity combat operations, with smaller stability and support operations viewed as a secondary priority and a lesser effort. “Since America declared its independence in 1775, our country has fought a total of 12 wars. Only four of those wars (War of Independence, Civil War, and World War I and II), was Americas existence and very way of life at risk. The remaining eight wars (War of 1812, Mexican War, Spanish-American War, Korean War, Vietnam War, Gulf War I and II, and Afghanistan) were limited wars”⁵ in support of regional security and stability. These wars were not essential to America’s existence, but were important to American interests, the stability of nations, and conducive to world order. Control of explosives is essential through the full range of military operations in order to regain stability and a viable nation-state at the conclusion of armed conflict.

During military operations, explosive ordnance, explosive remnants of war including abandoned ammunition, explosives, and mines are a significant and extremely lethal threat to Soldiers, coalition partners, and civilians as clearly defined and differentiated later. These items are inherently dangerous and vulnerable to heat, shock,

friction, as well as, contaminate the environment and contribute to regional instability. Explosives not under positive control during combat, stability operations, nation building, and reconstruction activities, are employed by insurgents against US and coalition forces. Explosives can be used as designed or incorporated in improvised explosive devices (IEDs) via information and directions readily accessible through the internet, and actively promulgated among insurgents and extremist organizations.

“In Iraq, from 2003-2008, the recovery of uncontrolled explosives including Explosive Remnants of War and captured, stockpiled, and abandoned ammunition cost in excess of \$1.5 billion and encompassed 346,000 short tons at 51 widely dispersed clearance sites, as well as, over 600,000 short tons of captured enemy ammunition following the invasion in 2003.”⁶ The destruction of explosive ordnance found throughout the country has supported the stability operations effort by denying the enemy access to explosives and by making explosives unavailable for use in improvised explosive devices.⁷

The Army’s missions are developed from a plethora of sources including National Strategies, statutory requirements, military doctrine, orders, operational experience, guidance for employing military forces, and operational requirements. Policy and doctrine direct the Army’s core competencies and priorities, including, operations other than full scale conflict and support to civil authorities. In accordance with Department of Defense Directive (DODD) 5100.1, “the Army’s primary function is to organize, equip, and train forces for the conduct of prompt and sustained combat operations.”⁸ Accordingly, the Army must possess the capability to defeat enemy land forces and

seize, occupy, and defend terrain.⁹ This includes strategically relevant operations in Joint, Interagency, Intergovernmental and Multinational (JIIM) operations.

Department of Defense Instruction (DODI) 3000.5, reviews stability operations requirements within Department of Defense, and prioritizes stability operations as a core mission through the broad spectrum of military expertise and operations. The military's conduct, support, and leadership of stability operations are delineated as essential military operations in support of overarching strategic goals of security and stability. The DODI 3000.05 specifically highlights the overarching operational tasks of, "establishing civil security and civil control, restoration and provision of essential services, repair of critical infrastructure, and provision of humanitarian assistance."¹⁰ Another key operational task which is a crucial component of the strategic end-state of successful stability operations is the removal of explosive remnants of war and humanitarian demining activities in support of explosive elimination. Access to services, infrastructure, and the freedom of movement to carry-out humanitarian activities require the clearance of explosives. There is a vast amount of funding allocated for humanitarian demining and the removal of explosive remnants of war. These efforts facilitate access and contribute to security and stability of states. The critical requirement of the removal of explosive material would be further legitimized with specific acknowledgement within DODI 3000.05.¹¹

DODD 3000.7, Irregular Warfare, highlights the strategic relevance of irregular warfare within traditional warfare. Irregular warfare is also discussed as an enhancement mechanism in support of Stability Operations, a core mission of the Department of Defense through the full spectrum of operations. Considering the

importance of explosive remnants of war and the requirement to eradicate uncontrolled explosives on the battlefield, control of explosives should specifically be referenced as a key component of irregular warfare which allows the conduct of stability operations.¹²

Mentioning security does not prioritize control of explosive material within military operations. Discussing the disarmament of belligerents is not the same as the removal and destruction of explosive material, explosive remnants of war, nor humanitarian demining. And, certainly more discussion of disarmament and landmines within safe and secure environments and the rule of law within the book, 'Guiding Principles for Stabilization and Reconstruction' published by the United States Institute for Peace (USIP) doesn't help prioritize Department of Defense efforts and further confuses essential explosive control efforts by using ambiguous and ill-defined terminology. The document incorrectly defines landmines, doesn't mention explosive remnants of war, and references unexploded ordnance once incorrectly as a sub-category within landmines.¹³ The USIP is an "independent, nonpartisan, national institution established and funded by congress".¹⁴

Explosive ordnance and explosive remnants of war, including abandoned ammunition and explosives, are inherently hazardous and dangerous on the battlefield and include other explosives in different levels of control, physical degradation, firing condition, and intended use. Explosives and explosive control is encompassed in a myriad and widely disparate set of worldwide organizations, agreements, policies, government agencies, laws, policies, which are often in conflict, ambiguous, and inaccurate. These all contribute to the confusion concerning explosive control challenges.

Ambiguous terminology and verbiage combined with the continuous incorrect usage of explosive related terminology contributes to the confusion surrounding tasks, priorities, and efforts concerning explosive related operations supporting stability operations. It is essential to use definitive language which clearly describes the specific complex explosive threat, and prioritizes specific types of explosive efforts within stability operations civil security tasks. Use of non-standard terminology and ambiguous referencing of 'disarmament and control of ammunition' over-simplifies required complex explosive operations and contributes to the confusion and lack of prioritization of government-wide required explosive operations.

Explosive Ordnance (EO) (JP 1-02)

"Explosive Ordnance includes all munitions containing explosives, nuclear fission or fusion material, and biological and chemical agents. This includes bombs and warheads; guided and ballistic missiles; artillery, mortar rocket, and small arms ammunition; all mines, torpedoes, and depth charges; demolition charges; pyrotechnics, cluster and dispensers, cartridges and propellant actuated devices; electro-explosive devices; clandestine and improvised explosive devices; and all similar or related items or components explosive in nature."¹⁵ "Unexploded ordnance is ordnance which has been primed, fused, armed or otherwise prepared for use and was fired, dropped, launched or projected, but failed to explode either by malfunction or design."¹⁶

Explosive Remnants of War (ERW)

Thousands of pieces of explosive ordnance, including abandoned ammunition and explosives, systemically remain at the conclusion of armed conflict as explosive remnants of war. These munitions include unexploded ordnance, stockpiled, and abandoned ordnance which remain on the battlefield and throughout the area of

operations. Removal and clearance of explosive remnants of war is labor intensive and inherently hazardous. ERW are a danger to troops during high intensity combat, as well as, follow-on operations which affects construction, deters freedom of movement and hinders the delivery of humanitarian assistance and other essential activities and services which allow normalcy. ERW prolongs the effects of combat long after the fighting concludes.¹⁷

Stability Operations

Stability operations are executed through the full range of military operations and will continue to be prevalent in today's exponentially threatening and complex international security environment. The demand for security and stability operations, nation building, reconstruction, and associated capabilities are the current predominant effort and named core mission area of the forces of the United States of America.¹⁸ Field Manual (FM) 3-07 is the Army's keystone doctrinal publication for comprehensive stability operation doctrine. The manual provides broad operational guidance for commanders and trainers at all echelons, and forms the foundation for development of the Army Training System curriculum. Embedded within stability doctrine is nation building and reconstruction. These efforts are inherent to the requisite mandate for civil security. An essential and embedded mandate within civil security tasks is control of ordnance and the follow-on elimination of remaining explosive material in the area for the subsequent safe commencement of nation building and reconstruction. It's not enough to mention disarmament and removal of mines within civil security. The problems and issues are much greater than this limited definition and scope, and don't provide the requisite amount of direction and clarity.¹⁹

ERW has significant negative impacts on local social and economic viability and rehabilitation. Stability, a core military mission, works to ensure individual and shared security within communities, while rebuilding a countries infrastructures and institutional integrity.²⁰ Because of the daily inherent threat by ERW, agricultural land is not tilled and farmers lose their income, and local populations incur restricted and inherently dangerous freedom of movement.²¹

Although repatriation occurred relatively rapidly in Afghanistan, continuing insecurity concerning refugee's safe return increased and continued to be threatened by unexploded ordnance.²² ERW kills and injures large numbers of Soldiers and civilians, and contributes to regional and worldwide insecurity and instability.²³ "During the Gulf War in 1991, the Armed Services reported 177 incidents caused by unexploded ordnance and 13% of total military casualties. Historically explosives systemically cause the greatest proportion of injuries in combat."²⁴

International Organizations and Treaties

Fifty-One nations restrict specific types of weapons used in armed conflict identified as inhuman and which contributes to regional security and ultimately leads to instability. "The United Nations Convention on Certain Conventional Weapons (CCW or CCWC), includes munitions which are 'excessively' injurious or have indiscriminate effects. The CCW is a formal annex to the Geneva Conventions of August 12, 1949, and concluded on 10 October 1980, and entered into force on December 1983".²⁵ The ultimate goal is to restrict or prohibit the use of specific conventional weapons, and subsequently explosive ordnance, explosive remnants of war and abandoned ordnance.²⁶ The convention's five protocols specifically restrict the use of weapons with "non-detectable fragments, landmines and booby traps without self-destruction and self-

deactivation mechanisms, incendiary weapons targeting civilians, restricts air delivery, limits deforestation, laser weapons designed to cause permanent blindness (1995), and describes obligations and best practices for the clearance of explosive remnants of war (2003).²⁷ These protocols promote national stability of nations.²⁸

“The Ottawa Treaty, also known as the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Antipersonnel Mines and on their Destruction, endeavors to limit explosives by banning the use of anti-personnel mines.”²⁹

Protocol on Explosive Remnants of War (ERW)

The Protocol on Explosive Remnants of War is a new treaty impacting international humanitarian law and adopted to the 1980 Convention on Certain Conventional Weapons (CCW). The protocol works to reduce explosive remnants of war, and the subsequent dangers posed to the civilian population, by unexploded and abandoned ordnance. This is the first international agreement which requires all parties involved in armed conflicts to remove ERW at the conclusion of operations.³⁰ “Under the protocol, each party to an armed conflict has the following obligations during conflict: To record location and type of explosive ordnance employed and/or abandoned by armed forces including type, number, location, and method of identification and safe disposal. At the end of hostilities, combat forces are required to: 1) Clear ERW in territories it controls. 2) Provide technical, material and/or financial assistance to facilitate the removal of ERW results from operations it does not control either directly to the controlling party or tertiary parties such as the UN or other non-governmental organizations. 3) Take feasible precautions in the territory to protect civilians. 4) Share recorded information of explosive/abandoned ordnance. 5) Protect humanitarian

missions and organization from ERW effects, as well as, information on ERW to requesting organizations.”³¹

Humanitarian Demining Assistance

In over 60 countries across the globe, the United States and other governments, private organizations, agencies, including the United Nations, are working together in partnership to provide humanitarian demining assistance and the removal of explosive remnants of war and uncontrolled explosive material. Such concerted international efforts over the past decade have significantly reduced casualties due to mines and uncontrolled explosives. Thousands of acres of land have been cleared, and hundreds of thousands of victims injured by mines and explosives have been helped. Stability and security have been enhanced through the safety and support of indigenous people, and significant contributions toward regional and worldwide stability have occurred.³²

America's National Diplomatic and Economic Commitment

America's commitment to the people and the world is exemplified by the extraordinary amounts of monies, manning, and physical support for international norms and agreements concerning the limitation of landmines, explosive ordnance, and explosive remnants of war. The continued efforts of the United States support the well-being and security of the people of the world, and assist in the maintenance of stability and world order.

America's active involvement in humanitarian demining and associated endeavors are inherent in our nation's diplomatic and economic efforts to gain and sustain worldwide stability. These humanitarian policies and efforts typify the best of American ideals and our nation's self-imposed responsibility for the people of the world. The United States' support of international humanitarian efforts to control the deadly

effects of mines and uncontrolled explosives are on-going. These efforts have strengthened the principles and foundations of American ideals.

Despite shrinking resources of all types, the United States is maintaining efforts on behalf of worldwide stability. While our diplomatic and economic policies are in tandem and working in support of American policies, there is limited formal delineation of the importance of explosive control, defense, stability operations, and military strategy concerning the inherent dangers of explosive ordnance and explosive remnants of war within Army doctrine and regulations, nor formal delineation within National Military Strategy, doctrine, and regulations to facilitate and integrate required efforts.

United States Landmine and Explosive Remnants of War Policies and Efforts

The United States Landmine Policy was immediately affected informally by The Treaty to Ban Landmines, although the U.S. remains a non-signatory. Stocks were counted and culled, and strict minimization of munitions and limitations of use were instituted within the military forces as internal self-policing measures. The U.S. Landmine Policy was formally delineated in February of 2004 and was significantly different from previous approaches. The policy broadly encompassed and provided protection for military forces and civilians, and formally continued U.S. leadership in humanitarian mine action and explosive remnants of war – and those activities directly contributing to the dangerous conditions caused by landmines and explosives and the follow-on effects of the injured.³³ Under the policy, the U.S. “eliminated persistent landmines, developed non-persistent (self-destructing/self-deactivating) landmines which do not pose humanitarian threats after conflict, supports the worldwide ban on the sale and export of persistent landmines, destroyed non-detectable mines, ceases

employment of persistent landmines after 2010, destroys persistent landmines not required for the protection of Korea, and supports a fifty percent increase in the U.S. Department of State's portion of the U.S. Humanitarian Mine Action Program above and beyond current baseline funding levels."³⁴

The United States is recognized as the "most generous national donor to humanitarian mine action spending in excess of \$1.3 billion to clean-up ERW and landmines since 1993".³⁵ US explosive ordnance clearance efforts are currently highlighted in "dollars spent in the two active theaters of operations of Iraq and Afghanistan, where the United States has expended "\$150 million and \$111 million, respectively."³⁶

The United States has addressed the danger of explosive ordnance of all types remaining on the battlefield by a plethora of diverse methodologies. Some items are delineated formally in U.S. Code, funding is within the State Department, and management is executed through the Office of the Secretary of Defense, while training is accomplished through the US Department of Defense Humanitarian Demining Training Center. Other critical portions are minimally or relatively unaddressed and apportioned via an ad hoc array of various codified laws, memorandums, international standards, agreements, and limited doctrine.

U.S. National Strategy

The United States National Security Strategy for the Global Age pursues a core goal of security at home and abroad – worldwide stability. Efforts in support of our National Strategic Objectives are crucial, both directly and indirectly, to U.S. national security.³⁷ National Defense Strategy and military strategies serve as the Defense Department's capstone documents, and they flow from the National Security Strategy.

These documents provide a framework for other Department of Defense and Service guidance documentation, specifically on manning, training, and equipping for current defense priorities and include campaign and contingency planning, force development, and intelligence. It reflects the results of the Quadrennial Defense Review (QDR) and lessons learned from on-going operations in Iraq, Afghanistan, and elsewhere. It addresses how the U.S. Armed Forces will fight and win America's wars and how we seek to work with and through partner nations to shape opportunities in the international environment for security and stability.³⁸

The Department of Defense is vested with protecting the American people and providing for the common defense. National Defense Strategy priorities inherently involve Department of Defense forces to garner benefits of long-term stability, reconstruction, development, and governance to gain required regional security. The Department of Defense overarching tenants include defense of the homeland, winning our nations wars, and securing US National interests. US Armed forces are specifically tasked with institutionalization of required core competencies and capabilities.³⁹ The National Military Strategy provides overarching direction from the Chairman of the Joint Chiefs of Staff to the National Command Authorities on the strategic direction of the Armed Forces. However, neither the proliferation of dangerous explosives nor explosive remnants of war in its many forms are identified as specific areas of interest within U.S. National Strategy.⁴⁰

The proliferation of explosives is inherent to national security. Significant, but disparate, federal structures and a myriad of funding sources represent a significant portion of governmental eradication efforts. In order to gain true security and stability,

and execute required nation building, and to wage war effectively, it is crucial to eliminate the proliferation of dangerous explosives on the battlefield in order to ultimately defeat terrorists and insurgents. Access to explosive remnants of war, mines, and other explosive ordnance must be eliminated to deny access to explosives used to make improvised explosive devices, and meet the key security tenants of preventing attacks before they occur both at home and abroad.

United States Programmatic Delineations

The United States Agency for International Development (USAID) provides humanitarian services once freedom of movement has been established. USAID is responsible for providing assistance between the conclusion of emergency assistance and assumption of long term assistance through the Bureau of Humanitarian Response, Office of Transition Initiatives.⁴¹ The U.S. Department of State Arms Control and International Security programs include sub and cluster munitions within the umbrella of explosive remnants of war.⁴²

The Bureau of Political-Military Affairs, Office of Humanitarian Demining Programs (PM/HDP), of the United States Department of State is the lead agency for the coordination of humanitarian demining programs worldwide.⁴³ The United States Humanitarian Demining Program (HDP), includes explosive remnants of war, and is responsible for Nonproliferation, Anti-terrorism, Demining and Related (NADR) Programs within the State Department and is administered by the Office of Weapons Removal and Abatement. The U.S. Humanitarian Demining Program works to relieve human suffering caused by landmines and unexploded ordnance, and is designed to protect US Soldiers, coalition partners, and civilian casualties in support of efforts to

gain regional stability and create conditions for the safe return of internally displaced persons (IDPs), and restore access to land and infrastructure.⁴⁴

The Office of Weapons Removal & Abatement, within the Department of State, facilitates the conditions necessary for the development of peace and stability by working to eradicate explosive ordnance.⁴⁵ “Areas of focus are sub-divided by type and include conventional weapons and munitions, and may include landmines, unexploded ordnance, abandoned ordnance (AO), man portable air defense systems (MANPADS), and other small arms and law weapons (SA/LW).”⁴⁶ The goal is to limit access of explosive material while, simultaneously, addressing humanitarian requirements, and illustrates the United States commitment to worldwide stability.⁴⁷

In accordance with the National Security Strategy published in 2006, the Administration established a new office within the Department of State, the Office of the Coordinator for Reconstruction and Stabilization to facilitate planning and execution of civilian stabilization and reconstruction efforts. The office leverages various agencies of the government and integrates governmental activities with military’s efforts. Additionally, the office coordinates United States Government efforts with other nation’s governmental entities to build similar capabilities around the world.⁴⁸

The Department of Defense is responsible for the execution of humanitarian support to demining training of indigenous people of countries requiring assistance and is executed in accordance with, *Title 10 of the United States Code, Subtitle A - General Military Law, Organization and General Military Powers, Chapter 20 – Humanitarian and other Assistance within Section 401 – Humanitarian Civic Assistance (including explosive remnants of war) provided in Conjunction with Military Operations and Section*

407 – Humanitarian Demining Assistance. In accordance with United States Law, prescribed by the Secretary of Defense, the Secretary of the Military Department, “may carry out humanitarian demining assistance in country’s to promote the security interests of the United States and assist specific operations readiness skills of participating armed forces.”⁴⁹ The Office of the Deputy Assistant Secretary of Defense for Peacekeeping and Humanitarian Assistance, Office of Special Operations and Low-Intensity Conflict (OASD (SO/LIC) PK-HA), acts as “DoD’s lead humanitarian demining agency by exercising overall responsibility, corporate level policy, planning and oversight for Department of Defense humanitarian demining programs and promulgation of explosives conducted pursuant to Title 10, and U.S. Code, Section 401.”⁵⁰

The Joint Staff Operations Directorate coordinates Humanitarian Demining operations and force allocation with regional and supporting CINCs, while providing guidance and operational control for Department of Defense Humanitarian Demining Operations in support of regional plans and missions.⁵¹ The Defense Security Cooperation Agency (DSCA) coordinates and monitors the Department of Defense’s execution of Humanitarian Demining Training Operations and related program activities.⁵² Geographic Combatant Commanders plan, manage and conduct humanitarian demining training operations within their Area of Responsibility (AOR), recommends priorities to the Joint Staff to OASD (SO/LIC) and the DSCA, and are ultimately responsible for the execution of approved programs.⁵³

Armed forces, including Special Operations and Explosive Ordnance Disposal (EOD) forces, provide support to demining efforts, but may not physically engage in

demining or the physical destruction of mines during humanitarian demining unless specifically approved by the Secretary of State. Military Humanitarian Demining Assistance includes training and support of landmine and ERW detection and clearance. Military efforts in support of demining assistance may include education, training, and technical assistance to indigenous host nation demining forces. During combat, EOD forces execute render safe procedures and other technical explosive disposal requirements and combat engineers provide destruction of explosives within maneuver corridors during combat.⁵⁴

The Military Challenge

Explosive remnants of war, explosive ordnance, and explosives, are the precursors for IEDs. ERW and unexploded ordnance are indirectly referenced in National Defense and Military Strategy within stability operations and are minimized within doctrine – including United States Army stability operations doctrinal guidance. Eliminating ERW is different and distinct from disarmament, demobilization and reintegration (DDR) tasks or freedom of maneuver issues. These terms are ambiguous and oversimplify the significant impact of explosives on essential security elements within regional stability goals and humanitarian intercession.⁵⁵

An overview of US laws, international norms, organizations, strategy, and doctrine typify broad governmental focus on security and stability requirements. While there is some mention of the requirement to control explosives within Army stability doctrine, it is limited. Institutionalization of increased security goals concerning explosive remnants of war and explosives remaining on the battlefield, including mines, is required in Army doctrine. Broad policy guidance is crucial to gain appropriate force usage and the greatest benefits and synergy of organizational efforts. Current

abbreviated guidance requires updates to accurately reflect current norms, procedures, and prioritization of efforts. The U.S. remains a leader in international programs and funding, and the U.S. commitment is highlighted by diplomatic engagement and significant governmental funding dedicated to humanitarian issues and security problems created by landmines, explosive remnants of war, obsolete stockpiles of weapons, and abandoned explosives throughout the world.⁵⁶

Stability is an enduring national interest. The Armed Forces have a myriad of competing challenges and requirements. Stability operations and security of indigenous peoples mandate simultaneous protection of civilians and armed forces. Inherent in stability and force protection is the requisite mandate to control explosives. Train the force initiatives support increased force effectiveness and indoctrinate warfighters with the use of emerging doctrine and techniques to include inculcation at the National Training Centers.⁵⁷

Recent experience in Iraq and Afghanistan underscores the importance within stability operations to control explosive material including mines, explosive remnants of war, and explosive ordnance. The need for guidance is clearly depicted within national strategy and for delineation of high-quality military forces trained and capable of performing technically specific tasks including worldwide humanitarian mine action efforts.⁵⁸ Military involvement is inherent in U.S. armed conflict to gain stability and security. While the Department of Defense and the Army have made increasing strides in the acknowledgment of explosive remnants of war and humanitarian mine action within stability operations, the institutionalization of key components and sub-categories within National Strategy and service guidance requires additional effort. Once peace

has been restored, the hard work of post-conflict stabilization and reconstruction continues. Stabilization, reconstruction, and nation building are largely accomplished by leveraging military manpower. The elimination of explosive ordnance is a critical precursor to executing military operations and gaining and maintaining security and stability.⁵⁹

The Military Solution

Explosive Ordnance Disposal forces are the Army's premier technical and tactical explosives experts. EOD Soldiers are the Army's explosive combat warriors trained and equipped to render-safe and dispose of unexploded ordnance, improvised explosive devices, and chemical, biological, and nuclear ordnance. EOD Soldiers receive in excess of 37 weeks of initial training and additional masters level courses provided by the Army, other agencies, and civilian academia, which culminate in unparalleled explosive technical expertise within the force structure⁶⁰ organized, trained, and equipped to support homeland defense and associated internal defense related missions, and stability and combat operations.⁶¹

EOD Soldiers' duties include locating, identifying, accessing, rendering safe, and disposing of foreign and domestic conventional, biological, chemical, or nuclear ordnance and IEDs, including WMDs and large vehicle bombs. Access procedures are those actions taken to locate and gain entry. Diagnostic procedures are actions taken to identify and evaluate unexploded explosive ordnance, render safe procedures involving the application of special explosive ordnance disposal methods, and tools to disrupt and separate essential components of unexploded explosive ordnance. Detonation and recovery procedures are actions taken to recover unexploded explosive ordnance and

final disposal procedures include demolition or burning in place, removal to a disposal area, or other appropriate means.⁶²

EOD forces execute intelligence gathering operations on first seen ordnance and IEDs to include physical material, fingerprints, and DNA. In support of combat operations, Soldiers research and identify ordnance using explosive ordnance disposal technical publications, use chemical detection technologies to determine the presence of, and identify chemical agents. EOD trained personnel prepare and use explosive ordnance disposal tools, equipment, and vehicles. EOD operations include explosive ordnance which becomes hazardous or damaged by deterioration, as well as, the destruction of captured enemy ammunition and any additional required specialized ammunition or explosive safety functions required by combat commanders.⁶³

EOD Soldiers have executed over 150,000 improvised explosive device missions in Iraq and Afghanistan including combat operations, post blasts, found, and cleared ordnance in support of operations, protecting combatants, civilians, and indigenous personnel.⁶⁴ When executing explosive ordnance disposal operations and supporting humanitarian demining and other explosive related tasks, explosive ordnance qualified Soldiers are the force of choice, followed by Special Forces within their foreign internal defense collateral duties, then other general purpose forces.⁶⁵

Recommended Priorities

The inclusion of specific stability operations terminology within US strategy and formal recognition of explosive remnants of war and humanitarian demining as key components of US stability interests in a whole government approach to coordinated security is essential. These efforts support critical components of America's security strategy by promoting freedom, justice, and human dignity, as

well as, working to address current stability challenges. These efforts support American and regional security interests. A review of international initiatives and agreements, U.S. structure, policies, and efforts in support of worldwide stability highlights the need for national guidance and initiatives to facilitate the control of explosive material before, during, and after combat operations including nation building and reconstruction activities in order to gain required synergy of organizations and fiscal policies.

First, identify the proliferation of explosives and explosive material including explosive remnants of war, and mines inherent to worldwide stability and security. The verbiage must be specific and doctrinally correct. The relative ease which explosives can be obtained affects Homeland Security, and the devastating effects of explosive material contribute to the worldwide pandemic of insecurity and instability.

Second, specifically identify the proliferation of explosives and explosive material including explosive remnants of war, and mines within National Security Strategy and military doctrine nested with U.S. stability and security. Include explosive eradication terminology within US strategy to garner synergy of national efforts, and publicly portray US explosive control priorities inherent to worldwide security and stability. The additional verbiage to national strategy is feasible, acceptable, and suitable to already stated national priorities, and current US current expenditures and efforts concerning humanitarian demining and explosive remnants of war elimination. Required delineation within military plans and doctrine and policy is required to provide comprehensive guidance identifying the importance of the control of explosives, explosives remnants of war, and humanitarian mine action. Clear guidance is inherent to effective military

operations across the spectrum of combat. Increased focus and benefits are garnered when the tenants of explosive control are nested within strategic and service guidance and energize key facets for unity of effort. Specifically, explosive remnants of war, facilitate insurgent building of improvised explosive devices and directly affect combat operations. Their elimination is critical in shaping and influencing regional security and stability.

Third, because of EOD expertise through the width and breath of explosive technical training, identify Joint force explosive ordnance disposal as the force of choice for explosives operations concerning humanitarian demining training of indigenous forces. EOD forces are specifically, trained, organized, and equipped to meet the most challenging explosive ordnance and destruction mission requirements. EOD forces are rigorously technically trained and are ideally suited to execute Department of Defense humanitarian mine action programs. EOD Soldiers are the Army's explosive ordnance technical experts who are best and most thoroughly trained personnel to execute highly specialized and delicate explosive operations. EOD forces execute missions either unilaterally, or in concert with special operations forces when additional defense priorities require unconventional warfare, direct action, special reconnaissance capabilities, or counter terrorism mission requirements in support of stability operations.⁶⁶

Conclusion

There is certainly no inexpensive or quick-fix to the dilemma of the wide spread proliferation of mines, explosive remnants of war, unexploded ordnance, and other uncontrolled explosive material. The United States has certainly made progress leveraging Department of State and Department of Defense assets, but more progress

is still required. Explosive terminology within national guidance, policies, directives, publications and other relevant documents must consistently and accurately utilize definitive recognized explosive terminology to establish legitimate priorities and guidance which can be clearly understood and adhered. The elimination of explosive threats to gain security and stability requires doctrinally specific and meaningful language within national documentation while simultaneously remembering true progress is more than the gross clearance of explosive and mines for military freedom of maneuver, and disarmament is simply not the same as the removal of explosive threats in support of civil security and stability.⁶⁷

Significant enhanced synergy and a whole of government approach with requisite language within national strategy and plans will leverage resources. Department of Defense documents with explicit language to influence the integration of security tasks will ultimately assist in gaining desired stability. Essential security related tasks concerning eradication and removal of explosives and concepts embedded within doctrine, organizations, training, materiel, leadership and education, personnel, facilities will energize military efforts and focus military operations toward the removal and destruction of explosives. Our Soldiers, our nation, and the world will yield benefits from efforts to eradicate explosives.⁶⁸

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International Campaign to Ban Landmines (ICBL). By 1997, 53 countries supported the total ban on landmines. By 1998, the Treaty to Ban Landmines was ratified by 40 countries and the treaty became a binding international convention. The treaty prohibits the manufacture, trade, and use of anti-personnel mines, requires countries to destroy stockpiles within 4 years and clear territories within 10 years, and urges governments to assist poor countries in landmine clearance and victim assistance. The Treaty to Ban Landmines has exhibited significant tangible effects on worldwide security, and subsequently stability". The Treaty to Ban Landmines gained extraordinary momentum of signatories and even with countries which have refused to sign. The document is the initial effort towards the end-goal of the total ban of landmines, antipersonnel landmines, cluster munitions, and supports the worldwide reduction of associated promulgation of all types of explosives including explosive ordnance and remnants of war which affects the stability and nation building of affected countries."The document was the fruition of efforts of the International Campaign to Ban Landmines (ICBL), including over 70 countries and won the Nobel Peace Prize. Over 156 countries are signatories Land Mine Ban Treaty of 1997. Only 39 countries have not signed the Land Mine Ban Treaty including the United States, Russian Federation, China, and Korea to list just a few." See "Treaty to Ban Landmines" and the "The Ottawa Treaty", linked from the Handicap International Homepage, http://www.handicap-international.org.uk/page_391.php (accessed on 28 September 2009).

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³⁶ U.S. Policy Evolution on Cluster Munitions, "Compilation from 2000 to 2008", http://cdi.org/clusters/clusters_full.pdf (accessed September 19, 2009), 1-2, 6. Additionally, A historical glimpse of U.S. funding for " 2007 includes \$64.3 million in humanitarian demining and \$10 million in International Trust Fund (ITF) monies" for demining and mine victim assistance which clearly demonstrates the U.S. national commitment to deal with and support the ramifications of the consequences from explosives and explosive ordnance; in addition to the \$1 billion from the Department of State and Department of Defense and other US agencies in support of efforts in over forty countries. "The dedicated support and funding has reduced casualties from over 26,000 in 2000 to 10,000 in 2008." Programs in support of these policies and efforts clear thousands of acres of land for productive use and open crucial infrastructure

via funds distributed through a complex arrangement of organizations. Additionally, the U.S. maintains a robust survivor assistance program through its Mine Action Program. See “Humanitarian Demining Program (HDP),” linked from The U.S. Department of State, <http://www.state.gov/t/pm/65535.htm> (accessed September 28, 2009). Furthermore, The U.S. commitment to Landmine Policy and Humanitarian Demining is characterized by the slogan, “To Walk the Earth in Safety”. The objectives defined in the United States Humanitarian Demining Program include, “the reduction of landmine casualties, the return of refugees and internally displaced persons (IDPs) threatened, and to enhance the political and economic stability of countries around the world affected by landmines.” The U.S. Government Policy Coordinating Committee (PCC) Subgroup on Mine Action is chaired by the National Security Council, and includes the Department of State (DOS), the U.S. Department of Defense (DoD), the U.S. Agency for International Development (USAID), and the Central Intelligence Agency as members. “The organization is responsible for coordinating, developing, and approving U.S. humanitarian demining assistance which typically involves the establishment of a mine action center (MAC), a mine-awareness program, and a demining training program.” As the country develops its mine-clearance program and capabilities, the Government Policy Coordinating Committee periodically evaluates program development and assists in program sustainment for the host nation and the active supervision of program continuation. See U.S. Department of State, Diplomacy in Action, “Overview of U.S. Humanitarian Demining Program – To Walk the Earth in Safety: The United States Commitment to Humanitarian Demining,” <http://www.state.gov/t/pm/rls/rpt/walkearth/2002/14867.htm> (accessed September 28, 2009).

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⁵⁹ "Office of Weapons Removal and Abatement (WRA)," linked from the U.S. Department of State, <http://www.state.gov/t/pm/wra/index.htm> (accessed on September 28 2009).

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