

Operational Use of the US Army Reserve in Foreign
Disaster Relief to Support the United States
Government's Strategic Use of
Humanitarian Assistance and
Disaster Response

A Monograph

by

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The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the US Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

Abstract

Operational Use of the US Army Reserve in Foreign Disaster Relief to Support the United States Government's Strategic Use of Humanitarian Assistance and Disaster Response, by MAJ Kelly J. Pajak, 47 pages.

Although it is impossible to predict the future, the operational environment of 2025 and beyond may require additional military support to the United States Government's agencies in Foreign Disaster Relief (FDR). Global climate change, urbanization, growing natural resources scarcity, and other factors will increase the need for humanitarian assistance (HA) and disaster relief. At the same time, the Department of Defense (DoD) is undergoing budget and force reductions. The confluence of these factors and interaction of these variables in the current and future operational environment may require increased FDR capability and support from the military. Options for how the DoD will address FDR should be explored. Given the unique capabilities of the United States Army Reserve (USAR), congruent with FDR, the USAR may be best suited for the primary role in FDR missions. This monograph explores the current and future environment and provides analysis of the USAR to serve as a DoD option with a primary responsibility in FDR.

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Acronyms

A2D	Area Access and Area Denial
COCOM	Combatant Command
DoD	Department of Defense
F2025B	Force 2025 and Beyond
FDR	Foreign Disaster Relief
FHA	Foreign Humanitarian Assistance
HA	Humanitarian Assistance
HADR	Humanitarian Assistance and Disaster Response
IPCC	Intergovernmental Panel on Climate Change
NDS	National Defense Strategy
NMS	National Military Strategy
NSS	National Security Strategy
OFDA	Office of Foreign Disaster Assistance
QDR	Quadrennial Defense Review
RAF	Regionally Aligned Forces
SecDef	Secretary of Defense
SRM	Sustainment Readiness Model
US	United States
USAID	United States Agency for International Development
USAR	United States Army Reserve
USG	United States Government

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Introduction

If you know the enemy and know yourself, you need not fear the result of a hundred battles. If you know yourself but not the enemy, for every victory gained you will also suffer a defeat. If you know neither the enemy nor yourself, you will succumb in every battle.¹

—Sun Tzu, *The Art of War*

As the operational environment evolves into the future, potentially greater opportunities exist to support United States national security aims through Foreign Disaster Relief (FDR) missions. Due to ongoing global climate change, rising sea levels, and the concentration of people in coastal megacities, it is likely that the Department of Defense (DoD) will undertake additional future Foreign Humanitarian Assistance (FHA) activities, specifically FDR. In the last two decades, FDR has been a joint and Army activity conducted by the DoD in support of other United States Government (USG) agencies.² During that time, the Presidents of the United States and the Secretaries of Defense have directed the DoD to conduct FDR activities in support of national strategic objectives. FDR will continue to remain a tool of diplomacy, security, and an expression of US values, and also a primary mission for the DoD.³ Since the future operational environment will likely include greater numbers of natural disasters, the DoD's responsibilities for FDR will multiply. The United States Army Reserve (USAR) may be a good option for the DoD to fulfill this responsibility.

The DoD's involvement in supporting the USG humanitarian assistance and disaster response (HADR) efforts through FDR will likely increase due to changing environmental

¹ Sun Tzu, *The Art of War*. trans. Ralph D. Sawyer. (Boulder, CO: Westview Press, 1994), 3.

² Joint Publication (JP) 3-29, *Foreign Humanitarian Assistance* (Washington, DC: Government Printing Office, 2014), ix; Army Doctrine and Training Publications (ADRP) 3-07, *Stability* (Washington, DC: Government Printing Office, 2013), chap. 3; DoD, Directive 5100.46, *Foreign Disaster Relief* (Washington, DC: Government Printing Office, July 6, 2012).

³ DoD, Directive 5100.46; DoD, Secretary of Defense (SecDef), *Quadrennial Defense Review (QDR) 2014* (Washington, DC: Government Printing Office, 2014), V, 22, 60.

conditions caused by climate change. Climate change is a major contributor to emerging natural resource scarcity, the increase in frequency of natural disasters, and other extreme weather events that influence the economic, social, and political stability of impacted nations. Insurgents and malign actors can capitalize on the prevailing unstable conditions created or exacerbated by climate change events or impacts. In addition, as nations have closed their borders to US presence, interaction, and influence, USG efforts in FDR can be a valuable tool to break down barriers and foster diplomacy.⁴

The DoD's structure, systems, and policies have not been modified to meet these future FDR challenges. Due to sharp budget and troop reductions, the focus of active duty forces is on preparedness for projecting strategic power.⁵ Yet the DoD's FHA responsibilities are likely to increase rather than decrease. As Joint Publication (JP) 3-29 *Foreign Humanitarian Assistance* explains:

Although US military forces are organized, trained, and equipped to conduct military operations that defend and protect US national interests, their inherent, unique capabilities may be used to conduct FHA activities.⁶

Research and case studies show that preparedness for defense and protection missions is not wholly transferable to disaster relief missions. Recent case studies about the US Marines' FDR missions in Iraq, Turkey, Cuba, and Bangladesh, as well as lessons learned from four joint service

⁴ Lydia Poole, "Counting the Cost of Humanitarian Aid Delivered Through the Military" *Global Humanitarian Assistance*, March 2013, 2, accessed February 18, 2015. <http://www.globalhumanitarianassistance.org/wp-content/uploads/2013/04/gha-2013-briefing-military-involvement-humanitarian-aid.pdf>; Ilan Kelman, "The Many Failures of Disaster Diplomacy" *Natural Hazards Observer* 37, no. 1 (September 2012): 12-15, accessed March 19, 2015, http://www.colorado.edu/hazards/o/archives/2012/sep12_observerweb.pdf

⁵ DoD, SecDef, *QDR 2014*, (Washington, DC: Government Printing Office), 60; JP 3-29, ix.

⁶ JP 3-29, ix; JP 3-0, *Joint Operations* (Washington, DC: Government Printing Office, 2011), xvii.

case studies about Asia-Pacific FDR efforts, demonstrate the need for DoD FDR reform.⁷ In addition, several publications and a recent RAND study on FDR argues that the DoD is not doing FDR missions justice by treating them as *ad-hoc* additions to a unit's core tasks.⁸

Reducing the vulnerability of the populations, the infrastructure, and the respective economic systems is the best way for nations to deal with natural disasters and climate change. However, it may take foreign nations a substantial amount of time, possibly decades, to develop the specific capabilities to counter the effects of disasters by themselves. In every combatant command's (COCOM) area of responsibility there are countries affected by disasters with national governments that may not have the capacity to respond and recover without assistance. According to the Intergovernmental Panel (IPCC) on Climate Change and the United States Agency for International Development (USAID), countries in Africa, Asia, South America, Europe and the Middle East are facing current and future risk to an increase in devastating impacts from climate change.⁹ While efforts to reduce risk and vulnerability to disasters are

⁷ Jennifer D. P. Moroney et al., *Lessons from Department of Defense Disaster Relief Efforts in the Asia-Pacific Region* (Santa Monica, CA: RAND Corporation, 2013), accessed August 21, 2014, http://www.rand.org/pubs/research_reports/RR146.html; Adam B. Siegel, *Requirements for Humanitarian Assistance and Peace Operations: Insights From Seven Case Studies* (Alexandria, VA: Center for Naval Analyses, March 1995).

⁸ Moroney et al., *Lessons from Department of Defense Disaster Relief Efforts in the Asia-Pacific Region*; Siegel, *Requirements for Humanitarian Assistance and Peace Operations*; Lael Brainard, ed., *Security by Other Means: Foreign Assistance, Global Poverty, and American Leadership* (Washington, DC: Brookings Institution Press and Center for Strategic and International Studies, 2007); James Jay Carafano and Richard Weitz, eds., *Mismanaging Mayhem: How Washington Responds to Crisis* (Westport, CT: Praeger Security International, 2008); DoD, Graphic Training Aid (GTA), 90-01-030, *Support to Foreign Disaster Relief: Handbook for JTF Commanders and Below* (Washington, DC: Government Printing Office, 2011), accessed March 9, 2015, <http://fas.org/irp/doddir/dod/disaster.pdf>.

⁹ USAID, "Disaster Assistance," accessed January 8, 2015, <http://www.usaid.gov/what-we-do/working-crises-and-conflict/responding-times-crisis/>; IPCC, B. Field et al., *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the IPCC* (New York: Cambridge University Press, 2014), 13, accessed January 8, 2015, http://ipcc-wg2.gov/AR5/images/uploads/WGIIAR5-Chap13_FGDall.pdf.

undertaken around the world, the USG acknowledges that the US involvement in HADR will continue.¹⁰ The DoD must explore options and adaptations to meet future demands to fulfill their role to support the USG's involvement in HADR FDR as part of the national security strategy.

This monograph explores the suitability of the USAR for future FDR missions and activities. It evaluates what changes in the future operating environment might require a review of the current DoD posture and institutional changes for DoD preparedness in support of the USG's strategic use of FDR. Secondly, it explores beneficial reasons for the use of the USAR to provide the primary and core FDR capabilities, for the DoD and the Army, and the obstacles for FDR participation. Lastly, it evaluates how the DoD could bolster the USAR's preparedness for FDR missions. This monograph argues for the USAR to be considered for a primary FDR role to fulfill the DoD's contribution to the USG's HADR efforts. The USAR is well suited to complete such missions due to the preparedness of its reservists, the current DoD fiscal environment (including training and personnel budgets), and competing DoD missions that require the attention and readiness of active duty forces. The USAR's capabilities are the capabilities needed in natural disasters, required by those affected, and requested by USAID, and is the primary reason for considering the USAR as an option.¹¹

The monograph addresses three main issues. The first section analyzes strategic guidance, discussing the risks that foreign disasters pose to US national security and the policy that directs DoD FDR responses. The second section looks at several complex factors influencing the ongoing and future operational environment that require changes for FDR capabilities in the force 2025 and beyond (F2025B). Analysis of the USAR, for a primary role in FDR, in

¹⁰ DoD, Directive 5100.46.

¹¹ Office of Foreign Disaster Assistance (OFDA), *Joint Humanitarian Operations Course* (Washington, DC: USAID, 2013), 7; GTA 90-01-030, 11-1.

conjunction with changes in the operational environment, is discussed in section three. Finally, section four provides recommendations and conclusions.

Strategic Overview of Foreign Humanitarian Assistance and Disaster Relief

Definitions

In US Army and Joint doctrine, there is significant ambiguity about language that describes responses to natural disasters and humanitarian crises.¹² USAID, is the lead USG agency the DoD supports and USAID uses the term HADR. USAID describes disasters and HA as follows:

USAID Disaster: An unexpected occurrence, manmade or natural, that causes loss of life, health, property or livelihood, inflicting widespread destruction and distress and having long-term, adverse effects on Agency operations. It is distinguished from an accident by its magnitude and by its damage to the community infrastructure or the resources required for recovery.¹³

USAID Humanitarian Assistance (HA): Providing life-saving aid, USAID's humanitarian work includes efforts to save lives by delivering shelter, safe drinking water, improved sanitation, critical relief supplies, and emergency medical care to people and places most in need which include preparation and recovery for humanitarian crises.¹⁴

USAID's meaning of the term HADR is the accepted and commonly used term outside of the DoD. Those who recognize USAID's definition of HA exclude militaries from being humanitarian actors because they cannot be impartial or neutral and because HA is temporally

¹² JP 3-29; ADRP 3-07.

¹³ USAID, "International Disaster Assistance: Major Functional Series 200 Program Assistance," 251, 502, 530. February 2013, 9, accessed March 21, 2015, <http://www.usaid.gov/sites/default/files/documents/1866/251.pdf>.

¹⁴ USAID, "50 Years of Humanitarian Assistance," accessed April 2, 2015, <http://www.usaid.gov/ofda50>; OFDA, Democracy, Conflict, and Humanitarian Assistance, accessed January 22, 2015, <http://www.usaid.gov/who-we-are/organization/bureaus/bureau-democracy-conflict-and-humanitarian-assistance/office-us>.

focused on only immediate suffering.¹⁵ While non-DoD US agencies, civil, international nongovernmental organizations, international governmental organizations, and other foreign governments use the term HADR, the DoD interchangeably uses multiple terms to describe the activities associated with HADR.¹⁶ This imprecision causes confusion and frustration outside and inside the DoD. Nevertheless, for the purpose of consistency and clarity, this monograph will use the DoD term “FDR” to denote DoD involvement in HADR. DoD publications define FDR as follows:

Joint and Army Foreign Disaster Relief:

FDR is the term used by the DoD for supporting the USG’s HADR efforts and is a submission to FHA. (Army doctrine, ADRP 3-07 *Stability* does not reference FDR but directs readers to reference JP 3-29 for further elaboration on FHA).¹⁷

FHA activities conducted by US Armed Forces range from steady-state activities supporting [COCOM] security cooperation and related programs to conducting limited contingency operation in support of another USG department or agency.¹⁸

FHA includes FDR operations and other activities that directly address a humanitarian need, and may also be conducted concurrently with other DoD support missions and activities such as dislocated civilian support, security operations, and foreign consequence management.¹⁹

FDR is assistance to alleviate the suffering of foreign disaster victims, including victims of natural disasters and conflicts, internally displaced persons (IDPs), refugees, stateless persons, and vulnerable migrants. Normally, it includes the provision of basic services and commodities such as food, water, sanitation, health care, non-food items (clothing, bedding, etc.), emergency shelter, as well as support to critical infrastructure and logistics necessary for the delivery of these essential services and commodities. The US military

¹⁵ UN Office of Coordination for Humanitarian Assistance, “Humanitarian Principles,” 2014, accessed October 11, 2014, https://docs.unocha.org/sites/dms/Documents/OOM-humanitarianprinciples_eng_June12.pdf; JP 3-29, III–22, I–6.

¹⁶ JP 3-29, GL–7, I–7.

¹⁷ ADRP 3-07, 3–17.

¹⁸ JP 3-29, I–6.

¹⁹ USAID, “50 Years of Humanitarian Assistance.”

normally will only be asked to provide FDR when it brings a unique capability or when the civilian response community is overwhelmed.²⁰

Further confusion is caused by the multiple terms used interchangeably to describe FHA, FDR, or stability operations like humanitarian relief, emergency response, crisis response and limited contingency operations, reconstruction and restoration of essential services for HA and social well-being, and others.²¹ The interchangeable and ambiguous language used for and in place of HA can also contribute to the confusion of roles, responsibilities, and authorities in FDR between agencies and nations affected.

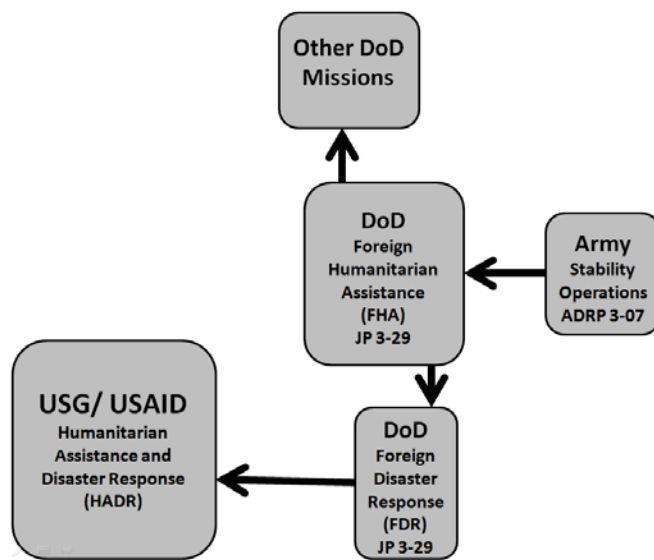


Figure 1. Army and Joint Doctrinal Relationship to FDR

Source: Created by author using ADRP 3-07, JP 3-29, JP 3-7.

Authority Directing the DoD’s Participation in Foreign Disaster Relief

The DoD is tasked with and responsible for providing support to HADR. The following directives confirm the current, anticipated, and limitations of authority for F2025B’s directed role in FDR. The 1995 Executive Order 12966, directs the DoD to provide foreign disaster assistance

²⁰ JP 3-29, I-7.

²¹ JP 3-29, I-8, I-9, B-1; ADRP 3-07, 2-6 – 2-9, 2-11, 2-16, 2-17.

outside of the US only at the direction of the President in concurrence with the Department of State, or to save lives when there is not enough time to seek the Secretary of State's concurrence.²² The 2012 DoD Directive, 5100.46, updated Title 10, United States Code, Armed Forces sections 404 (foreign disaster assistance) and 401 (humanitarian and civic assistance), and Executive Order 12966. The guidance contained in these documents directs the DoD to provide disaster assistance in support of USG efforts and provides the legal authority for DoD involvement.²³

United States involvement in HADR required a different skill set and training in comparison with long-term diplomatic development programs. The President chose as lead USG agency, the Office of Foreign Disaster Assistance (OFDA), within the Bureau of Democracy, Conflict, and Humanitarian Assistance, USAID, with the skills and training best suited to direct and manage USG's HADR.²⁴ In that capacity, the OFDA determines whether DoD capabilities are needed for a disaster and conducts direct coordination with the Office of the Secretary of Defense.²⁵ The Office of the Secretary of Defense Policy 2004 Cable "Guidance Policy and

²² William Clinton, Executive Order 12966, "Foreign Disaster Assistance," *Federal Register* 60, no.137 (July 18, 1995): 36949.

²³ DoD, Directive 5100.46: US Congress. Committee on Armed Services of the House of Representatives. January 7, 2011. Title 10, United States Code. Armed Forces. § 401 Humanitarian and Civic Assistance; § 404 Foreign Disaster Assistance, accessed January 8, 2015. http://armedservices.house.gov/index.cfm/files/serve?File_id=8F86265A-E2DD-482C-A4F6-72B9A0E1B2D9; Executive Order 12966.

²⁴ US Congress, House and Senate. Committee on Foreign International Relations, Legislation on Foreign Relations Through 2002, 204, accessed March 10, 2015, <http://www.usaid.gov/sites/default/files/documents/1868/faa.pdf>; Executive Order 12966, 2.

²⁵ Office of the Secretary of Defense (OSD), Policy 2004 Cable Guidance, "Policy/Procedures for DoD Participation in FDR/ER Operations" (Washington, DC: Government Printing Office, May 2004), 1, 3; DoD, Directive 5100.46; USAID, "Who We Are: USAID Bureaus," 2, accessed January 21, 2015, <http://www.usaid.gov/who-we-are/organization/bureaus>; Secretary of State, "USAID Office of US Foreign Disaster Assistance: Guidance for Disaster Planning and Response- FY 2012," December 2, 2011, 2, accessed January 11 2015, <http://www.usaid.gov/sites/default/files/documents/1866/251mad.pdf>.

Procedures for DoD Participation in FDR/ER Operations” states the “DoD’s role in disaster response is part of a comprehensive US government approach in which the [USAID]/OFDA is the lead agency.”²⁶ DoD Directive 5100.46 reinforces DoD’s support role. The “DoD shall respond to foreign disasters in support of [USAID].”²⁷

Strategic Guidance Associated with Foreign Disaster Relief

Strategic guidance identifies HADR as part of the US national security and objectives. Based on strategic guidance contained in guidelines, regulations, and authoritative statements, such as the *National Security Strategy (NSS)*, the Army must prepare the F2025B to conduct FDR and respond to an increase in climate change related natural disasters. The next few paragraphs explore strategic documents establishing the common vision of the future operational environment. The document review captures senior USG and military leadership’s directives on how global climate change, related extreme weather events, budget reduction, the growth of megacities and so forth will impact the future environment. The strategic documents are the NSS,

²⁶ OSD, Policy 2004 Cable Guidance.

²⁷DoD, Directive 5100.46.

National Defense Strategy (NDS), National Military Strategy (NMS), Sustaining US Global Leadership: Priorities for 21st Century Defense (Secretary of Defense Strategic Guidance), Quadrennial Defense Review (QDR), current COCOM posture statements related to Unified Campaign Plans, and other directives issued by military and political leaders.²⁸

Climate Change

Climate change will play a major role in the future strategic and operational environment. On January 20, 2015, President Barack Obama stated “No challenge poses a greater threat to

²⁸ Barack Obama, *2015 National Security Strategy* (Washington, DC: Government Printing Office, February 2015), accessed March 22, 2015, http://www.whitehouse.gov/sites/default/files/docs/2015_national_security_strategy.pdf; SecDef, *QDR 2014*; Chairman of the Joint Chiefs of Staff (CJCS), *The National Military Strategy of the United States of America 2011: Redefining Americas Leadership* (Washington, DC: Government Printing Office, 2011), accessed January 12, 2015, <https://acc.dau.mil/adl/en-US/425505/file/55897/2011%20National%20Military%20Strategy.pdf>; SecDef, *Sustaining US Global Leadership: Priorities for 21st Century Defense* (Washington, DC: Government Printing Office, January 2012), accessed May 5, 2014, http://www.defense.gov/news/Defense_Strategic_Guidance.pdf; DoD, SecDef, *National Defense Strategy* (Washington, DC: Government Printing Office, June 2008), accessed October 9, 2014, <http://www.defense.gov/news/2008%20National%20Defense%20Strategy.pdf>; DoD, “2014 Climate Change Adaptation Roadmap” (Washington, DC: Government Printing Office, 2014), accessed January 15, 2015, <http://www.acq.osd.mil/ie/download/CCARprint.pdf>; US Africa Command, *United States Africa Command 2015 Posture Statement*, accessed January 11, 2015, <http://www.africom.mil/>; Lloyd J. Austin III, “Statement of General Lloyd J. Austin III, Commander US Central Command, Before the House Appropriation Committee—Defense Committee on the Posture of US Central Command, March 5, 2014, accessed January 11, 2015, <http://www.centcom.mil/en/about-centcom-en/commanders-posture-statement-en>; Philip M. Breedlove, *Statement of General Philip Breedlove, Commander US Forces Europe Before the House Armed Services Committee*, February 25, 2015, accessed April 2, 2015, <http://www.eucom.mil/mission/background/posture-statement>; Samuel J. III Locklear, *Statement of Admiral Samuel J. Locklear, US Navy Commander, US Pacific Command, Before the Senate Committee on Armed Services on US Pacific Command Posture*, March 25, 2014, accessed January 11, 2015, <http://www.pacom.mil/Media/SpeechesTestimony/tabid/6706/Article/8598/pacom-senate-armed-services-committee-posture-statement.aspx>; John F. Kelly, *Posture Statement of General John F. Kelly, United States Marine Corps, Commander, United States Southern Command Before the 114th Cong., Senate Armed Services Committee*, March 12, 2014, accessed February 9, 2015, <http://www.southcom.mil/newsroom/Pages/2015-Posture-Statement-to-Congress-.aspx>.

future generations than climate change.”²⁹ He also shared the DoD’s view on climate change. “The Pentagon says that climate change poses immediate risks to our national security.”³⁰ Obama’s declaration reinforces the national position on climate change and is captured in strategic guidance.

The 2008 *NDS* was the first *NDS* to reference climate change, urbanization, natural resource scarcity, and purports a disaster support role as part of the national defense strategy.³¹ Then in 2011, the *NMS* also emphasized the need to mitigate the impacts of climate change in the strategic defense environment.³² The *NMS* also highlighted the impact of natural disasters and global natural resource competition and challenges associated with population growth.³³ In 2012, the Secretary of Defense (SecDef) issued strategic guidance, *Sustaining US Global Leadership: Priorities for 21st Century Defense*. In this Defense Strategic Guidance, Secretary of Defense Leon Panetta listed HADR as a primary US Armed Forces mission, “to protect US national interests and achieve the objectives of the 2010 *National Security Strategy*.”³⁴ The Defense Strategic Guidance does not mention the impact of climate change, natural resource scarcity, or urbanization.

The 2014 *QDR* reinforces the link between climate change, and the “frequency, scale, and complexity of future missions,” wreaking havoc on nations and creating environments

²⁹ Barack Obama, Address Before a Joint Session of the Congress on the State of the Union: Address to the Nation. January 20, 2015. (Daily Comp. Pres. Docs., 2009 DCPD No. 00001): 8. Accessed January 21, 2015. <http://www.gpo.gov/fdsys/pkg/DCPD-201500036/pdf/DCPD-201500036.pdf>

³⁰ Ibid., 8.

³¹ SecDef, *National Defense Strategy*, 2011, 5, 2008, accessed January 18, 2015, <http://www.defense.gov/news/2008%20National%20Defense%20Strategy.pdf>.

³² CJCS, *The National Military Strategy of the United States of America*, 4,5, 2, 15.

³³ Ibid., 1,4,5.

³⁴ SecDef, *Sustaining US Global Leadership: Priorities for 21st Century Defense*, 5, 6.

conducive to adversaries.³⁵ The *QDR* references the DoD's need for the future capability to respond to disasters.³⁶ It also describes the influence of climate change on the operational environment, natural resource scarcity, stability, and changes to roles and missions for the US Armed Forces.³⁷ In the *QDR* the Secretary of Defense, Chuck Hagel, and the Chairman of the Joint Chiefs of Staff, General Martin Dempsey listed FDR as an important part of the DoD's strategy to project power. However, it was listed twelfth out of the twelve priorities set by the SecDef.³⁸

A Unified Campaign Plan provides specific guidance to the COCOM for focusing their planning, missions, and operations to support strategic guidance provided by the President, the National Security Council, SecDef, and Chairman of the Joint Chiefs of Staff.³⁹ Insights into their mission focus are provided through their posture statements to the House Armed Services Committee. In their testimonies to the House Armed Services Committee, each COCOM reported conducting missions or training related to FDR and expressed concern over natural resource competition and increased vulnerability due to urbanization.⁴⁰ Pacific Combatant Commander,

³⁵ SecDef, *QDR 2014*, VI, 30.

³⁶ *Ibid.*, viii, 12, 75.

³⁷ SecDef, *QDR 2014*, 5, 8, 16, 22,25, 60.

³⁸ SecDef, *QDR 2010* (Washington, DC: Government Printing Office, February 2010), 60.

³⁹ DoD, *DoD Releases Unified Command Plan 2011*, April 8, 2011, accessed January 12, 2015, <http://www.defense.gov/releases/release.aspx?releaseid=14398>.

⁴⁰ Austin, 2, 8, 7, 12, 13, 15; Breedlove, 12; Locklear, 2,3; US Africa Command, 1, 3, 4; Kelly, 29, 44; Charles H. Jacoby, *Statement of General Charles H. Jacoby, Jr., US Northern Command and North American Aerospace Defense Command Before the House Armed Services Committee*, February 26, 2014, accessed February 9, 2015, http://www.northcom.mil/Portals/28/Documents/2014%20NC%20Posture%20Statement_Final_HASC.pdf, 15.

Admiral Samuel J. Locklear III, made a bold statement in 2013, that climate change was the biggest long-term threat to the region.⁴¹ Again, in 2014, he reemphasized his position:

I haven't changed my position [on the threat of climate change]. I mean, if there's one thing I tell everybody that comes to work for me, [to] every commander I say 'While you're here, you may not have a conflict with another military, but you will have a natural disaster that you have to either assist in, or be prepared to manage the consequences on the other side.' And that has been true every year.⁴²

In 2014, the DoD published the *Climate Change Adaptation Roadmap*.⁴³ The document emphasizes that "climate change will affect the Department of Defense's ability to defend the Nation and poses immediate risks to US national security."⁴⁴ SecDef Hagel's forward states:

A changing climate will have real impacts on our military and the way it executes its missions. The military could be called upon more often to support civil authorities, and provide humanitarian assistance and disaster relief in the face of more frequent and more intense natural disasters.⁴⁵

The roadmap lists multiple potential effects of climate change on the DoD, including an "increased demand for disaster relief and humanitarian assistance overseas."⁴⁶

President Obama's 2015 *NSS* also identifies climate change as a serious, urgent, and growing challenge.⁴⁷ The *NSS* argues that climate change is accelerating and that the US must take action to confront it.⁴⁸ Obama's previous *NSS* stated that:

⁴¹ Bryan Bender, "Chief of US Pacific Forces Calls Climate Biggest Worry," *The Boston Globe*, 2, March 9, 2013, accessed March 24, 2015, <https://www.bostonglobe.com/news/nation/2013/03/09/admiral-samuel-locklear-commander-pacific-forces-warns-that-climate-change-top-threat/BHdPVCLrWEMxRe9IXJZcHL/story.html>.

⁴² Caitlin Werrell and Francesco Femia, "Must Watch: PACOM Commander on the Climate Change Threat to the Asia-Pacific," *The Center for Climate & Security*, July 11, 2014, 2, accessed April 6, 2015, <http://climateandsecurity.org/2014/03/07/must-watch-pacom-commander-on-the-climate-change-threat-to-the-asia-pacific/>.

⁴³ DoD, "2014 Climate Change Adaptation Roadmap." (Washington, DC: Government Printing Office, 2014).

⁴⁴ *Ibid.*, 3.

⁴⁵ *Ibid.*, 2.

⁴⁶ *Ibid.*, 5.

[the]consequences of natural disasters, and a changing climate portends a future in which the United States must be better prepared and resourced to exercise robust leadership to help meet critical humanitarian needs.⁴⁹

The US response to disasters promotes the strength, influence, and universal values of the United States.⁵⁰ The *NSS* emphasizes the active leadership role the United States must take, providing examples of US responses to natural disasters.⁵¹ As a result, the USG must be better resourced, prepared, and able to meet critical needs in disasters and humanitarian crises. The *NSS* states as fact that the military “will remain ready to . . . mitigate the effects of natural disasters” and render HADR to support national defense.⁵²

Historical Context of the Future Operational Environment

Climate change is a catalyst for instability. The IPCC is the leading international scientific body for the assessment of climate change. The organization collects and disseminates information about the science and anthropological impacts of climate change from multiple and competing reports to determine the degree of probability for an event or outcome to occur.⁵³ The IPCC designed a model to experiment with various changes to carbon dioxide emissions, to

⁴⁷ *National Security Strategy 2015*, i, 2, 4.

⁴⁸ *Ibid.*, i–ii, 7, 12.

⁴⁹ Barack Obama, *2010 National Security Strategy* (Washington, DC: White House, May 2010), 39-40, accessed October 4, 2014, http://www.whitehouse.gov/sites/default/files/rss_viewer/national_security_strategy.pdf.

⁵⁰ *National Security Strategy 2015*, 7.

⁵¹ *Ibid.*

⁵² *Ibid.*

⁵³ IPCC, “Intergovernmental Panel on Climate Change: Organization,” Last modified 2015, accessed January 7, 2015, <http://www.ipcc.ch/organization/organization.shtml>.

estimate future risks, vulnerabilities, and impacts.⁵⁴ The findings indicated that the impacts of climate change are going to multiply, not decrease in the future. The implication is that requests for USG HA missions likely will grow. Additionally, because climate change can cause abrupt changes, distributed unevenly throughout the world, every COCOM should be prepared for FDR missions.⁵⁵

Natural Disasters

Exposure to extreme destabilizing events will increase in global and local scale, frequency, and intensity in the future due to climate change.⁵⁶ For example, areas prone to monsoons expand and the storms will intensify, El Niño's Southern Oscillation affects will likely expand, increasing variability regionally.⁵⁷ In addition, the IPCC predicts that flooding (extreme precipitation), storm surges, coastal erosion (rising sea level), droughts (heat waves), cyclones, and wild fires will increase in frequency, driving political and social stability.⁵⁸ Extreme events can quickly destabilize a community, city, or nation in the future with their "higher probability, larger magnitude, persistence, [and population] vulnerability, and limited potential to reduce risk."⁵⁹

⁵⁴ IPCC, "Climate Change 2014: Synthesis Report," 61-60, last modified 2014, accessed January 7, 2015, http://ipcc.ch/pdf/assessment-report/ar5/syr/SYR_AR5_LONGERREPORT_Corr2.pdf.

⁵⁵ *Ibid.*, 16.

⁵⁶ IPCC, "Climate Change 2014: Synthesis Report," 16, 55, 69.

⁵⁷ *Ibid.*, 64.

⁵⁸ *Ibid.*, 8.

⁵⁹ *Ibid.*, 69.

Urbanization

Global population growth will likely amplify the devastation of natural disasters in several structural and institutional ways creating conditions for instability. The world is complex and there are major future implications from the interaction between nature, climate change, urbanization of coastal cities, and population growth in megacities. The concentration of people in megacities will likely increase the severity of natural disasters. It is critical that the military planner, not only in FDR but also in all military missions, understand the interdependency of these factors with climate change to formulate better plans, interventions, and actions.⁶⁰ It is ever apparent why DoD needs options to be prepared for conducting FDR.

The interaction between existing natural systems, climate change, and urbanization creates a positive feedback loop between the impacts of climate change and the impact of the population on the area. The population stresses the environment and is stressed by the changes in the environment exacerbating both the impacts of climate change and on the population creating a positive feedback loop, which is the one increasing the problem on the other and vice versa. The complexity of the operational environment, in which FDR is conducted, and other military interventions, grows due to these feedback loops.

Climate, just as anthropogenic or natural variability, affects both climate and human related drivers. Risk on coastal systems is the outcome of integrating drivers' associated hazards, exposure, and vulnerability. Adaptation options can be implemented either to modify the hazard or exposure and vulnerability or both.⁶¹

⁶⁰ IPCC, *Climate Change 2014: Impacts, Adaptation, and Vulnerability*, 367.

⁶¹ *Ibid.*, 373.

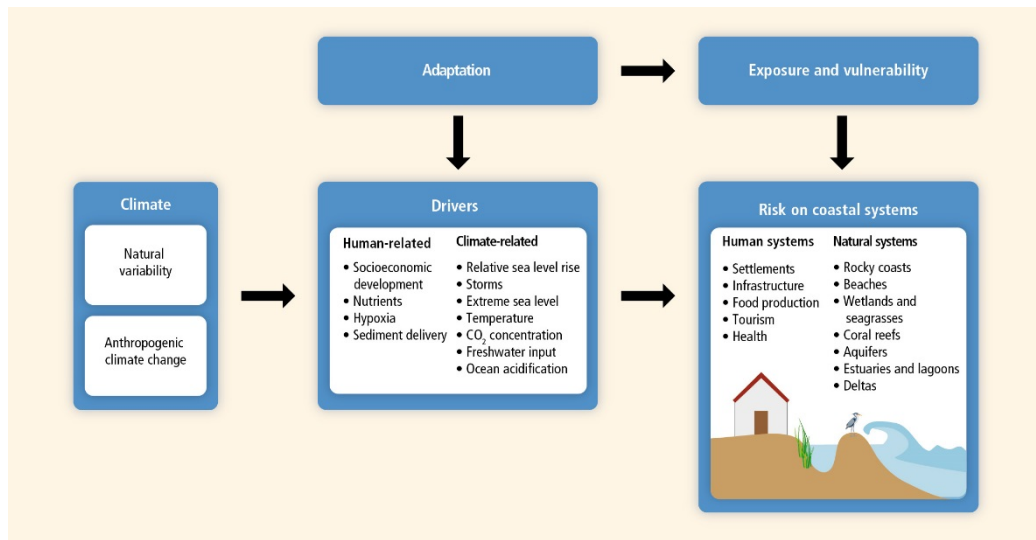


Figure 2. Human Drivers and Climate Change: Complex Interactions and Positive Feedback Loops.

Source: IPCC, *Climate Change 2014: Impacts, Adaptation, and Vulnerability* (Working Group II Contribution to the Fifth Assessment Report to the IPCC. 2014), 373.

The global population exposed to extreme weather events is expected to rise from thirty-nine million to 148 million by 2070 because of coastal migration, urbanization, and economic growth.⁶² One-half of the world’s population lives in urban centers, and eighteen out of twenty-three megacities are in low to middle-income countries and growing.⁶³ Contributing factors to urbanization are the pull of cities socioeconomic opportunities and the draw to cities to escape shortages in water, food, and arable land (also influenced by climate change).⁶⁴ Megacities in general contain the bulk of investment and development assets, transportation centers,

⁶² IPCC, *Climate Change 2014: Impacts, Adaptation, and Vulnerability*, 381; CJCS, *The National Military Strategy of the United States of America 2011*, 2.

⁶³ IPCC, “Climate Change 2014: Impacts, Adaptation, and Vulnerability,” 541–544; Demographia, *Demographia World Urban Area: Built-up Urban Areas or World Agglomerations*, May 2014, 20–42. Mega-cities are defined as having a population over ten million.

⁶⁴ IPCC, “Climate Change 2014: Synthesis Report,” 13, 14, 16.

infrastructures, and industry.⁶⁵ Military forces in a megacity environment must understand the influence and complexity of climate change to conduct feasible interventions.

Marginalized and disadvantaged groups in urban areas are disproportionately vulnerable to disasters. The poor, attracted to urban areas in hopes of securing employment, often live in informal settlements that increase their vulnerability to climate impacts.⁶⁶ They often live in housing that does not mitigate against the impacts of extreme weather. After a disaster, they are often left with no home, livelihoods destroyed, and lack the financial resources to rebuild or recover socially and economically.⁶⁷ Recovery and rebuilding costs after a disaster are expensive and if a country does not have the resources and financial means, the recovery time and funding can cripple a local or national economy, which can add to the local and regional instability.⁶⁸

The idea that geography and climate change influences the historical, social, and political stability of an area is not a new idea. Authors of history and multidisciplinary sciences like Robert Kaplan and Jared Diamond recognize how interrelated factors such as climate and geography, have influenced the development stability of continents over the centuries.⁶⁹ Currently, and in the future, climate change will redefine the global landscape. Peer reviewed research conducted in recent years links climate change to conditions conducive to conflict.⁷⁰ National governments unable to mitigate the negative effects of climate change (natural resource scarcity, vulnerability

⁶⁵ IPCC, *Climate Change 2014: Impacts, Adaptation, and Vulnerability*, 372–373, 381.

⁶⁶ *Ibid.*, 373.

⁶⁷ *Ibid.*, 545, 795–796.

⁶⁸ *Ibid.*, 384.

⁶⁹ Jared M. Diamond, *Guns, Germs, and Steel: The Fates of Human Societies* (New York: Norton, 1999); Robert D Kaplan, *The Revenge of Geography: What the Map Tells Us about Coming Conflicts and the Battle against Fate* (New York: Random House, 2013).

⁷⁰ Solomon M. Hsiang, Kyle C. Meng, and Mark A. Cane, “Civil Conflicts Are Associated with the Global Climate,” *Nature* 476, no. 7361 (August 2011): 1.

to disasters, loss of economic means, and way of life) are vulnerable to conditions favorable to insurgents.⁷¹ In addition, climate change combined with meteoric population growth and natural resource scarcity, puts “unavoidable pressure on people through migration, displacement, food insecurity, and impoverishment, possibly ending in conflict.”⁷²

Scholarship draws out the connection with extreme environmental events and social and political instability.⁷³ One example is a study from Columbia and Princeton that claims “the probability of new civil conflicts arising throughout the tropics doubles during El Niño years relative to La Niña years with the poorest responding the greatest with violence.”⁷⁴ Another example is a study of the Naxalities, a faction of the 1967 Maoist insurgency. The study associated the eruption of violence with extreme weather events that caused intense drought between the period of 1984 and 2000.⁷⁵ Even more recent, an article on the conflict in Mali in 2012, warned of pending conflict and the ease of insurgent recruitment, due to severe droughts in the Sahel.⁷⁶

These studies do not necessarily prove that climate change causes insurgencies, but

“unpredictable climate events may exacerbate conditions on the ground that can heighten the

⁷¹ Lionel Beehner, “Don’t Blame the Weather,” *World Policy Institute*, 6, last modified October 15, 2012, accessed March 31, 2015, <http://www.worldpolicy.org/blog/2012/10/15/dont-blame-weather>; Christian Parenti, *Tropic of Chaos: Climate Change and the New Geography of Violence* (New York: Nation Books, 2012), 139.

⁷² Beehner, “Don’t Blame the Weather,” 3.

⁷³ Parenti, *Tropic of Chaos*, 139.

⁷⁴ Hsiang, Meng, and Cane, “Civil Conflicts Are Associated with the Global Climate,” 1, 10.

⁷⁵ Parenti, *Tropic of Chaos*, 135.

⁷⁶ The Economist, “A Perfect Desert Storm,” March 17, 2012, 4, accessed March 30, 2015, <http://www.economist.com/node/21550324>; Abraham Riesman, “Could Climate Change Be Al-Qaida’s Best Friend in Africa?,” *Slate*, February 7, 2013, 2, accessed January 13, 2015, http://www.slate.com/blogs/future_tense/2013/02/07/mali_islamist_insurgents_could_climate_change_be_al_qaida_s_best_friend.html.

likelihood of violence.”⁷⁷ President Obama recognized these “forces of instability” such as climate change, that would persist and spread, undermining global security and the need to shape international order, including mitigating the destabilizing effects of climate change.⁷⁸

Area Access and Denial Mitigation

Area access and area denial (A2D) to regions around the world are of concern to the US national security. FDR military support to USG HADR missions, historically, allowed area access to the military and other USG agencies for brief and sometimes prolonged periods, where access had previously been denied. The Joint Chiefs of Staff’s Capstone Concept for Joint Operations and the Joint Operational Access Concept are the strategic and operational concepts for how the US Military will defend the United States from future security challenges like A2D.⁷⁹ The Joint Operational Access Concept is the vision and concept for DoD’s response to the growth of A2D in the global environment.⁸⁰ Both documents address the importance and need to prioritize finding ways to mitigate A2D. A2D is on the rise for many reasons. Some reasons are that globalization offers countries alternatives for seeking assistance and secondly, the US presence is perceived as an imposition to a nation’s sovereignty.⁸¹ Challenges from A2D negatively affect the

⁷⁷ Beehner, “Don’t Blame the Weather,” 9.

⁷⁸ *National Security Strategy 2010*, 5, 40, 47.

⁷⁹ CJCS, *Capstone Concept for Joint Operations: Joint Force 2020* (Washington, DC: Joint Chiefs of Staff, September 10, 2012), 1, accessed January 18, 2015, http://www.defenseinnovationmarketplace.mil/resources/JV2020_Capstone.pdf; US Joint Forces Command (USJFCOM), *The Joint Operating Environment 2010*, (Washington, DC: Government Printing Office, February 18, 2010), 1, accessed January 18, 2015, <http://fas.org/man/eprint/joe2010.pdf>.

⁸⁰ CJCS, *Capstone Concept for Joint Operations: Joint Force 2020*, 1; USJFCOM, *The Joint Operating Environment 2010*, 1.

⁸¹ DoD, *Joint Operational Access Concept 2012* (Washington, DC: Government Printing Office, January 17, 2012), 11–12, accessed January 18, 2015, http://www.defense.gov/pubs/pdfs/JOAC_Jan%202012_Signed.pdf.

prosperity and security of the United States and its allies by destabilizing and restricting freedom of transit in the global commons and international systems.⁸²

Anti Access strategies are designed to prevent an opposing force from entering an area. They are not only military actions and capabilities but can also include economic, social, and political actions and capabilities that act as barriers to effective theater entry and operations.⁸³

Area Denial is a nation or other group of actor's actions and capabilities for limiting freedom of action in a specific area, like denial for transit, basing, staging, or over-flight rights.⁸⁴

The Capstone Concept for Joint Operations lists several force implications from the strategic guidance, stating the need to improve capabilities to defeat A2D and the ability to gain and maintain access as part of the broader security challenges to the US's national interests.⁸⁵ By using cross-domain synergies, the USG can exploit fleeting local opportunities to disrupt the enemy system.⁸⁶ As stated earlier, disasters and other extreme weather events can create conditions that support adversarial operations. When the USG requests support from the DoD for HA through FDR, US Armed Forces need to be prepared to exploit these opportunities for ensured access. FDR can provide opportunities to open up barriers to A2D. In cases of dire need during a disaster, disasters may be the only time a normally-closed area to the United States becomes accessible; FDR is a tool to decrease A2D. FDR thus provides a rare opportunity to

⁸² CJCS, *Capstone Concept for Joint Operations: Joint Force 2020*; USJFCOM, *Joint Operational Access Concept 2012*; Organization for Economic Co-operation and Development, *Emerging Systemic Risks in the 21st Century: An Agenda for Action* (Paris: OECD, 2003), 1.

⁸³ Nathan Freier, "The Emerging Anti-Access/Area-Denial Challenge," Center for Strategic and International Studies, May 17, 2012, 2, accessed January 18, 2015, <http://csis.org/publication/emerging-anti-accessarea-denial-challenge>; USJFCOM, *The Joint Operating Environment 2010*, i.

⁸⁴ DOD, *Joint Operational Access Concept 2012*, i; Freier, "The Emerging Anti-Access/Area-Denial Challenge," 2.

⁸⁵ CJCS, *Capstone Concept for Joint Operations: Joint Force 2020*, i, iii, 1, 9, 18.

⁸⁶ DoD, *Joint Operational Access Concept 2012*, 2.

access a country as a means of building a platform for trust, confidence, and diplomatic goodwill.⁸⁷ FDR missions in the broader USG response are also important for the positive reputation of the United States and as part of the narratives used to demonstrate the positive actions the United States undertakes.⁸⁸

There are several examples providing evidence that HA and FDR support missions can create greater access to areas formally and informally closed to United States presence. Two examples are the 2003 Bam, Iran earthquake and the 2004 Tsunami, in Indonesia. In 2004, the relationship between the United States and Indonesia was strained; Indonesia had shut down many of the programs the US military was running, which had previously ensured access to Indonesia.⁸⁹ After the Tsunami, the United States offered military assistance to help the Indonesian military in conducting disaster relief operations that Indonesia accepted. The disaster relief support to Indonesia was viewed as a turning point in defense relations “since the two countries highlighted the need for further cooperation after the disaster,” and the United States was given access to operate in a part of the Indonesian territory it never had access to before.⁹⁰ The 2003 Bam earthquake in Iran is another example of a FDR mission that gave the US Military very limited access to an area of A2D. Despite the fact that relations between Iran and the United States were officially cut off two decades earlier, Iran accepted USG aid in response to the

⁸⁷ Ibid., iii, 19, 45; CJCS, *Capstone Concept for Joint Operations: Joint Force 2020*, 9, 11, 15.

⁸⁸ USJFCOM, *The Joint Operating Environment 2010*, 33, 59; DoD, *Joint Operational Access Concept 2012*, 19, 45.

⁸⁹ Frega W. Inkiriwang, “New Chapter of the United States-Indonesia Defense Relations: Reengagement through IMET” (Master’s Thesis, Command and General Staff College, 2013), 5-9, accessed March 10, 2015, <http://cgsc.contentdm.oclc.org/cdm/singleitem/collection/p4013coll2/id/3041/rec/12>.

⁹⁰ Ibid., 55; Bruce Vaughn, *Indonesia: Domestic Politics, Strategic Dynamics, and American Interests* (Washington, DC: Congressional Research Service, 2011), 5.

earthquake.⁹¹ Military aircraft were used to deliver personnel and aid and allowed to land in Iran.⁹² Although, this did not help relations in the long-term, the US Military was briefly allowed access into the country.

Changes in Force Structure and the Military Budget

Reductions in overall military end strength and the DoD budget are contributing factors to reassess which service and—or service component should take a leading role for FDR. Currently, the Budget Control Act of 2011 requires a DoD budget reduction of 487 billion US dollars over ten years, and sequestration stipulates a fifty billion US dollars reduction to the DoD budget annually.⁹³ Also, current DoD guidance for the military's roles and responsibilities F2025B aims at a leaner, more agile, flexible, and expeditionary force than today. The 2014 *QDR* proposes that the Army Active Duty forces reduce to seventy-four percent of its strength, the National Guard to eighty-eight percent, and the Reserve to ninety percent.⁹⁴ Should sequestration be implemented in 2016, the percentage of troops maintained could be even lower.⁹⁵ The

⁹¹ China Daily, "Iran Quake Toll May Hit 50,000," December 31, 2003, accessed March 10, 2015, http://www.chinadaily.com.cn/en/doc/2003-12/31/content_294833.htm.

⁹² David Shelby, "US Sends Relief Assistance to Iranian Earthquake Victims," *Past Time: Greater Iran and Beyond*, December 29, 2003, accessed March 10, 2015, <http://www.parstimes.com/news/archive/2003/washfile051.html>.

⁹³ SecDef, *QDR 2014*, IV–V.

⁹⁴ SecDef, *QDR Report*, IX. "The active Army will reduce from its war-time high force of 570,000 to 440,000-450,000 Soldiers. The Army National Guard will continue its downsizing from a wartime high of 358,000 to 335,000 Soldiers, and the US Army Reserve will reduce from 205,000 to 195,000 Soldiers. If sequestration-level cuts are imposed in FY2016 and beyond, all components of the Army would be further reduced, with active duty end strength decreasing to 420,000, the Army National Guard drawing down to 315,000, and the Army Reserves reducing to 185,000." X.

⁹⁵ SecDef, *QDR 2014*, X; Rowan Scarborough, "Congress on Verge of Doing What Taliban, Al Qaeda Can't: Break US Army," *The Washington Times*, October 6, 2014, 2, accessed March 10, 2015, <http://www.washingtontimes.com/news/2014/oct/6/army-chief-budgets-cuts-could-take-army-to-breakin/>.

capability for traditional warfighting continues to be the central focus of the Active Army to protect and defend the United States.⁹⁶ Supplemental guidance from the *NDS* stresses the need for reserve forces to remain operational and promotes an increased reliance on the reserve to meet current challenges to US forces as part of the Joint Force.⁹⁷ The fact that the USAR's relative reduction in numbers is expected to be less than all other service components is linked to an increased reliance on the reserve.

Foreign Disaster Relief is a priority mission for the DoD and is closely tied to national strategic objectives and security. The mission is not going away and the frequency, as well as the importance of FDR will likely increase in the future. Not every component or service will be equally efficient and trained for all the diverse missions the DoD is being tasked to respond to. It is therefore critical to determine where FDR capabilities reside within DoD structures. Budget constraints will have a major impact when defining where FDR capabilities, roles, and responsibilities reside. Limited time and funds to train FDR forces will be the most critical factors to successfully prepare units for FDR missions.⁹⁸

The United States Army Reserve and Foreign Disaster Relief

⁹⁶ Colonel Willie Rios III, "Reserve Component Transformation: How Does the Army Maintain Readiness in a Declining State of War?" (Research Paper, US Army War College, 2011), 10, accessed March 8, 2015, <https://www.hsdl.org/?view&did=726417>; "Army Capabilities Integration Center "Strategic Landpower and Force 2025 and Beyond," 1, accessed March 9, 2015, http://www.arcic.army.mil/app_Documents/ARCIC_Slides_WAUSA-Strategic-Landpower-and-Force-2025-and-Beyond_MG-Hix_20FEB214.pdf; Department of Defense, *QDR 2014*, 22, 60.

⁹⁷ SecDef, *Sustaining US Global Leadership: Priorities for 21st Century Defense*, 7; Catherine Dale, *The 2014 Quadrennial Defense Review and Defense Strategy: Issues for Congress* (Washington, DC: Congressional Research Service, February 2014), 14, accessed March 10, 2015, <http://fpc.state.gov/documents/organization/223469.pdf>.

⁹⁸ Dale, *The 2014 Quadrennial Defense Review and Defense Strategy*, 14, accessed March 10, 2015, <http://fpc.state.gov/documents/organization/223469.pdf>.

The USAR has evolved into an operational force over the last decade and is integrated into the Total Army. Wherever and whatever the active component does, the reserve component is required for support.⁹⁹ There are new initiatives, such as the Regionally Aligned Forces (RAF) Concept, the Army Total Force Policy, and the potential of the future Army Sustainment Readiness Model (SRM).¹⁰⁰ Because the USAR possesses a preponderancy of the capabilities requested and needed in HADR missions, special consideration should be made for the USAR to be an option for a primary role in the DoD and the Army's FDR capability for the F2025B.

Despite previous debates about the role of the USAR as an operational or strategic force, the current national position is to sustain the USAR as an operational force.¹⁰¹ The current SecDef and Chairman of the Joint Chiefs of Staff's guidance is to keep the operational posture of the USAR, from observing their contributions in and during the Iraq and Afghanistan wars. In 2009, Army Chief of Staff General George Casey Jr.'s objective was to transition the USAR, from a strategic reserve to an operational force. He stated:

A strategic reserve is a force in waiting, which does not expect to deploy unless and until there is a conflict. Reserve units that are part and parcel of the operational force, by contrast, are fully integrated into the deployment cycle. The objective is a reserve-

⁹⁹ SecDef, *QDR 2014*, 31; Commanding General, USAR Command Jeffrey A. Talley, "The United States Army Reserve: A Great Business Model for National Defense" (power point presented at the Pre-command Course, Fort Leavenworth, KS, January 5, 2015), 4.

¹⁰⁰ James L. Huggins, "2014 Green Book: Rebuilding and Sustaining Army Readiness," The Official Homepage of the United States Army, 2, accessed March 17, 2015, <http://www.army.mil/article/134893/>; Army Capabilities Integration Center, "Initiatives: Force 2025 and Beyond," accessed March 9, 2015, <http://www.arcic.army.mil/Initiatives/force-2025-beyond.aspx>.

¹⁰¹ Ralph Wipfli and Dallas D. Owens, "State of the US Military Reserve Components" (Colloquium Brief, US Army War College, 2008), 4; Steven Metz, "Strategic Insights: America's Strategic Debate - And Why It Matters To The Army" (Strategic Studies Institute, The US Army War College, September 25, 2014), 2, accessed March 18, 2015, <https://www.strategicstudiesinstitute.army.mil/index.cfm/articles/Americas-Strategic-Debate/2014/09/25>.

component force that is manned, trained and equipped for recurrent mobilization and for employment as cohesive units.¹⁰²

The distinction between the roles as an operational or strategic force is relevant to the discussion of the use of USAR in FDR. First, the missions and roles of the USAR as an operational force have not been fully identified or assigned. Secondly, USAR readiness for current FDR missions is now possible as an operational force.¹⁰³ Under Title 10, United States Code, the command of USAR forces assigned to the COCOMs by the SecDef “are available for operational missions when mobilized.”¹⁰⁴

To support the enduring change of the USAR as an operational force, guidance from several national and component level documents have been published such as the *NDS*, *NMS*, *QDR*, Directive 1200.17, *Managing the Reserve Components as an Operational Force*, and the USAR 2020 Guidance. All guidance documents were based on the recognition of the USAR’s past and ongoing contributions to operations alongside the Active Component. Chief of Army Reserve, Commanding General USAR Component, Lieutenant General Jeffery Talley’s USAR 2020 force and beyond concept calls for the continuing preparation of the USAR’s future employment as an operational force.¹⁰⁵ The 2014 *QDR* recognizes the routine engagement of reserve forces to provide critical capability and capacity needed to execute the *NDS*, and

¹⁰² John R. Guardiano, “Transitioning the Strategic Reserve into an Operational Force,” The Official Homepage of the United States Army, last modified June 29, 2009, accessed March 31, 2015, <http://www.army.mil/article/23614/>.

¹⁰³ Michael C. Peeters, “The Army Reserves Strategy to Support the DoD in 2025” (Strategy Research Project, US Army War College, 2011), 10, accessed March 8, 2015, <https://www.hsdl.org/?view&did=726417>.

¹⁰⁴ JP 1, *Doctrine for the Armed Forces of the United States* (Washington, DC: Government Printing Offices, 2013), xxii.

¹⁰⁵ Jeffrey Talley, “Rally Point 32,” Official Site of the US Army Reserve, accessed March 9, 2015, <http://www.usar.army.mil/resources/ForSoldiers/Pages/Rally-Point-32.aspx>.

contribution to projecting power operationally and strategically.¹⁰⁶ The 2012 *NMS* maintains that the reserve remains an operational force to meet future security challenges including climate change and natural disasters.¹⁰⁷ In addition, the 2012 *NMS* recognizes the essential strategic and operational depth the reserve provides to the Joint Force.¹⁰⁸

[The Department of Defense has] made significant progress in the readiness of our reserve component, and this will remain a key focus area. The missions we undertake are growing more diverse as we work more with our civilian counterparts. In turn, the skills and experiences of our Reserve and National Guard forces have become ever more relevant. To capitalize on the progress made, we must continue to utilize the Reserve Component and National Guard in an operational capacity as a trained, equipped, ready, and available force for routine, predictable deployments.¹⁰⁹

The above quote explains the link between the reserve and the contribution it brings to the operational environment. Daily use of professional skills, ongoing training and experience in reservist's civilian career fields, and the experience gained in military operations over the last two decades are foundational for the USAR's institutional agility and flexibility. Reservists are also experienced and familiar with, working with civilian counterparts, which is an essential requirement for FDR missions. The USAR also possesses skills, high demand capabilities, and experiences that the active component does not, that are beneficial to FDR missions.¹¹⁰ The following paragraphs describe the specific skills, capabilities, and experiences in more depth. In line with Directive 1200.17, *Managing the Reserve Components as an Operational Force*, a

¹⁰⁶ SecDef, *QDR 2014*, 31.

¹⁰⁷ SecDef, *Sustaining US Global Leadership: Priorities for 21st Century Defense*, 7.

¹⁰⁸ CJCS, *The National Military Strategy of the United States of America 2011: Redefining Americas Leadership*, 17.

¹⁰⁹ CJCS, *The National Military Strategy of the United States of America 2011: Redefining Americas Leadership*, 18.

¹¹⁰ Rios, "Reserve Component Transformation: How Does the Army Maintain Readiness in a Declining State of War?," 4.

leading role of the USAR for FDR by integrating its unique attributes and individual competencies into FDR missions.¹¹¹

Associated with leveraging the unique training and skills that reservists acquire in their civilians jobs and with keeping the USAR operational, the lower cost of the reserve in peacetime allows the Army and DoD to keep a larger total force.¹¹² The costs of maintaining the USAR and retaining military capability, is a fraction of the cost of maintaining the active component.¹¹³ It is estimated that the cost of an Active Duty Soldier costs four times that of a reservist not activated.¹¹⁴ As Talley has stated, “[u]sing the Army Reserve is a cost effective way to mitigate risk to national security in an era of constrained fiscal resources, while maintaining an operational reserve.”¹¹⁵

The Active Component’s attention on protection and defense and the previous experience of the USAR in FDR postures the USAR as a strong choice. With the active component focused on expeditionary war fighting, maximizing the ability of the USAR to conduct FDR operations, given that force numbers and funding are being reduced, makes sense from a security

¹¹¹ DoD, Directive 1200.17, *Managing the Reserve Components as an Operational Force* (Washington, DC: Government Printing Office, 2008), 1.

¹¹² Rios, “Reserve Component Transformation: How Does the Army Maintain Readiness in a Declining State of War?,” 16.

¹¹³ Sydney Jr. Freedberg, “Active vs. Guard: An Avoidable Pentagon War,” *Breaking Defense*, June 28, 2013, 6, accessed March 31, 2015, <http://breakingdefense.com/2013/06/active-vs-guard-an-avoidable-pentagon-war/>.

¹¹⁴ Federal Research Division, *Comparison of Pay and Benefits Eligibility for Active-Duty Personnel and National Guard and Reserve Personnel on Active Duty* (Washington, DC: Library of Congress, March 2007); US Congress, House and Senate, *Commission on the National Guard and Reserves: Transforming the National Guard and Reserves into a 21st Century Operational Force: Final Report to Congress and the Secretary of Defense* (Arlington, VA: Government Printing Office, January 31, 2008), 9.

¹¹⁵ Talley, “The United States Army Reserve: A Great Business Model for National Defense,” 12.

perspective.¹¹⁶ According to one study, the USAR has historically participated and excelled in disaster response type missions (such as Japan and Haiti).¹¹⁷ The USAR 2020 vision supports this point, stating that the “USAR is ideally suited to provide combat support and combat service support for expeditionary missions and international engagements.”¹¹⁸ Combat support and combat service support are the USAR’s inherent core capabilities; the USAR’s strengths and capabilities in combat support and combat support service are congruent with the capabilities most requested and needed in FDR missions.

Since the USAR has the organizational capabilities and the individual personnel with skills and experience most commonly used and requested for FDR, assigning the USAR a FDR role is a viable option. The next section explores those capabilities as a premise for suggesting the USAR as the primary option, best suited for the DoD to conduct FDR missions.

USAR Capabilities Congruent with Humanitarian Assistance and Disaster Relief

Before listing the USAR capabilities, there are common characteristics to the capabilities requested from USAID for FDR that should be understood. The common characteristics are that they are unique to the DoD, involve tactical level capabilities, are needed for a short period, and are inherently logistically based.¹¹⁹ Discussions regarding DoD’s HADR capabilities usually

¹¹⁶ Rios, “Reserve Component Transformation: How Does the Army Maintain Readiness in a Declining State of War?,” 10; Headquarters, Department of the Army, “Soldiers Participate in Disaster Response Exercise Daimiel 15,” last modified March 2015, accessed April 6, 2015, http://www.army.mil/article/144683/Soldiers_participate_in_disaster_response_Exercise_Daimiel_15/; Headquarters, Department of the Army, “DoD Special Report: Tsunami Relief Efforts in Japan,” last modified March 25, 2011, accessed April 6, 2015, <http://www.army.mil/article/53827/>.

¹¹⁷ Peeters, “The Army Reserves Strategy to Support the DoD in 2025,” 11.

¹¹⁸ USAR, “The Army Reserve 2020 Vision and Strategy,” 7, accessed March 9, 2015, <http://www.army.mil/article/56234/>.

¹¹⁹ Carafano and Weitz, *Mismanaging Mayhem*, 197; GTA 90-01-030, 11–1; Brainard, *Security by Other Means*, 152, 328.

focus on airlift and sealift for the purpose of speed and capacity because both are limited in humanitarian agencies.¹²⁰ This monograph focuses on the ground capabilities most commonly needed in HADR since all branches of services and components have a degree of air and maritime capabilities regularly coordinated through the US Transportation Command during a contingency.¹²¹

There are several valuable sources available to determine what capabilities are needed in HADR, including the USAID OFDA Joint Humanitarian Operations course, *DoD Support FDR Handbook*, historical scholarly research, and foreign policy national security think tanks reports spanning from 1918 to 2008.¹²² From those four sources, the most common capabilities requested in FDR and needed during a disaster are determined and captured in the following chart.

¹²⁰ Brainard, *Security by Other Means*, 328. Humanitarian agencies and organizations have comparable airlift capabilities with the DoD at a much lower cost to the public. However, the DoD airlift is used when a response cannot wait a few days and is considered to be time critical. Humanitarian agencies' maritime capabilities are not comparable with the DoD's.

¹²¹ JP 3-33, *Joint Task Force Headquarters* (Washington, DC: Government Printing Office, 2012), I-2, http://www.dtic.mil/doctrine/new_pubs/jp3_33.pdf; US Transportation Command, "What Is USTRANSCOM?," accessed March 30, 2015, <http://www.transcom.mil/about/whatIs.cfm>; Field Manual (FM) 3-94, *Army, Corps, and Division Operations* (Washington, DC: Government Printing Office, 2014), 3-37, accessed December 17, 2014, http://armypubs.army.mil/doctrine/DR_pubs/dr_a/pdf/fm3_94.pdf.

¹²² USAID. *Joint Humanitarian Operations Course*; GTA 90-01-030; Carafano and Weitz, *Mismanaging Mayhem*; Brainard, *Security by Other Means*.

ITEM	MOST COMMON REQUIREMENTS IN FDR	US ARMY RESERVE	US ARMY ACTIVE DUTY	USAID REQUESTED/NEEDED FOR FDR
1	LOGISTICS	71%	12%	YES
2	PUBLIC AFFAIRS	41%	15%	YES
3	MILITARY INFORMATION SUPPORT OPERATIONS	83%	17%	YES
4	INFORMATION OPERATIONS	50%	17%	YES
Including	BROADCAST OPERATIONS DETACHMENTS			YES
5	CIVIL AFFAIRS	79%	21%	YES
6	LINGUISTS	48%	29%	YES
7	MEDICAL	59%	25%	YES
Including	VETERNARIAN			YES
Including	LABRATORY TESTING			YES
Including	MEDICAL SPECIALISTS			YES
Including	MORTUARY AFFAIRS			YES
8	ENGINEER	36%	16%	YES
Including	GEOSPATIAL			YES
9	TRANSPORTATION	55%	20%	YES
Including	PORT OPENING			YES
Including	RAIL LINE			YES
Including	CUSTOM BORDER OPERATIONS			YES
10	SUBJECT MATTER EXPERTS (MULTI-DISCIPLINE)	USAR contains 75% of Doctorates and 50% Masters of the total Army		YES
11	MILITARY POLICE	24%	39%	YES
12	COMMUNICATION/SIGNAL	38%	47%	YES
13	CONTRACTING	13%	64%	YES
14	LAWYERS/LEGAL	39%	24%	YES
15	PERSONNEL	42%	42%	YES
17	AVIATION AIRLIFT	14%	41%	YES
Including	AIRIAL RECONNAISSANCE			YES

Table 1. Foreign Disaster Relief Military Capabilities by Unit Percentage for 2017

Source: Data adapted from DoD, Structure and Manpower Allocation System Center 2014; Lael Brainard, ed., *Security by Other Means: Foreign Assistance, Global Poverty, and American Leadership* (Washington, DC: Brookings Institution Press, 2007); James Jay Carafano and Richard Weitz, eds. *Mismanaging Mayhem: How Washington Responds to Crisis* (Westport, CT: Praeger Security International, 2008); OFDA, *Joint Humanitarian Operations Course* (Washington, DC: USAID, 2013); GTA 90-01-030.

As the chart shows, there is a preponderance of FDR capabilities in the USAR. Overall, “the USAR provides nearly 70% of the logistics capabilities, 60% of medical capabilities, 40% of the public affairs capabilities, and 30% of the engineer capabilities required by the Army and Joint Force in support of global requirements.”¹²³ Logistics, medical, public affairs, and engineering capabilities are only a few of the USAR capabilities congruent with FDR requirements at a higher proportion than the other components. In addition possessing these institutional military capabilities, the USAR has the flexibility and agility to send only the capabilities required for a disaster. When sending USAR individuals or units, it can be done without reducing the DoD’s warfighting capability if a conflict were to arise somewhere else during a concurrent FDR mission. The USAR’s unique organization allows it to provide a tailored structure, capabilities, and units in support of emerging force requirements like FDR.¹²⁴ The biggest challenge for the USAR to provide robust FDR is the lack of formal recognition of an assigned role and responsibility. With a formal primary assignment to FDR the USAR could be formally integrated into the Army’s, DoD, and USG overall HADR plan. Secondly, the requisite training and knowledge to be an effective FDR force could be developed and implemented by specific units involved in FDR. Lastly, a plan and system could be developed to reduce the time requirement for requesting (or assigning) USAR forces, to the deployment of those forces for a FDR mission.

Currently, certain Army initiatives are in place that could mitigate some of the problems associated with providing an effective USAR FDR response. Those initiatives include the RAF Concept, the Army Total Force Policy, and the potential of the future SRM.¹²⁵ However,

¹²³ Talley, “The United States Army Reserve: A Great Business Model for National Defense,” 11.

¹²⁴ Ibid., 17; Talley, “Rally Point 32 - Official Site of the US Army Reserve,” 2.

¹²⁵ Huggins, “2014 Green Book,” 2; Army Capabilities Integration Center, “Initiatives: Force 2025 and Beyond.”

regardless of how often HADR is stated as part of the *National Security Strategy*, (in relation to climate change, urbanization, or setting the conditions for instability), FDR must be programmed and planned within these initiatives; otherwise, the *ad-hoc* use of available active component capabilities will continue as the primary response option. The USAR should be the component primarily considered for the FDR role and responsibilities and programmed within these initiatives. Specific USAR units with HADR capabilities could be structured, trained, prepared, funded, and programmed as routinely required forces. Even though, where and when, disasters are going to strike is not possible to predict with one-hundred percent accuracy, factors in the operational environment indicate they will continue to strike with greater intensity and frequency.

The RAF Concept is congruent with FDR missions because of the training the RAF Concept provides to units and the easement of Combatant Commanders to access required capabilities. One of the benefits of the RAF Concept is the aim to provide forces with cultural, linguistic, and regional contextual knowledge of their specific operational environment. As stated earlier, units considered capable of conducting FDR effectively require additional training.¹²⁶ FDR missions require familiarity and knowledge of the geopolitics, local politics, internal security, cultural considerations for capacity, need and delivery of FDR, understanding of regional partners, international efforts, and the USG enduring programs in the affected area.¹²⁷ The RAF Concept hence will not provide the requisite depth of knowledge needed for FDR, but rather only a sparse framework.

The Army Total Force Policy and the future SRM are the other two initiatives that can support USAR to conduct FDR missions. The Army Total Force Policy reinforces the integration of all army components to support joint operations that include the USAR as an operational

¹²⁶ Brainard, *Security by Other Means*; Moroney et al., *Lessons from Department of Defense Disaster Relief Efforts in the Asia-Pacific Region*.

¹²⁷ Brainard, *Security by Other Means*, 36, 47, 131, 331; Carafano and Weitz, *Mismanaging Mayhem*, 198–199, 243–245.

force.¹²⁸ The SRM is still in the developing stage but the concept replaces the Army Force Generation cycle. The Army Force Generation is a “process and forum to plan, manage, prioritize, and allocate limited resources to meet all worldwide expeditionary and anticipated Army force requirements.”¹²⁹ However, the Army Force Generation was not designed for programming regional requirements unique to the reserve component when assigning units to the contingency expeditionary force FDR missions.¹³⁰

The COCOMs generally receive the tailorable and scalable forces they need when requested in advance. According to Lieutenant General Talley, “the USAR Global Force Management fills Combatant Command requirements with force packages customized from all available assets within the USAR,” as needed.¹³¹ However, USAR FDR forces and capabilities should be programmed and requested far in advance, in anticipation of the impacts of climate change.¹³² The SRM concept, to a greater degree, purports that it offers more agility and flexibility to the army, to provide capabilities with a much smaller force, to meet the requirements of the *National Defense Strategy*.¹³³ COCOM’s requested use of USAR forces for FDR missions required too long mobilization times, mainly because they were not programmed into the Army

¹²⁸ DoD, Army Directive 2012-02, *Army Total Force Policy*. (Washington, DC: Government Printing Office, 2012), 2, accessed March 17, 2015, http://armypubs.army.mil/epubs/pdf/ad2012_08.pdf.

¹²⁹ Rios, “Reserve Component Transformation: How Does the Army Maintain Readiness in a Declining State of War?,” 11.

¹³⁰ Ibid.

¹³¹ Talley, “The United States Army Reserve: A Great Business Model for National Defense,” 4.

¹³² David Vergun, “Regionally Aligned Forces Continue to Organize despite Budget Uncertainties,” The Official Homepage of the United States Army, October 23, 2013, accessed March 17, 2015, <http://www.army.mil/article/113660/>.

¹³³ Huggins, “2014 Green Book”; Mark A. Milley, “2014 Maneuver Warfighter Conference,” September 2014.

Force Generation cycle or process, against the requirements for potential natural disasters.¹³⁴ Untimely, deployment and employment of USAR capabilities during HADR support negates their effectiveness and their arrival comes after they are actually needed. While our senior military and governmental leaders cannot predict where or what the next conflict will be, USG HADR missions will occur and are likely to increase in all geographic Combatant Commander's areas of responsibility.¹³⁵ USAR capabilities for FDR, when anticipated and programmed into the new SRM, are more likely to effectively meet the future HADR efforts in the national security strategy. Anticipated programming in the SRM for USAR FDR missions would allow Combatant Commanders greater freedom and access to use the appropriate FDR capabilities in a time relevant way.

The FDR capabilities in the DoD are not currently structured to meet the operational environments demands in 2025 and beyond. The current operational posture and the unique capabilities the USAR has to offer, make it an option that should be considered when developing the DoD and the Army capabilities in FDR, to meet future demands. Although, current initiatives like the RAF and SRM would improve the USAR's ability to provide excellence in FDR, more would be needed to prepare for F2025B.

Recommendations and Conclusions

Ongoing global climate change is altering the operational environment. As the 2014 DoD Climate Change Assessment Roadmap states, "the military could be called upon more often to . . . provide HADR in the face of more frequent and more intense natural disasters."¹³⁶ Since national strategic policy has given the DoD the responsibility to conduct FDR, it is in the best interest of

¹³⁴ GTA 90-01-030.

¹³⁵ Brainard, *Security by Other Means*, 21, 121, 124, 128.

¹³⁶ DoD, "2014 Climate Change Adaptation Roadmap," 2.

the DoD to prepare for increasing FDR missions. Due to difficult fiscal realities and the unique capabilities within the USAR, the DoD should select the USAR as the primary organization to carry out FDR missions. As this monograph demonstrated, the operational USAR holds the bulk of the life saving and life sustaining capabilities and the most needed and requested FDR capabilities.¹³⁷ As the Army component with the greatest proportion of medical, engineering, and logistics capabilities (to name a few) and with its budgetary appeal, the USAR is best suited for these responsibilities.

An in-depth comparative and combined study of the capabilities across the services is needed to validate what units are best for the FDR missions and activities. A simple three-prong approach for transforming the USAR allows scalability to build the requisite knowledge, military effectiveness, and align the USAR within the DoD to support political priorities in the national strategic guidance. The first two prongs are identifying and notifying units with the right capabilities of their roles and responsibilities in FDR and then training those units. The third prong is to tailor the FDR training for their RAF area. This three-prong approach is scalable to the amount of time and funding available to train. Identifying units allows those units to immediately and with minimal cost conduct on-line and in-class training to build requisite knowledge focused on FDR and on learning the key actors in HADR. Based on the findings of the in depth assessments, this approach also promotes a complete adaptation to the doctrine, organization, training, material, leadership and education, personnel, and facilities for the DoD to fulfill its future FDR role.

Today and in the future, many areas that are already suffering from instability like Mali, Pakistan, Somalia, Afghanistan, India, Nigeria, China, Brazil, and Sudan will face disastrous effects from global climate change, generating political and social instability, which threatens US

¹³⁷ Talley, "The United States Army Reserve: A Great Business Model for National Defense," 4.

national security.¹³⁸ The USAR offers a balance of capabilities, operational readiness, and cost effectiveness to be the DoD's primary provider of ground FDR capabilities. The scale, frequency, and complexity of future missions will be forever altered by the interaction of climate change with the operational environment, and the DoD must be prepared to meet these challenges.

¹³⁸ United Nations (UN) Office for Disaster Risk Reduction, "Disaster Statistics: Countries and Regions," PreventionWeb, accessed March 31, 2015, <http://www.preventionweb.net/english/countries/>.

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