

American Humanitarianism: The Unique Opportunity for US Military Policy in a World Increasingly Confronted with the Realities of Climate Change

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Abstract

The foreign policy of the United States is at an inflection point. Policymakers are confronted by the arrival of climate change, intensifying US-China great power competition, damaged American credibility, faltering US global health leadership, and the lack of American grand strategy. Most pressingly, the window for completely preventing climate change has passed as increasing temperatures, rising sea levels, and more frequent and devastating natural disasters affect populations worldwide. In order to develop an effective response to these challenges, we should learn from previous humanitarian assistance and disaster relief operations (HADR) which have been shown to significantly change a country's perception abroad, deepen bilateral and multilateral cooperation, improve the readiness of a country's military, while also building resilience and providing aid during times of need. As such, this paper specifically recommends policymakers consider increasing reactive HADR missions, improving HADR mission readiness, increasing proactive HA missions, increasing funding for HADR and HADR-capable assets, and reforming the combatant command structure.

Introduction

The foreign policy of the United States is at a point of inflection. Many long-term trends and concerns that have been identified in the past are now a reality. Most importantly, the climate has changed and the window for complete prevention has passed. Global warming will reach 1.5°C above pre-industrial levels by 2040 and will likely reach that level by 2030 (Intergovernmental Panel on Climate Change, 2021). Sea level rise has become irreversible (Intergovernmental Panel on Climate Change, 2021). Storms will occur with increasing strength and frequency (Intergovernmental Panel on Climate Change, 2021). Furthermore, great power competition has intensified as the United States and China compete economically, militarily, and culturally for international prestige. Unfortunately, American credibility has been tainted during the past two

decades by events such as the War on Terror, the unpredictable presidency of Donald Trump, and by recent decisions to abandon US allies such as the Kurds in 2019 and the Government of Afghanistan in 2021. Additionally, the response to the Covid-19 pandemic is the first significant humanitarian crisis since the Cold War that has not been led by the United States, raising questions about the future of American global leadership. Thus, this paper argues that given the changing strategic environment and increasing occurrence of environmental disasters, proactive and reactive humanitarianism in foreign and military policy will save lives, while offering benefits to American grand strategy. Therefore, the United States should apply the successes and lessons learned from previous humanitarian assistance and disaster relief (HADR) missions to update US military policy by elevating the role of humanitarianism in US foreign policy.

This paper will begin by exploring five of the United States' key foreign policy challenges. Special attention will be given to discussing the realities of climate change which arguably represent the greatest challenge. Part II will then examine the theoretical role of humanitarianism in a state's foreign policy. This section will first investigate how humanitarian missions are an exercise in "smart power" by combining aspects of both hard and soft power. Then, this paper will demonstrate that the US military is the ideal agent to implement humanitarian missions. This section will also respond to those critical of the expanding role of the military while arguing that military doctrine has changed in the past twenty years to support a growing role for HADR missions. Part III will then move beyond theory and strategy to analyze the past twenty years of HADR missions conducted both by the US and other states. First, we will discuss several successful US-led HADR responses to natural disasters with special focus on Operation Tomodachi in response to the Great Tōhoku Earthquake & Tsunami. Second, US HADR responses in Pakistan will be presented to demonstrate HADR is not a "silver bullet" and is affected by extraneous events. The third case study will examine how Indo-Pacific regional navies increasingly recognize the importance of HADR—a fact that alters the strategic humanitarian landscape in the region. Thereafter, the fourth case study focuses on how China's humanitarian record reveals the dangers of inaction. In sum, Parts I through IV will illustrate both the environmental and strategic reasons why the United States must expand its humanitarian action mission portfolio. Finally, Part V focuses on solution building and translating the concerns raised in this paper into actionable policy.

Part I: Key Challenges for American Foreign Policy

American foreign policy is at a point of inflection and is confronted by several serious challenges:

1. Climate Change: As this paper will emphasize, the climate has changed. Even under the most idealistic scenarios, global warming is very

likely to reach 1.5°C above pre-industrial levels by 2040 and will likely reach that level by 2030. Many impacts, such as sea level rise, have become irreversible. Extreme climate events will occur with increasing strength and frequency. Populations around the world will be affected but some more so than others. Globally, the poorest regions will be the most vulnerable as communities lack climate-resilient infrastructure. Regionally, the Indo-Pacific will be the hardest hit due to the region's environmental characteristics, population density, and level of development. Unfortunately, American foreign policy has been slow to adapt to this new reality and has not yet developed an adequate policy response.

2. China's Rise: Sino-American relations have become increasingly strained as the world's two largest economies decouple. China's rise to become a regional and global superpower pose the biggest threat to the American hegemony since the end of the Cold War. Both the US and China are now locked in a race for allies, economic development, technological supremacy, military dominance, and natural resources. In the past ten years, China has significantly stepped up its overseas engagement with the Belt and Road Initiative (BRI), aiming to provide an alternative to the US and western model. While US-China competition now affects all regions of the world, it is most pronounced in the Indo-Pacific as states attempt to balance a vital economic relationship with autonomy and the defense of their territorial claims. While the United States has announced a continuation of the "Pivot to the Pacific" policy, American foreign policy remains unprepared for the battle for the hearts and minds of the Indo-Pacific people.

3. Damaged Credibility: Perhaps in the biggest blow to American foreign policy ambitions, the United States has lost a significant amount of credibility on the world stage in the past twenty years. America's long wars in Afghanistan, Iraq, Syria, Libya, and Yemen have, in particular, attracted much domestic and international criticism and undermined relationships with US allies. Specific events such as the 2019 abandonment of US Kurdish allies in Syria and the 2021 abandonment of the US-supported Afghan government have, in particular, shaken confidence in America's ability to fulfill its promises to its allies and partners. Furthermore, the presidency of Donald Trump resulted in historic lows of global opinion of the United States and damaged the working relationships between the US and key partners and alliance networks. Cognizant of these challenges, American foreign policy is in need of a coherent strategy to re-engage the world in a manner that restores confidence and faith in American leadership and of the benefits of US partnership.

4. Covid-19 & Global Health Leadership: Since December 2019, the world has been dealing with the Covid-19 pandemic that has taken the life of 5.31 million people at the time of writing. Challengingly, the United States has been greatly affected by the pandemic, limiting the ability of the

US to respond to the health and humanitarian crisis elsewhere. In fact, Covid-19 is the first major global health crisis since the Cold War where the US has not led the global response. While China did not end up leading the Covid-19 recovery as many initially predicted, China's success at stopping the spread of Covid-19 domestically allowed China to swiftly furnish health aid to parts of Europe, Asia, Africa, and Latin America with much fanfare. In contrast, high case numbers and a lack of supplies at home meant the US was rendered unable to muster large responses to the pandemic abroad, such as in India where deaths were rising uncontrollably between April and June 2021 as hospitals ran out of basic supplies such as oxygen. Even the much-celebrated US-supported Covax initiative has only pledged to vaccinate 20% of participating country's populations—which is not enough to prevent community transmission. Yet even as the situation improves domestically as the percent of Americans vaccinated rises, US foreign health policy remains timid and without a cohesive vision for furnishing global health aid to the rest of the world.

5. Lack of American Grand Strategy: The United States has lacked a cohesive grand strategy since the end of the Cold War. Left as the sole superpower after the collapse of the Soviet Union, the US had the opportunity to re-shape the world to promote American values. And while this lasted for a time—perhaps best demonstrated with the UN-backed global coalition during the First Gulf War—the September 11, 2001 terrorist attacks shook US strategic vision. Thus, as the United States dramatically ends much of its involvement in the Middle East and continues the pivot to Asia, the US policymakers and strategists have an opportunity to reassess US grand strategy and determine how to best match capabilities with outcomes; a changed strategic landscape demands it.

Accepting the Realities of Climate Change

Over the past decade, the global campaign to address climate change has increased in pace and achieved commendable progress. In the Paris Agreement, adopted in 2015, 196 parties pledged to prevent global greenhouse gas emissions in this century from exceeding 2°C above pre-industrial levels, with the goal of limiting the increase to 1.5°C. To this end, 12 countries including the United Kingdom, Japan, Germany, France, Canada, and Spain have passed carbon neutrality targets into law while another four countries have legislation pending (Energy & Climate Intelligence Unit, 2021). Other major polluters including the United States and China have outlined non-binding goals to achieve neutrality by 2050 and 2060 respectively (Energy & Climate Intelligence Unit, 2021). Sub-national governments, private companies, and citizens are also taking impressive action by developing their own climate strategies, adopting new technologies, and making more climate-conscious decisions on a daily basis. Such progress is very likely to be sustained as technology advances, new policy is adopted, and international cooperation accelerates

at forums such as the 26th meeting of the Conference of the Parties (COP26) which was held in November 2021.

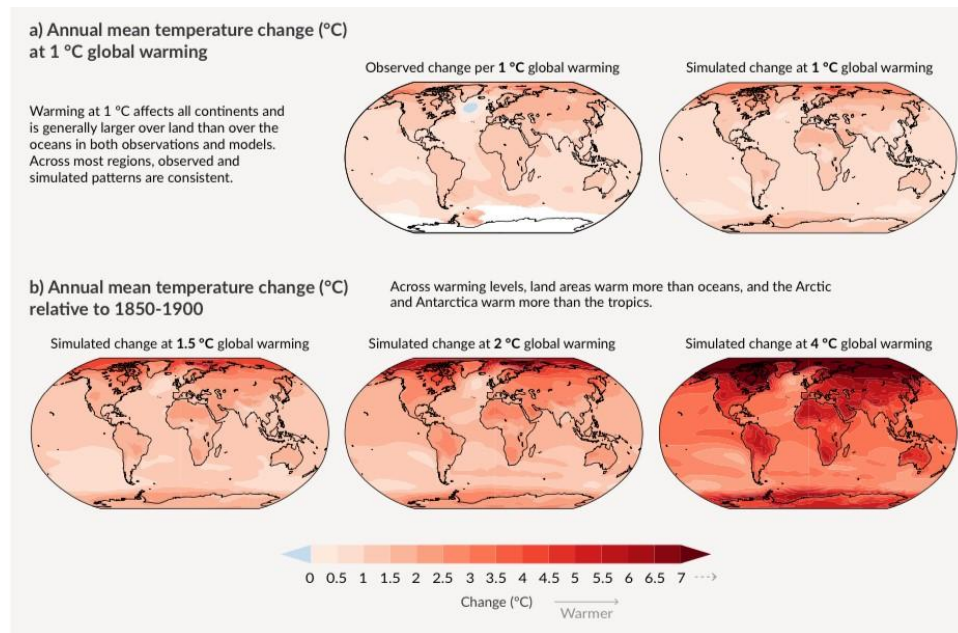


Figure 1: *Impact of Global Warming (Intergovernmental Panel on Climate Change, 2021)*

While these developments give cause for optimism, a more realistic analysis must accept that the window for preventing climate change has passed and governments must also begin to pivot towards adaptation strategies. Importantly, the 2021 United Nations Intergovernmental Panel on Climate Change (UNIPCC) finds that global surface temperatures will continue to increase until at least the mid-century under *all assessed future emissions scenarios*. Worryingly, global temperatures are very likely to reach 1.5°C above 1850-1900 levels by 2040, even with the most immediate climate action (Intergovernmental Panel on Climate Change, 2021). Indeed, some models indicate a 1.5°C increase could be reached as soon as 2030 — and 2°C may be exceeded within the century (Intergovernmental Panel on Climate Change, 2021). As many changes in the climate system correspond directly with increased global warming, the UNIPCC anticipates increases in the “frequency and intensity of hot extremes, marine heatwaves, heavy precipitation, agricultural and ecological droughts...and proportion of intense tropical cyclones, as well as reductions in Arctic Sea, ice, snow cover, and permafrost” (Intergovernmental Panel on Climate Change, 2021). As such, extreme climate events “unprecedented in the historical record” will also occur more regularly with increasing impact on human society as global warming approaches 1.5°C (Intergovernmental Panel on Climate Change, 2021). On an especially sobering note, the UNIPCC finds that many

changes, alongside sea level rise, will be “irreversible for centuries to millennia” due to past and future greenhouse gas emissions” (Intergovernmental Panel on Climate Change, 2021). In short, it is “virtually certain” that temperatures will continue to climb, mountain and polar glaciers will continue to melt, and sea levels will continue to rise.

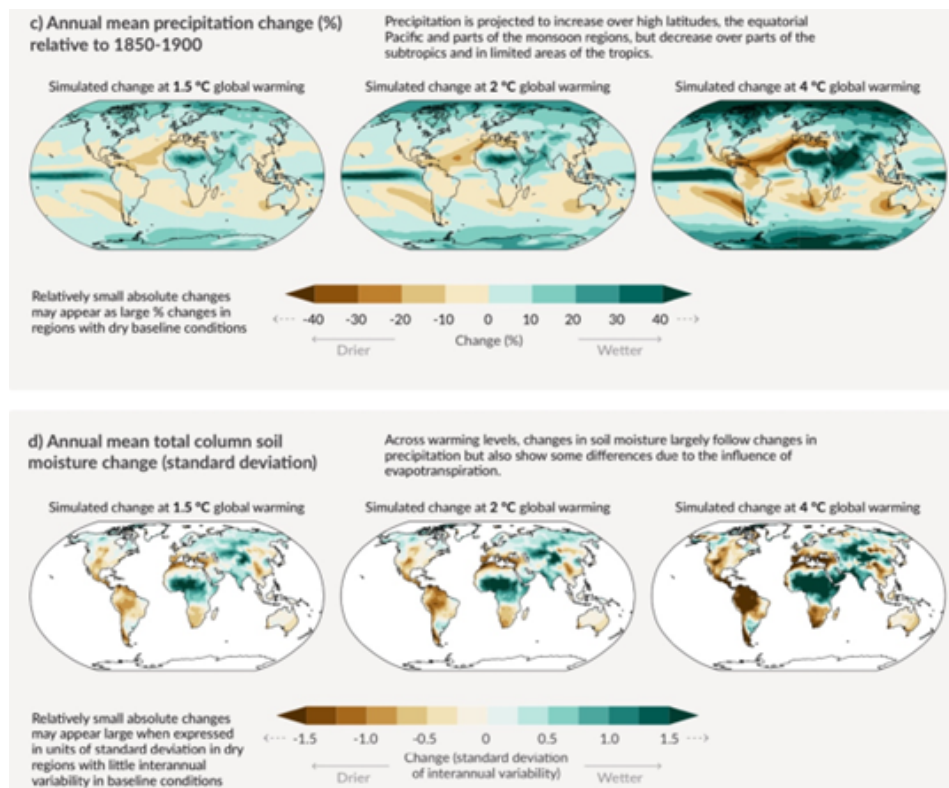





Figure 2: *Impact of Global Warming (IPCC 2021)*

The impact of these changes has already been felt around the world by both developed and developing countries. 2021 has seen record high temperatures in North America causing drought, raging wildfires, and heatstroke; deadly flooding in Europe caused by two months of rain falling during two days, that killed over 200 people; forest fires in the Siberian tundra; drought and record high temperatures in the eastern Mediterranean, where forest fires have engulfed parts of Turkey and Greece; and severe flooding in central China, where the city of Zhengzhou got a year’s worth of rain in just three days. While these disasters show that both developed and developing countries are impacted, some parts of the world are more disaster-prone than others. In 2020, for example, the Caribbean had a record-breaking 30 tropical storms, including seven major hurricanes that killed more than 400 people, displaced thousands, and caused over USD 51.105 billion in damages (Masters, 2021; Rojanasakul & Sullivan, 2020).

The Pacific is one of the most disaster-prone regions globally and suffers from frequent exposure to cyclones, typhoons, earthquakes, tsunamis, floods, tidal surges, landslides, droughts, forest fires, and volcanic eruptions. For example, the Ring of Fire is a line of volcanoes encircling the Pacific and is the location of ninety percent of the world’s earthquakes. Pacific storms are also generally more severe as the larger and deeper ocean allows for more time for systems to strengthen before landfall. As such, ten of the ten of the most destructive storms in recorded history have taken place in the Pacific (NBC News, 2008). 2020 saw the Pacific’s strongest ever-recorded storm, Super Typhoon Goni, that had 1-minute sustained winds of 195 mph and caused USD 415 million in damage and displaced over 400,000 people (Treisman, 2020). Furthermore, Typhoon Goni was the fourth major typhoon to hit the Philippines within one month and occurred just a week after Typhoon Molave which displaced 120,000 (Ratcliffe, 2020). While Goni missed major population centers, Super Typhoon Haiyan in 2013 revealed the devastating impact of a single storm; Haiyan hit the central Philippines killing over 7,000 and displacing over 4 million people (Sherwood et al., 2015). As the warming of our climate is inevitable—optimistically until at least until 2040—we can only expect natural disasters in the Pacific, and around the world, to continue to strengthen, become more deadly, and pose more complex humanitarian crises.

Table 1: Photos of Natural Disasters in the Indo-Pacific		
		
<p><i>Figure 3: Philippine coastal town in 2013 following Typhoon Haiyan (Reuters 2013)</i></p>	<p><i>Figure 4: Japan after 3.11 earthquake and tsunami (Warren Antiola 2011)</i></p>	<p><i>Figure 5: Pakistan after the 2010 floods (Kahalid Tanveer 2010)</i></p>

Beyond the immediate impact of increasingly severe natural disasters, climate change has, and will have, additional spillover effects. Fluctuating weather patterns will impact global agriculture, food supply, and freshwater access. The global economy will shift as some regions become more or less hospitable to habitation and economic activity leading to destabilizing situations such as mass migrations and intensified resource conflict. Thus, climate change also has serious security consequences. The US Department of Defense, for example, found that climate change-related weather events jeopardize more than two thirds of US military bases and can have additional operational impacts (Office of the

Under Secretary of Defense for Acquisition and Sustainment, 2019). Climate change has also been linked to increased civil unrest, political instability, violence, and even terrorism (United Nations Office on Drugs and Crime, 2019). Dilley et al., even finds that natural disasters themselves have similar effects as kinetic weapons, terrorism, and other malicious acts, as they can cause mass panic, change local ways of life, and devastate the economy (Dilley et al., 2005). Public confidence in government can also drop, especially if response measures to disasters are perceived as inadequate. A broader conception of security offers additional insight. Adopting a human security lens—which focuses on protecting individuals’ “freedom from want” and “freedom from fear”—also notes the serious impacts on health, development, education, and human rights (Futamura et al., 2011).

Climate change is happening now. As natural disasters intensify, millions of people will be directly affected, and humanitarian and security crises will become more severe and widespread. Today, policymakers are predominantly focused on *preventing* climate change. While this is important, we must also accept that the window for complete prevention has passed, and governments must begin to pivot towards implementing *adaptation* strategies that account for the next several decades of intensifying climate disasters.

Humanitarian assistance and disaster relief operations are one policy tool that deals with the realities of climate change head-on. This paper will now explore the role HADR, and humanitarianism more broadly, plays in American foreign policy.

Part II: Humanitarianism and Foreign Policy

Humanitarian missions have long been one tool used by countries to build relationships and strengthen national security while also helping those in need. According to the Good Humanitarian Donorship (GHD) initiative OECD DAC countries subscribe to, humanitarian action “includes the protection of civilians and those no longer taking part in hostilities, and the provision of food, water and sanitation, shelter, health services and other items of assistance, undertaken for the benefit of affected people and to facilitate the return to normal lives and livelihoods (OECD, 2018). But if states are truly self-interested, rational actors, competing in an anarchic international system, why do many devote finite military resources for the human welfare of others?

This section will first investigate how humanitarian missions are an exercise in “smart power” by combining aspects of both hard and soft power. Then, this paper will demonstrate that the US military is the ideal agent to implement humanitarian missions. This section will also respond to those critical of the expanding role of the military while arguing that military doctrine has changed in the past twenty years to support a growing role for HADR missions.

Hard, Soft, & Smart Power

In the international relations academy, few ideas are more central than the conception of hard, soft, and smart power. Neorealist scholars, such as John Mearsheimer and Kenneth Waltz, adopt a structural and largely materialist analysis of the international system. From this theoretical standpoint, states' positions in the international order are based on their hard power—material capabilities including military power, economic success, and population size. These characteristics enable more powerful states to influence others to act in ways “contrary to their initial preferences and strategies” (Nye, 2011). However the utility of brute force and coercion has been increasingly questioned, with some political scientists such as Joseph Nye, arguing positive outcomes are more likely to be achieved via non-coercive means of influence, or soft power. Sourced from a state's values, culture, and institutions, the goal is to entice support as Nye notes, “attraction often leads to acquiescence” (Nye, 2004). Theoretically cheaper than employing hard power instruments, soft power seeks to develop the alignment of goals between states enabling others to follow “without the use of threats or bribes” (Armitage & Nye, 2007). Others have also argued that the utility of hard power alone has decreased as states develop deadlier weapons that raise the costs associated with interstate conflict and war as a viable tool. This logic finds, for example, that conventional war between the United States and China is unlikely as both are nuclear powers and conventional conflict would cause irreconcilable economic damage.

Soft power, nevertheless, is not free from criticism. Some argue it should not be taken for granted that a nation's culture is perceived as attractive. Josef Joffe, a fellow at the Institute for International Studies and the Hoover Institution, for example, observed that American culture often “twists minds in resentment and rage” (Joffe, 2006). Within academia, soft power is also criticized for being too vague and all-encompassing with Nye even conceding that the conception of soft power has been “stretched and twisted” (Nye, 2006).

Smart power, introduced by Nye in 2004, sought to reexamine the use of power and respond to the various criticisms levied against both hard and soft power. According to a Center for Strategic and International Studies commission, smart power involves the skillful, use of both hard and soft power via an approach that “underscores the necessity of a strong military, but also invests heavily in alliances, partnerships and institutions at all levels” (Armitage & Nye, 2007). In short, Nye defines smart power as “the ability to combine the hard power of coercion or payment with the soft power of attraction into a successful strategy” (Nye, 2008).

While smart power is again accused of lacking definitional bounds, smart power does offer a pragmatic and policy-oriented path forward as decision-makers are encouraged to utilize all instruments of national power.

The Gradual Expansion of the US Military's Responsibilities

Since the end of the Cold War, American policymakers have ushered in a significant reconception of American military policy that has seen the scope of military doctrine expand to increasingly identify and respond to non-traditional security threats. Peacekeeping, security assistance, and foreign capacity-building have been elevated to core military responsibilities under the guise of “Phase Zero” operations seeking to “prepare the battlespace.” Today, the military is not just about warfighting and strike capability, but also about “policing, state-building, disaster management, health care, development, and diplomacy” (Rosen, 2010). This expanded mission scope is grounded on a fundamentally broader and more holistic conception of security that sees ethnic violence, hunger, migration, and terrorism as critical threats alongside traditional great power competition and inter-state warfare.

Prior to the Clinton Administration, the military had been mainly focused on traditional military tasks such as balancing against the Soviet Union and fighting inter-state wars in Korea, Vietnam, and the Persian Gulf. Ideologically, this was encapsulated by Samuel Huntington's *The Soldier and the State*, which advocated for a professional officer corps chiefly concerned with the “management of violence” (Huntington, 1957). Huntington found that the purpose of the military was limited to “successful armed combat” where duties include “organizing, equipping, and training of this force; the planning of its activities; and the direction of its operation in and out of combat” (Huntington, 1957). This period was defined by clear lines between civilian and military roles, command structures, and institutional cultures. While much has changed since the era of Huntington and Marshall, many today continue to argue that the military should remain removed from civilian spheres of influence and reasonability and should confine itself to warfighting.

The end of the Cold War and a number of global humanitarian emergencies resulted in changes to the scope and role of the military. The Clinton Administration particularly adopted a broader conception of security that recognized humanitarian crises such as famine in Somalia and ethnic cleansing in the former Republic of Yugoslavia as national security challenges warranting an American response. In what became known as “Blue Helmet” operations, American soldiers were deployed in peacekeeping missions to furnish humanitarian aid and provide regional stability. Here, the dividing line between civilian and military was often blurred as armed forces worked directly alongside civilians in oftentimes low-intensity environments. Military planners also saw a need for deeper cooperation with civilian NGOs and international organizations and began to institutionalize civil-military partnerships. Thus, the Clinton Administration's new approach saw soldiers increasingly doing non-military duties such as policing, providing food and humanitarian relief, and post-conflict state-building. Since Clinton, the military's responsibilities have only continued to expand as the Bush Administration

embraced a “whole of government” approach to national security challenges. While this principled idea often proved hard to realize, policymakers began to see the military’s utility in responding to tasks beyond strictly warfighting. As such, these changes represented a noteworthy break from previous conceptions of the function of the military.

However, these changes have not come without criticism. US military officer Charles Dunlap Jr. offered a sounding rebuke to this approach in his 1992 essay exploring the consequences of the civilianization of the military. Cautioning that “it can be all too seductive to start viewing the military as a cost-effective solution,” Dunlap asserts, “We make a terrible mistake when we allowed the armed forces to be diverted from their original purpose” (Dunlap, 1992). Critical of the military’s expanding responsibilities, beginning in the 1980s to include counter narcotic operations in the Caribbean, Dunlap reasons that “people in the military no longer considered themselves warriors. Instead, they perceived themselves as policemen, relief workers, educators, builders, health care providers, politicians—everything except warfighters” (Dunlap, 1992). As such, Dunlap demands that “the armed forces focus exclusively on indisputably military duties” noting that “we must not diffuse our energies away from our fundamental responsibility for warfighting” (Dunlap, 1992). He further recommends that the US “divest the defense budget from perception-skewing expenses. Narcotics interdiction, environmental cleanup, humanitarian relief, and other costs tangential to actual combat capability should be assigned to the budgets of DEA, EPA, State and so forth” (Dunlap, 1992). Dunlap cautions that should these steps not be taken, civil-military relations will break down and the military’s readiness undermined.

These are valid concerns and should be considered by policymakers when considering the future role of the US military. Still, other scholars disagree and find that the expansion of the military’s responsibilities to include civilian tasks is necessary. For instance, in the late-twentieth century, University of Chicago scholar Morris Janowitz argued that the dawn of nuclear weapons changed the nature of war, requiring “greater and greater political expertise and vast amounts of political information in order for the US military to operate on a worldwide basis” (Janowitz, 1964). Thus, given the demands of the international landscape, Janowitz notes that it is impossible—even dangerous—“to deny or destroy the difference between military and civilian” and recommends that officers in the military academies be exposed to how to effectively manage the political nature of contemporary military service (Janowitz, 1964). Other developments, such as the growing sophistication of military technology and the managerial skills required to operate a professional military, have further expanded the non-combat roles soldiers assume on a day-to-day basis (Janowitz, 1964). Amending Huntington’s definition of a professional soldier, Janowitz writes that “the professional soldier must

develop more and more skills and orientations common to civilian administrators” in a process referred to as the civilization of military affairs (Janowitz, 1960).

In response to these changes, Janowitz puts forward the re-conception of militaries as “constabulary forces” that retain military traditions while allowing these organizations to serve a broader role in society and international politics (Janowitz, 1960). Importantly, constabulary forces “encompass the entire range of military power and organization,” including everything from weapons of mass destruction at the “upper end” to military aid programs at the “lower-end” (Janowitz, 1960). In step with this broader conception of the role of militaries, Janowitz further comments that the professional soldier “will probably require duty in civilian agencies, at home and abroad, or with military agencies engaged in civilian enterprises, such as the Corps of Engineers who are working on technical assistance to underdeveloped countries” (Janowitz, 1960). In sum, Janowitz recommends that the conventional conception of militaries be broadened to better respond to an altered strategic landscape.

Nye’s support for smart power can be seen as an evolution of this narrative. As smart power importantly seeks to leverage and join all aspects of a nation’s power and influence to build more long-lasting relationships, Nye has praised non-traditional military operations, such as NATO peacekeeping and US military-led responses to humanitarian crises and natural disasters (Armitage & Nye, 2007). Nye crucially stresses that American foreign policy should focus on the “global good—providing things that people and governments in all quarters of the world want but cannot attain in the absence of American leadership”—and as such welcomes a broader conception of security and a degree of civil-military integration (Armitage & Nye, 2007).

Naval diplomacy is one example of this broader conception of the military in action. Naval diplomacy, or the “non-belligerent and political use of naval forces,” is one demonstration of smart power (Widen, 2011). A military strategy that employs a nation’s hard power assets for soft power gains, naval diplomacy has long been used as an element of state power. Humanitarian assistance and disaster relief (HADR) operations are one mission archetype of naval diplomacy. For the US Department of Defense, HADR is broken down between Foreign Humanitarian Assistance (FHA) and Foreign Disaster Relief (FDR). According to DoD Joint Publication 3-29, FHA involves “DoD activities conducted outside the US and its territories to directly relieve or reduce human suffering, disease, hunger, or privation” while FDR is “assistance that can be used immediately to alleviate the suffering of foreign disaster victims” and can include search and rescue, the provision of essential supplies, and medical services (US Joint Chiefs of Staff, 2019). While both fall under the umbrella of HADR, FHA tends to be a more proactive activity while FDR is more reactive as military assets respond in the aftermath of disaster.

The US Military: An Exceptional Respondent to Climate Catastrophe

Conscious of the influence of military diplomacy, the US military has increasingly recognized the importance of HADR, FHA, and FDR missions. While the United States has provided humanitarian assistance abroad since the nineteenth century—in 1812, the US furnished USD 50,000 (equivalent to USD 1.026 million in 2021) of food aid to Venezuela following an earthquake that destroyed the capitol, Caracas—the past twenty years has seen policy changes that elevate the importance of humanitarian missions (Irwin, 2017). September 11, 2001 was one key watershed moment as the Department of Defense expanded “preventive, deterrent, and preemptive activities” to more effectively counter non-state actors and support the “long war” in the Middle East (Serafino et al., 2008). Such policy change is evident in how key strategy documents discuss HADR operations. The 2006 Quadrennial Defense Review (QDR), for example, marked a policy change placing “a new emphasis on the utility of non-combat foreign assistance activities” (Capie, 2015). Then, the 2007 US Maritime Strategy: A Cooperative Strategy for 21st Century Sea Power importantly elevated HADR as a core mission of the navy, marines, and coast guard together with deterrence, sea control, power projection and maritime security (US Department of the Navy, 2007). Furthermore, a 2008 US Congressional Research Service report found that DoD officials “instructed military commanders to look more broadly than in the past at humanitarian assistance, employing it as a component of U.S. security cooperation with foreign nations” (Serafino et al., 2008).

Beyond the debate about whether the military should respond to catastrophes like natural disasters, policymakers do not currently have viable alternatives. Civilian agencies are categorically underfunded and lack the personnel and equipment to mount a meaningful response. Actors like the Department of State and USAID don’t have the financing, stockpiles, transportation methods, or personnel to respond. Civilian agencies also lack the necessary underlying bureaucratic infrastructure that would enable a rapid crisis response. Even at a domestic level, responses to large-scale climate disasters, though ostensibly led by the Federal Emergency Management Agency (FEMA), are made possible through military mobilization. This is perhaps best demonstrated by how the US responded to Hurricane Katrina in 2005, Hurricane Sandy in 2012, Hurricane Harvey in 2017, and Hurricanes Irma and Maria in 2017. International institutions like the United Nations may be one alternative. With over 97,000 UN uniformed peacekeepers and the Humanitarian Air Service, which operates 75 aircraft, the UN has some elements that enable a strong response (UN Peacekeeping, 2022 and UNHAS, 2022). However, the consensus-based nature of UN decision-making and financing makes the UN a generally slow and unresponsive actor. And perhaps more importantly, UN assets are already stretched thinly and can’t be easily

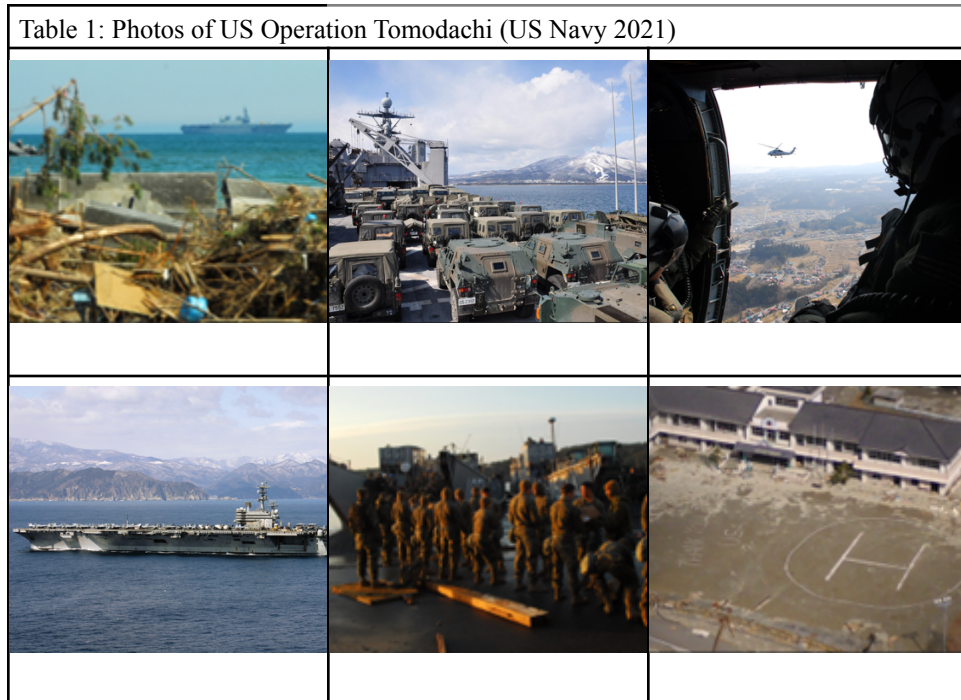
moved from one crisis to another. Non-governmental actors are also another option. For example, the International Committee of the Red Cross is an active respondent in mobilizing supplies, personnel, aircraft, and sometimes ships in response to natural disasters. However, NGOs, including the ICRC, simply lack scale.

In contrast, the United States military is one of the few actors globally with the resources to respond to a catastrophe anywhere swiftly and effectively. From a strictly material lens, the US operates a considerable number of HADR-capable vessels including 11 aircraft carriers, 9 amphibious assault ships, 11 amphibious transport docks, 11 dock landing ships, 2 amphibious command ships, and 2 hospital ships. These ship classes are capable of transporting relief supplies, provisioning water and electricity, conducting search and rescue, providing medical aid, and facilitating the movement of both responding US personnel and those in need of aid. Augmenting these capabilities are impressive airlift capabilities that can sometimes provide faster responses and reach areas the navy cannot. Equally important, the military, unlike civilian agencies such as USAID, has a large and diversified personnel pool that can not only draw on numbers but also special skill sets that may be needed in a disaster. Additionally, the US force projection model and use of the combatant command system enables the US military to respond swiftly anywhere in the world. The six geographic unified combatant commands (CCMD)—consisting of AFRICOM, CENTCOM, EUCOM, NORTHCOM, SOUTHCOM, and INDOPACOM—are forward-deployed and composed of units from multiple service branches providing the US with flexibility and global converge. As a result, the US military is uniquely suited for responding to natural and man-made disasters worldwide and can provide a response that currently cannot be matched by any other state or non-state actor.

Part III: Beyond Theory & Strategy: HADR in Practice The Great Tōhoku Disaster, Operation Tomodachi, & US HADR Missions

On March 11, 2011, at 2:46 PM Japan Standard Time (JST), a 9.0 magnitude earthquake occurred 80 miles off the coast of Japan. The earthquake unleashed a tsunami, with a recorded wave height of 133 feet, that decimated the eastern seaboard of Japan. Known as the Great Tōhoku Earthquake and Tsunami, or simply 3.11, the earthquake was the most powerful in recorded Japanese history, and fourth most powerful in the world. Updated figures released in 2021, the tenth anniversary of the disaster, report that 19,747 were killed, 6,242 injured, and 2,556 missing (Fire and Disaster Management Agency, 2011). 561 square miles were affected with 129,500 houses destroyed and another 265,324 severely damaged leaving around 136,000 displaced following the disaster (Moroney et al., 2013; Kaczur et al., 2016). 1.4 million households in 14

prefectures had no access to water and 1.25 million households had no electricity (UN Office for the Coordination of Humanitarian Affairs, 2011; Pellerin, 2011). Infrastructure and communication networks were also crippled with 71 bridges, 3,500 roads, 26 rail lines, and 2,000 mobile phone transmission stations damaged or destroyed (Kaczur et al., 2016). The earthquake and tsunami also caused a series of explosions and a meltdown at the Fukushima Daichi Nuclear Power Plant, forcing the Government of Japan (GoJ) to raise the threat level to seven, the highest on the international scale of nuclear incidents (BBC News, 2011). GoJ then mandated the further evacuation of more than 177,000 people from a 20km radius (Moroney et al., 2013). Exacerbating the triple-threat scenario, severe cold temperatures, high winds, and snowfall occurred in the following weeks, posing a substantial health risk to the thousands without shelter. At the time, the World Bank calculated the damage from the disaster could amount to USD 235 billion, require several years of rebuilding, and negatively impact global trade (Kim, 2011).



In response, the United States launched Operation Tomodachi (“Operation Friendship”) which came to be one of the largest HADR operations in history. Hours after the disaster the first USN vessel, the *USS McCampbell* was on the scene, and by Day 4, 12 ships, including all elements of the Reagan Carrier Strike Group, were on station conducting HADR operations (Kaczur et al., 2016). In total, the US response consisted of over 24,000 personnel, 122 vehicles, and 24 ships (including a Nimitz-class aircraft carrier, Wasp-class amphibious assault ship, Blue

Ridge command ship, three dock landing ships, and destroyers) (Kaczur et al., 2016). In the air, 189 US aircraft flew 1,937 sorties and 76 intelligence, surveillance, and reconnaissance (ISR) missions while US personnel on the ground delivered 189 tons of food, one million gallons of fresh water, 6,000 blankets, 351 drums of kerosene, and 87 tons of other relief supplies (US Forces Japan, 2011). Several other specific task forces were also stood up including Operation Shower Power providing 12 shower facilities at six evacuation centers that delivered 1,000 showers a day, Operation Field Day which cleared 12 school sites, Operation Backpack which delivered 1159 backpacks, and Operation Band Camp which involved the 296th Army Band delivering 22 performances at evacuation camps (US Forces Japan, 2011). US personnel also rapidly cleared airports and ports and provided specialist assistance, such as the 155-person Chemical, Biological, and Incident Response Force (CBIRF) which assisted the Japanese Self Defense Forces (JSDF) with issues related to the Fukushima Daiichi power plant (US Forces Japan, 2011). In sum, the total authorized budget of Operation Tomodachi was USD 105 million (US Forces Japan, 2011).

While certainly providing much needed humanitarian support, Operation Tomodachi also had a profound effect on US foreign policy and bilateral US-Japan relations. First, Operation Tomodachi showed how powerful HADR operations can be on US public opinion abroad. According to Pew research data, in 2010, 66% of Japanese polled said they held a favorable opinion of the United States (Pew Research Center, 2011). A year later, 85% expressed a favorable view (19% increase), which was the highest percentage recorded since the Pew Global Attitudes Project began tracking the question in 2002 (Pew Research Center, 2011). Importantly, Pew research found that perceptions of US self-interest also improved from 31% in 2010 to 51% in 2011—an area that is often a vulnerable point for the US. Even in the Kyushu region—which is home to Okinawa where discontent with the Torii Station Army Base is common—approval ratings reached highs of 77.4% (Sumida Wyatt Olson, 2011).

Additional aspects of the US image abroad also improved. The surveyed Japanese public expressed increased “confidence in the US President” (76% in 2010; 81% in 2011) and were also more likely to list the US as the “world’s leading economic power” (40% in 2010; 55% in 2011) (Pew Research Center, 2011). While Japanese public opinion of the US certainly fluctuates on a year-on-year basis, especially during election years, the gains between 2010 and 2011 are significant because there was no change in US leadership. Furthermore, among those surveyed who believed the US gave a “great deal” amount of assistance, 93% expressed a positive opinion of the US, further establishing a link between assistance provided and public opinion (Pew Research Center, 2011). It is especially remarkable that these significant swings in public opinion were a product of an operation that lasted just 31 days.

Second, Operation Tomodachi likewise increased public confidence in Japan's Self Defense Forces. Pew research found that 95% of Japanese said the JSDF did a good job responding to the emergencies, including 62% who said the force did a very good job (Pew Research Center, 2011). Additional evidence of this is seen in a survey of periodicals following the disaster with titles such as "Nihon ni jieitai ga ite yokatta" (Thank Goodness Japan has the SDF) and "Arigato jieitai" (Thank you, SDF) (Mullins et al., 2016). This surge of Japanese public support for the JSDF is uncommon given Japan's pacifism following World War II. MIT political scientist Richard Samuels further notes, "a once-marginalized military found itself on center-stage, achieving new levels of national esteem, while the periodically maligned military alliance with the United States performed to similar accolades (Samuels, 2013). These changes in public opinion thus gave a public mandate for an expansion of the capabilities and operations of the JSDF and for deeper cooperation with the United States; thus providing benefits to US national security and grand strategy.

Third, Operation Tomodachi sent an incredibly strong message to the global community. Most importantly, the swiftness and scale of the US response demonstrated unwavering US support to a US ally that few other acts could achieve. Equally important, Operation Tomodachi was a demonstration of the forward operational capabilities of the US military. As mentioned, previously, the Reagan Carrier Strike Group and Essex Amphibious Ready Group were on station within days and conducting operations in a destabilized and traumatized environment. Operation Tomodachi thus sent a clear message to American allies and partners of the benefits of cooperation with the US military; and a message to US adversaries warning of the military capabilities Washington can rapidly deploy. And lastly, Operation Tomodachi demonstrated that the US military can simply respond to a disaster and withdraw in a timely manner. America's long wars in the middle east and history of Cold War interventionism can raise real fears about invasion or occupation—especially given a country's heightened vulnerability. Such sentiments were notably demonstrated by Myanmar's government in 2008 which initially refused US humanitarian aid following Cyclone Nargis and seemed to view the situation as a security rather than humanitarian crisis (Selth, 2008, p. 27). With Operation Tomodachi, however, US leadership was sensitive to always emphasizing Japanese leadership and most US forces departed just 25 days after disaster struck. The swift departure crucially signaled confidence in the Government of Japan and allowed the US military to re-deploy its assets and resume normal operations.

In summary, Operation Tomodachi demonstrated the incredible impact of a 30-day US military HADR operation not only from a humanitarian perspective but also in terms of providing additional benefits to the US position in the Pacific.

Operation Tomodachi is hardly the only example of a USN HADR operation changing public opinion. In response to the December 26, 2004, Indonesian Earthquake and Tsunami which killed nearly 230,000 people and displaced two million across 11 countries, the US Pacific Command stood up Operation Unified Assistance (Khaliq, 2019). Operation Unified Assistance eventually encompassed 25 ships including Carrier Strike Group 9 led by the *USS Abraham Lincoln* with support from an Expeditionary Strike Group led by the *USS Bonhomme Richard*. The 1,000-bed hospital ship, *USS Mercy*, 48 helicopters, and 12,600 personnel were also mobilized in addition to USD 857 million to support rehabilitation and reconstruction (McGinley et al., 2012, p. 34 - 38). Indonesian public opinion of the United States improved remarkably following Operation Unified Assistance. Favorable opinion had reached a low of 15% in 2003 following the invasion of Iraq but increased to 38% in 2005—a 23% increase) (McGinley et al., 2012, p. 35). Public perceptions about US self-interest also shifted: in 2003, 25% of Indonesians believed the US considered the interests of other countries but by 2005 that number rose to 59% (McGinley et al., 2012, p. 35).

In addition to Operation Tomodachi and Operation Unified Assistance, the US military has also conducted sizable HADR operations in response to a number of other natural disasters around the world. In 2007 the US Navy dispatched two amphibious assault ships, the *USS Tarawa* and *USS Kearsarge*, that delivered 400 tons of food, 12,000 gallons of fresh water, and 200 tons of relief supplies to Bangladesh in response to Cyclone Sidr which killed 3,000 people and left several hundred thousand homeless (National Museum of the US Navy, 2020). Then in 2009, the *USS Denver's* Amphibious Task Group provided aid supplies to Subic Bay in the Philippines following typhoon Ketsana and Parma. Another distinguished example is Operation Unified Response which was stood up in reaction to the March 2010 7.0 magnitude Haitian earthquake that killed more than 220,000 people and displaced another 1.5 million (BBC News, 2010; Benet, 2020). The US response was significant with 17 ships, over 17,000 personnel, and delivered 19 million pounds of cargo (CNN, 2010).

The US in Pakistan: HADR is No Silver Bullet


Not all humanitarian missions, however, have been successful from the perspective of changing another country's attitudes about the United States. Pakistan, for example, has seen two large-scale US HADR operations in the past two decades. The first was in October 2005 in response to a 7.6 magnitude earthquake which killed over 100,000 and displaced 3.5 million people. The day after, 90,000 pounds of initial relief supplies arrived in Pakistan delivered by the airlift capabilities of USAF C-17 Globemaster transports. Additional assets from Afghanistan and other bases were deployed and brought the US response to more than 30 helicopters and 1,200 personnel (McGinley et al., 2012, p. 36). In sum, the

US delivered 14,000 tons of relief supplies, transported 19,600 people including 35,000 needing urgent medical care, and vaccinated 20,000 others to prevent the spread of disease (McGinley et al., 2012, p. 36). Then in 2010, heavy monsoon rains resulted in widespread flooding—approximately one-fifth of the country was affected—killing over 2,000 and directly affecting 20 million people (Singapore Red Cross, 2010). In support, the US pledged a total of USD 150 million in international aid, dispatched more than 20 helicopters from Afghanistan, and helped establish 15 treatment centers for water-borne diseases. In both cases, however, public opinion of the US did not change. In 2005, 23% of Pakistanis held a favorable impression of the US, with that number climbing marginally to 27% following the US response. But by 2007, favorable public opinion plunged to just 15% (Pew Research Center, 2020). More promisingly, in 2004 just 18% of Pakistanis believed the US considered the interests of other countries but by 2005 39% now held that view indicating one brief area of improvement (Pew Research Center, 2020). In 2010, public opinion of the US had actually decreased by 2011 and the opinion of America's concerns for other states remained stable at a low 19% (Pew Research Center, 2020). However, these statistics alone don't tell the complete picture and it would be incorrect to draw a link between US HADR operations and a declining opinion of the United States. Instead, it is likely that other events such as the 2011 killing of Osama bin Laden—which involved a breach of Pakistan's sovereignty—and the Global War on Terror, overshadowed US foreign aid (McGinley et al., 2012). It is also worth discussing that the US response to both disasters—especially the second—were considerably smaller in comparison to the other major humanitarian disasters previously analyzed. This may have been intentional—a larger American military deployment could have raised fears akin to those expressed by Myanmar's government in 2008—and further stoked fears of American expansionism and occupation. Conversely, a larger presence and demonstration of the US-Pakistan cooperation may have had a positive effect on public opinion.

Indo-Pacific Regional Navies Recognize the Importance of HADR

Aside from the United States, other Indo-Pacific countries are becoming increasingly aware that their response to disasters also matters and carries political ramifications. While the HADR mission space in the Pacific has become increasingly multinational, regional navies have only entered this space in earnest in the last two decades. Japan, for example, commissioned its first significant HADR-capable asset, the *Ōsumi* class in 1998 followed by the *Hyūga* class helicopter destroyers in 2009, and the *Izumo* class multipurpose destroyers in 2015. However only the *Hyūga* and *Izumo* classes were designed to allow for increased flexibility outside of traditional security environments by leveraging increased command and control functions to enable military, civilian, and NGO collaboration. Even

more recently, Japan elevated the importance of conducting HADR missions abroad following the 2011 Tōhoku disaster. For example, Japan sent a 26-member emergency response team, relief goods, and a transport plane in response to the 2010 Haiti earthquake, but primarily sent financial assistance (Ministry of Defense, 2010). Two years after 3.11, Japan staged its largest overseas deployment since 1945 to conduct HADR operations in response to Typhoon Haiyan. The *JDS Ise* and *JDS Osumi* led the response providing medical assistance to over 2,600 people and vaccinations and health check-ups for nearly 12,000—in addition to 630 tons of food among other supplies (Patalano, 2015). In 2014, Japanese Prime Minister Abe wisely followed-up the disaster relief mission with investment loans in the Philippines worth JPY 20 million for transportation development and flood-management projects (Patalano, 2015). This trend has continued, and Japan has become a more active player in HADR exercises and missions.

		
<p><i>Figure 6: PLAN Peace Ark hospital ship (US Navy 2014)</i></p>	<p><i>Figure 7: The Marado LPH (RoKN)</i></p>	<p><i>Figure 8: The 30,000-tonne converted container ship, Zhuanghe (unknown)</i></p>
		
<p><i>Figure 9: The PLAN Shandong aircraft carrier (Weibo)</i></p>	<p><i>Figure 10: JS Ise DDH-182 Hyūga-class helicopter destroyer (JMSDF)</i></p>	<p><i>Figure 11: HMA Ships Adelaide and Canberra (Australian Ministry of Defense)</i></p>

Beyond Japan, South Korea, Australia, Singapore, and Taiwan and have also expanded their HADR capabilities as they increase their conventional militaries in response to more traditional security concerns. South Korea has only recently begun to acquire more sizable HADR-capable assets including the *Dokdo* class in 2007 and the *Cheonwangbong* class in 2014. Australia followed a similar timeline, only commissioning the first of the *Canberra* class amphibious assault ships in 2014. While Australia did have experience operating the *Majestic* class of light fleet carriers in the 1970s, the Australian Navy sought to upgrade the

fleet's amphibious capabilities following experiences leading the International Force for East Timor peacekeeping mission in 1999-2000. The conflict and humanitarian crisis placed demands on the navy comparable to a HADR operation, and Australia found itself ill-equipped for the task. Singapore and Taiwan still have only limited HADR capabilities but have each become more active actors in responding to natural disasters. Taiwan is a particularly unique case as it sees HADR missions as a tool for garnering goodwill, and more importantly, international recognition and legitimacy. Thus, while it is important to concede that HADR was not the sole reason behind the design and purchasing of new assets, the additional ships paired with a demonstrated broader mission scope reveals that Pacific states are increasingly aware of both the humanitarian need and political and strategic opportunity provided by HADR missions.

China's 2013 Response to Typhoon Haiyan: The Dangers of Inaction

Like other regional Indo-Pacific navies, China's People's Liberation Army (PLA) has only recently developed both a meaningful capacity and a will to conduct HADR missions. Indeed, while China may have previously had the resources to conduct HADR, China often fell back on its status as a "developing country" and only offered limited aid. This temperament has changed however in the past twenty years. In 2011 China commissioned its first aircraft carrier, the *Liaoning*, using a 1983 platform designed for the Soviet Union. China has since expanded its HADR-capable assets with the commissioning of the *Daishan Dao* (a.k.a. *Peace Ark* during peacetime), a 300-bed hospital ship, in 2008 and the PLAN's second aircraft carrier, the *Shandong*, in 2019. Additional procurement programs for the Type 071 amphibious transport dock, Type 075 landing helicopter dock, and Type 003 aircraft carrier beginning in 2007, 2021, and 2023 respectively, will further augment China's ability to respond to natural disasters and conduct humanitarian missions.

Yet, China's HADR record is mixed, and previous mistakes should provide important lessons for American policymakers. First, it is clear China does recognize the importance of soft power, smart power, and disaster diplomacy. Following its commissioning, China deployed the *Peace Ark* to the Gulf of Aden for the three-month "Harmonious Mission 2010." The proactive humanitarian and medical expedition visited local populations in Djibouti, Tanzania, Kenya, the Seychelles, and Bangladesh to provide medical treatment (Dooley, 2015). Proving to be a success, China deployed the *Peace Ark* to Cuba, Costa Rica, Jamaica, and Trinidad and Tobago as part of "Harmonious Mission 2011" and the PLAN's first visit to the Caribbean (Dooley, 2015). China has subsequently deployed the *Peace Ark* worldwide calling upon Gabon, Barbados, French Polynesia, Grenada, Mexico, Peru, the Philippines, and even the United States and Australia. The continuation of the "Harmonious Mission" and

plans for additional hospital ships such as the repurposed *865 Zhuanghe* container ship and Project 320 Ob' class further reveal China recognizes the benefits humanitarian operations can have on global public perception.

Conversely, China's deliberately reluctant response to 2013 Typhoon Haiyan left a stain on China's humanitarian and foreign policy record, providing an important lesson on the consequences to public perception for inaction. In contrast to the previously discussed rapid and sizable responses by the United States and Japan, China initially offered just USD 100,000 — which is paltry in comparison to the USD 450,000 the Philippines gave China following the 2008 Sichuan earthquake (Pesek, 2014, p. 180). Global criticism followed. Reuters proclaimed, "While the navies of the United States and its allies rushed to the aid of the typhoon-hit Philippines, a state-of-the-art Chinese hospital ship has stayed at home...becoming a symbol of China's tepid response to the crisis" (Torode, 2013). The Diplomat Writer James Holmes further derided, "not only has the [CCP] leadership done away with a promising soft-power campaign that was years in the making...it razed its own soft-power edifice to the ground, and salted the ruins so nothing can take root again" (Holmes, 2013). Even China's state-run, nationalistic, Global Times newspaper expressed concern about China's response noting, "China, as a responsible power, should participate in relief operations to assist a disaster-stricken neighboring country, no matter whether it's friendly or not...China's international image is of vital importance to its interests. If it snubs Manila this time, China will suffer great losses" (Rajagopalan, 2013). Bowing to international criticism, China later increased its donation to USD 241.6 million—which global media still noted was less than the USD 242.7 million sent by furniture-maker Ikea—and dispatched the *Peace Ark* (Dorell, 2013).

China's decision to not direct the *Peace Ark* and offer a more substantial relief package is perplexing, given Beijing's comprehension of the value of humanitarian missions—demonstrated by the succession of the "Harmonious Missions." There are several probable explanations. First, the concept of foreign aid was not a widely supported domestic concept with many wondering why citizens abroad received support when there was still widespread poverty at home. Second, China had long sought to appear as a developing country with finite capabilities. Such a narrative was, for example, accepted by the international community in 2004 following the Indian Ocean tsunami where China only contributed USD 60.46 million (Xinhua, 2004). However, in 2013, China was Asia's largest economy and had apparent aspirations to be a regional, if not global, hegemon. As a result, China's lack of action was no longer acceptable to the international community. Thirdly, and perhaps most importantly, China's decision can be traced to the *realpolitik* dynamics of Sino-Philippine relations. In 2013, relations between Beijing and Manila were frosty over China's territorial claims in the South China Sea. Such a decision was designed to send a clear message—China takes its maritime

claims seriously and expects compliance from smaller states. Unfortunately, such a strategy proved to be misguided. In addition to the already-mentioned international backlash, China invalidated the supposed ideological grounding of its foreign policy—the traditional values of harmony, benevolence, righteousness, courtesy, wisdom, honesty, loyalty, and filial piety (Zhang, 2013). And lastly, instead of mending Sino-Philippine relations and demonstrating to other nations the United States was no longer needed in the Indo-Pacific, Beijing played into the hands of Washington seeking a “Pivot to the Pacific.” Consequently, China’s 2013 Response to Typhoon Haiyan offers an inimitable message on the consequences of *inaction*.

Part IV: Discussion & Analysis

This paper sought to demonstrate and examine the positive increasing association between humanitarian assistance and global public opinion. America’s long HADR record provides evidence that such missions can improve the public perception of the US—including in more elusive areas such as self-interest. This conclusion is supported by consistent increases in perception and public opinion, and when data is not available, the rhetoric used by country elites and mass media. Conversely, this section’s analysis of China’s response to Typhoon Haiyan demonstrated the negative association between inaction and public opinion. Lastly, the discussion of US assistance to Pakistan serves as an important reminder that HADR is no silver bullet and is affected by external factors that can overshadow or overpower any gains generated by humanitarian assistance.

It is also worth exploring what specifically causes public opinion shifts following HADR missions. First, a correlation between foreign aid and official development assistance (ODA) and public opinion is already well established. Second, the presence of US aid following a disaster will intensify feelings of goodwill as US personnel save lives and provide humanitarian aid. Third, and perhaps most importantly, the scale and visibility of the US response is also a factor; nothing better demonstrates American commitment more than dozens of ships and thousands of troops appearing at a country’s greatest time of need. Indeed, a team of navy analysts concluded, “the very size of the vessel sends a strong strategic message that smaller engagements cannot” (Morrison et al., 2013). Furthermore, CNN wrote in 2007, ‘as an expression of hard power, they don’t come bigger or more fearsome than the USS George Washington...But as an expression of soft-power, the Nimitz-class carrier is finding its influence in its Asian theater of operations’ (Shadbolt, 2013).

Beyond the United States, this paper also aimed to illustrate that many regional Indo-Pacific powers are increasing their involvement in the HADR mission space, likewise cognizant of the soft power benefits. China, Japan, South Korea, Australia, Singapore, and Taiwan (to name a few) have made significant strides in building HADR capacity and improving responsiveness to natural disasters and humanitarian crises. For

all the countries discussed, humanitarian assistance and disaster relief operations provide paths towards enhanced international prestige, greater legitimacy, and deeper bilateral partnership.

Box 1: Summary of Part III Findings & Key Takeaways

1. There is a positive increasing association between HADR responses and global public opinion. HADR can have very powerful soft power benefits.
2. There is a positive decreasing association between no response and global public opinion. The lack of a response can significantly damage a country's reputation and roll-back progress gained by previous HADR missions.
3. HADR missions are not a foreign policy silver-bullet and are affected by external factors and events.
4. While the underlying cause of HADR mission impact can have multiple explanations, one prevalent factor is the size and visibility of the response. Bigger and more visible responses have a greater impact on public opinion. As such, simply monetary donations will have only a limited impact.
5. Other countries have also recognized the benefits of HADR and have taken steps to become more active in this space.

Part V: Filling Strategic Gaps by Elevating Proactive and Reactive HADR

This paper began by exploring five of the biggest challenges for American foreign policy: climate change, China's rise, damaged American credibility, faltering US global health leadership, and the lack of American grand strategy. Climate change in particular may pose the greatest threat as it will serve as a catalyst for instability and other crises worldwide. To date, US policy has primarily been focused on preventing climate change—but the window for complete prevention has passed. Global warming will reach 1.5°C above pre-industrial levels by 2040 and will likely reach that level by 2030. Sea level rise has become irreversible. Storms will occur with increasing strength and frequency. As a result, American foreign policy is at an inflection point and policymakers must reexamine American grand strategy and how to best match capabilities with outcomes.

Based on an exploration of theory, policy, history, and case studies, humanitarian assistance and disaster relief missions may offer one effective solution at addressing these concerns. While US military doctrine has placed continuing emphasis on HADR for the past two decades, HADR remains a relatively low priority for the US military and its potential is far from maximized. Furthermore, the link between HADR and climate change has not been explicitly stated nor explored in depth.

Thus, this final section will explore a range of policy solutions with the aim of addressing the key challenges to US foreign policy.

AFRICOM as a Framework for Change

While HADR missions offer valuable benefits, they are often limited in scope and impact. To really develop a comprehensive response to climate change, China's rise, damaged American credibility, faltering US global health leadership, and the lack of American grand strategy, American policymakers will need to examine US military policy at a more macro level. One source of inspiration for future reform is US Africa Command (AFRICOM).

US Africa Command was stood up in 2007 by the Bush Administration to better coordinate US Africa policy. Unlike other regions of the world, Africa predominantly faces non-traditional security challenges including poverty, famine and food insecurity, poor infrastructure, natural disasters, poaching, human, drug, and arms trafficking, corruption, political volatility, religious and ethnic violence, border disputes, internal conflict, and terrorism. In response to these non-traditional security concerns, President Bush announced AFRICOM would focus on non-traditional military responsibilities by enhancing American “efforts to bring peace and security to the people of Africa and promote our common goals of development, health, education, democracy, and economic growth in Africa” (Bush, 2021). AFRICOM's command structure is unorthodox and was designed to leverage the “talents, expertise, and capabilities within the entire US government” (United States Africa Command, 2021). AFRICOM was the first and remains the only US regional command to integrate civilian advisors into the formal military chain of command. Notably, AFRICOM's Deputy Commander is a civilian—a State Department ambassador-level official. This position manages AFRICOM's civil-military relations, including all its foreign assistance programs. The Deputy Commander is also tasked with helping to manage representatives from other civilian agencies, such as USAID, Treasury, and Agriculture, who may be embedded directly alongside military officers.

More specifically, Schaefer and Eaglen note that AFRICOM was uniquely tasked with “bolstering stability, encouraging political pluralism, enhancing the military capabilities of Afghan peacekeepers, promoting development and economic growth, building institutions, promoting good governance, and addressing short-term natural disasters and other crises” (Schaefer & Eaglen, 2007). In the 14 years that AFRICOM has been operating, it has trained African police and military units, constructed schools, hospitals, and wells, and furnished medical aid. Importantly, AFRICOM has led the American response to the outbreaks of various highly infectious diseases, including HIV/AIDS, Ebola, and, most recently, COVID-19 (Townsend, 2021). While AFRICOM is far from perfect, as General Craddock, former commander of EUCOM, noted that

this “pioneer effort could be beneficial in ‘re-crafting’ the other combatant commands” (Gibbs, 2007).

Policy Recommendations for A New Era

This paper similarly argues that AFRICOM’s prioritization of the humanitarian assistance portfolio may be applicable elsewhere. Cognizant of the fact that the security challenges and operating environments facing the other US combatant commands vary, this paper offers the following recommendations to update US military policy in the face of climate change, China’s rise, damaged American credibility, faltering US global health leadership, and the lack of American grand strategy.

1. Increase Reactive HADR Missions: As climate disasters become more frequent, the budgets supporting reactive HADR responses should be increased accordingly. Already, we are seeing some disasters go largely unanswered. For example, in response to appeals for help to deal with the record 2021 deadly wildfire season that ravaged the eastern Mediterranean, the US only sent a single Boeing P-8 Poseidon surveillance aircraft to Greece and two CH-47 Chinooks to Turkey—despite the proximity of US military bases in the region. France, in contrast, deployed three planes, 58 vehicles, and 243 personnel and Germany 46 vehicles alongside 221 personnel to Greece. In addition to equipment from the EU, Ukraine, Qatar, Azerbaijan, and Iran, Russia also deployed five planes and three helicopters to Turkey (Sabah, 2021; ANI, 2021). Ensuing political commentary in Greek media outlets called the US response “limited” and that “Americans have created the impression to the average citizen that they give more weight to Turkey than to Greece” (US State Department, 2021). More frequent and damaging disasters will also place greater demands on US military capabilities. US military planners should also be aware of the lessons learned from previous HADR missions. Larger, more visible missions may have a greater impact on public opinion than smaller deployments or simply cash contributions. Furthermore, the US should ensure it does not repeat China’s mistake of not responding to a natural disaster for political reasons. In fact, a response to a country with poor relations with the United States underscores American commitment to humanitarianism.

2. Improve HADR Mission Readiness: While the United States can and should take the leadership role in responding to disasters worldwide, policymakers should also consider how to increase mission readiness by leveraging the expansive network of US allies and partners. The United States already conducts several multinational HADR exercises which are designed to improve coordination during a disaster. However, the US can go beyond preparatory exercises and develop multilateral HADR response strategies that more effectively integrate the abilities of militaries of friendly nations. Such a response can be modeled after the domestic US National Response Framework (NRF) that helps to designate clear lines of authority and mission scope. An equivalent structure should also consider

the role of the private sector and how regional supply chains can be leveraged to produce the fastest response times. The Indo-Pacific would especially benefit from this level of integration and a comprehensive regional framework could include the US, Australia, New Zealand, Japan, South Korea, India, Singapore, and Taiwan as each of these states build and expand their HADR-capable assets. US leadership, however, should still be visible.

3. Increase Proactive HA Missions: In perhaps the biggest proposed change for US policy, this paper recommends that the US increase funding for *proactive* humanitarian assistance missions. Importantly, the US should give renewed focus towards preventing future disasters by building local capacity through the form of expanded vaccination programs, assisting with the construction of shoreline storm surge barriers, and training local emergency workers. Improving the infrastructure in disaster-prone areas—especially in more impoverished communities—may be the best method in preventing damages and loss of life. Increasing proactive HA missions also involves deepening the “whole of government” approach and more effectively balancing the “3-D’s” of foreign policy: defense, development, and diplomacy. In practice this means improving multi-agency cooperation and partnerships with civilian agencies such as USAID and the State Department. Other tactics can involve more frequent deployments of the two US Navy hospital ships, the *USS Mercy* and *USS Comfort* for missions to provide health services to local communities.

4. Increase funding for HADR and expand HADR-capable assets: Importantly, in order for HADR missions to be completed, the Department of Defense must allocate more funding and resources to the US Combatant Commands for HADR. Additionally, the US military should study cost-effective ways to expand the US suite of HADR-capable assets. For example, both the *USS Mercy* and *USS Comfort* are crewed largely by reserves which limits the extent to which they can be utilized for either proactive or reactive HADR missions. Currently, staffing both ships provide policymakers with a trade-off between deployment and keeping the reservists stateside. Providing the budget to staff the *USS Mercy* and *USS Comfort* full-time would dramatically expand the United States’ ability to conduct HADR missions abroad and would represent the first US ships tasked full-time for humanitarian operations. Looking beyond the *USS Mercy* and *USS Comfort*—both of which are near the end of their operational life spans—the US can also look into novel ways of expanding the number of HADR-capable assets available to policymakers. One possible solution is to convert older transport aircraft into fully equipped mobile hospitals that can land in areas unreachable by the navy.

5. Reform the Combatant Command Structure: AFRICOM’s novel appointment of a civilian deputy commander to lead all foreign assistance programs should be replicated in the other US combatant commands—with priority given to INDOPACOM and SOUTHCOM. This

appointment elevates the importance of the humanitarian assistance portfolio and may increase the effectiveness of proactive and reactive HA missions. Designated leadership for the HA portfolio would also help policymakers achieve this paper's previous recommendations and could be particularly helpful in improving HADR mission readiness with US partner nations.

Conclusion

This paper has extensively argued that expanded humanitarian assistance and disaster relief operations are an integral and effective tool in foreign policy statecraft that can significantly change a country's perception abroad, deepen bilateral and multilateral cooperation, improve the readiness of a country's military, while also building resilience and providing aid during times of need. As such, this paper specifically recommends policymakers consider increasing reactive HADR missions, improving HADR mission readiness, increasing proactive HA missions, increasing funding for HADR and HADR-capable assets, and reforming the combatant command structure. Given the significant challenges facing US foreign policy today—the arrival of climate change, China's rise, damaged American credibility, faltering US global health leadership, and the lack of American grand strategy—American humanitarianism offers a timely, relatively low-cost, solution. Therefore, the United States should apply the successes and lessons learned from previous humanitarian assistance and disaster relief missions to update US military policy by elevating the humanitarian assistance portfolio.

References

- ANI. (2021, July 31). *Russia sends 5 planes, 3 helicopters to help Turkey put out wildfires: Erdogan's office*. Asian News International. Retrieved December 16, 2021, from <https://www.aninews.in/news/world/asia/russia-sends-5-planes-3-helicopters-to-help-turkey-put-out-wildfires-erdogans-office20210731195340/>
- Armitage, R. L., & Nye, J. S. (2007). (rep.). *CSIS Commission on Smart Power: A Smarter, More Secure America* (pp. 1–90). Washington, DC: Center for Strategic & International Studies.
- BBC News. (2010, February 11). *Haiti quake death toll rises to 230,000*. BBC News. Retrieved December 15, 2021, from <http://news.bbc.co.uk/1/hi/world/americas/8507531.stm>
- BBC News. (2011, April 12). *Japan residents on raised nuclear threat level*. BBC News. Retrieved December 15, 2021, from <https://www.bbc.co.uk/news/world-asia-pacific-13047683>
- Benet, J. (2020, January 1). *Behind the numbers: The shadow of 2010's earthquake still looms large in Haiti*. Internal Displacement Monitoring Centre. Retrieved December 15, 2021, from

- <https://www.internal-displacement.org/expert-opinion/behind-the-numbers-the-shadow-of-2010s-earthquake-still-looms-large-in-haiti>
- Bush, G. (2021, February 6). *President Bush Creates a Department of Defense Unified Combatant Command for Africa*. The White House. Retrieved December 15, 2021, from <https://georgewbush-whitehouse.archives.gov/news/releases/2007/02/20070206-3.html>
- Capie, D. (2015). The United States and Humanitarian Assistance and Disaster Relief (HADR) in East Asia: Connecting Coercive and Non-Coercive Uses of Military Power. *Journal of Strategic Studies*, 38(3), 309–331. <https://doi.org/10.1080/01402390.2014.1002914>
- CNN. (2010, January 26). *Numbers tell stories of horror, heroism in Haiti*. CNN. Retrieved December 15, 2021, from <http://edition.cnn.com/2010/WORLD/americas/01/26/haiti.by.the.numbers/index.html?hpt=T1>
- Daily Sabah. (2021, August 2). *Countries pledge solidarity with Turkey over fires, send planes*. Daily Sabah. Retrieved December 16, 2021, from <https://www.dailysabah.com/politics/diplomacy/countries-pledge-solidarity-with-turkey-over-fires-send-planes>
- Dilley, M., Chen, R. S., Deichmann, U., Lerner-Lam, A. L., & Arnold, M. (2005). Natural Disaster Hotspots: A Global Risk Analysis. *Disaster Risk Management*. <https://doi.org/10.1596/0-8213-5930-4>
- Dooley, H. J. (2012). The Great Leap Outward: China's Maritime Renaissance. *The Journal of East Asian Affairs*, 26(1), 53–76. <https://doi.org/https://www.jstor.org/stable/23257908>
- Dorell, O. (2013, November 15). *China lags IKEA in aid to Philippines*. USA Today. Retrieved December 15, 2021, from <https://eu.usatoday.com/story/news/world/2013/11/14/china-typhoon-haiyan-aid/3529729/>
- Dunlap, C. J. (1992). The origins of the American military coup of 2012. *Parameters*, 22(1). <https://doi.org/10.21236/ada543045>
- Energy & Climate Intelligence Unit. (2021). *Net Zero Scorecard*. Net Zero Tracker. Retrieved December 15, 2021, from <https://zerotracker.net>
- Fire and Disaster Management Agency. (2011, March 9). 平成 23 年(2011 年)東北地方太平洋沖地震(東日本大震災)について (2011 *Tohoku-Pacific Ocean Earthquake (Great East Japan Earthquake)*). Fire and Disaster Management Agency. Retrieved December 16, 2021, from <https://www.fdma.go.jp/disaster/higashinihon/items/161.pdf>
- Futamura, M., Hobson, C., & Turner, N. (2011, April 29). *Natural disasters and human security*. United Nations University. Retrieved December 15, 2021, from <https://unu.edu/publications/articles/natural-disasters-and-human-security.html>

- Gibbs, R. W. (2007). *Africom: A Unique Opportunity to Reshape Civil/Military Relationships* (thesis). US Naval War College, Newport.
- Holmes, J. R. (2013, November 27). *Chinese soft power: Another Typhoon Haiyan Victim*. *The Diplomat*. Retrieved December 15, 2021, from <https://thediplomat.com/2013/11/chinese-soft-power-another-typhoon-haiyan-victim/>
- Huntington, S. P. (1957). *The Soldier and the State: The Theory and Politics of Civil–Military Relations*. Harvard University Press.
- Intergovernmental Panel on Climate Change. (2021). (publication). *Climate Change 2021: the Physical Science Basis, the Working Group I contribution to the Sixth Assessment Report* (pp. 1–3949). New York, NY: United Nations.
- Irwin, J. F. (2017, November). *The origins of U.S. foreign disaster assistance*. *The American Historian*. Retrieved December 15, 2021, from <https://www.oah.org/tah/issues/2018/february/the-origins-of-u.s-foreign-disaster-assistance/>
- Janowitz, M. (1964). *The Professional Soldier: A Social and Political Portrait*. Free Press.
- Joffe, J. (2006, May 14). *The perils of soft power*. *The New York Times*. Retrieved December 15, 2021, from https://www.nytimes.com/2006/05/14/magazine/14wwln_lede.html
- Kaczur, A., Aurelio, J., & Joloya, E. (2016). *An Analysis of United States Naval Participation in Operation Tomodachi Humanitarian and Disaster Relief in the Tsunami-Stricken Japanese Mainland*. *Dudley Knox Library*.
- Khaliq, R. ul. (2019, December 26). *Mayhem of 2004 Indian Ocean tsunami recalled*. Anadolu Agency. Retrieved December 15, 2021, from <https://www.aa.com.tr/en/asia-pacific/mayhem-of-2004-indian-ocean-tsunami-recalled/1684322>
- Kim, V. (2011, March 21). *Japan damage could reach \$235 billion, World Bank estimates*. *Los Angeles Times*. Retrieved December 15, 2021, from <https://www.latimes.com/business/la-fgw-japan-quake-world-bank-20110322-story.html>
- Lihua, Z. (2013, November 21). *China's traditional cultural values and national identity*. Carnegie Endowment for International Peace. Retrieved December 15, 2021, from <https://carnegietsinghua.org/2013/11/21/china-s-traditional-cultural-values-and-national-identity-pub-53613>.
- Masters, J. (2021, May 16). *A look back at the horrific 2020 atlantic hurricane season " Yale climate connections*. *Yale Climate Connections*. Retrieved December 15, 2021, from

- <https://yaleclimateconnections.org/2020/12/a-look-back-at-the-horrific-2020-atlantic-hurricane-center/>
- McGinley, J. E., Kelly, L. P., & Thurston Goodroe, L. M. (2012). Soft Power: The Limits of Humanitarian Intervention. *American Intelligence Journal*, 30(2), 34–38.
- Ministry of Defense. (2010, January 20). *Implementation of International Emergency Relief Activities (Medical Activities) by SDF Units in Response to the Large-Scale Earthquake in the Republic of Haiti*. Press Releases. Retrieved December 15, 2021, from <https://web.archive.org/web/20110323174906/http://www.mod.go.jp/e/pressre/2010/100120.html>
- Moroney, J. D. P., Pezard, S., Miller, L. E., Engstrom, J., & Doll, A. (2013). The Great East Japan Earthquake/Operation Tomodachi (Japan). In *Lessons from Department of Defense Disaster Relief efforts in the Asia-Pacific region*. essay, RAND Corporation.
- Morrison, S., Cullison, S. G., & Roughead, T. G. (2013). (rep.). *U.S. Navy Humanitarian Assistance in an Era of Austerity*. Washington, DC: Center for Strategic & International Studies.
- Mullins, M. R., & Nakano, K. (2016). Military Force as Social Good: The Legacies of Operation Tomodachi. In *Disasters and social crisis in contemporary Japan: Political, religious, and sociocultural responses* (pp. 42–58). essay, Palgrave Macmillan.
- Mulyungi, P. (2021, September 2). *Construction of djougou-pehunco-banikoara "cotton" road in Benin*. Construction Review Online. Retrieved January 29, 2022, from <https://constructionreviewonline.com/news/construction-of-djougou-pehunco-banikoara-cotton-road-in-benin/>
- National Museum of the US Navy. (2020, May 7). *November 2007 – Bangladesh (Cyclone Sidr)*. Naval History and Heritage Command. Retrieved December 15, 2021, from <https://www.history.navy.mil/content/history/museums/nmusn/explore/photography/humanitarian/21st-century/2000-2009/2007-bangladesh-cyclone-sidr.html>
- NBC News. (2008, May 7). *The 10 deadliest storms in history*. NBC News. Retrieved December 15, 2021, from <https://www.nbcnews.com/id/wbna24488385>
- Nye, J. S. (2004). *Soft power: The means to success in world politics*. PublicAffairs.
- Nye, J. S. (2006, February 23). *Think Again: Soft Power*. Foreign Policy. Retrieved December 15, 2021, from <https://foreignpolicy.com/2006/02/23/think-again-soft-power/>
- Nye, J. S. (2008). Smart Power and the “War on Terror.” *Asia-Pacific Review*, 15(1), 1–8. <https://doi.org/10.1080/13439000802134092>
- Nye, J. S. (2011). *The Future of Power*. Perseus Books.
- OECD. (2018, June). *24 Principles and Good Practice of Humanitarian Donorship*. Good Humanitarian Donorship. Retrieved December 15,

- 2021, from
<https://www.ghdinitiative.org/ghd/gns/principles-good-practice-of-ghd/principles-good-practice-ghd.html>
- Office of the Under Secretary of Defense for Acquisition and Sustainment. (2019). (rep.). *Report on Effects of a Changing Climate to the Department of Defense* (pp. 1–22). Washington, DC: US Department of Defense.
- Patalano, A. (2015). Beyond the gunboats: Rethinking Naval Diplomacy and Humanitarian Assistance Disaster Relief in East Asia. *The RUSI Journal*, 160(2), 32–39.
<https://doi.org/10.1080/03071847.2015.1031523>
- Pellerin, C. (2011, March 23). *Helping Japan now Pacific Command's Top Priority*. The Flagship. Retrieved December 15, 2021, from
https://www.militarynews.com/norfolk-navy-flagship/news/top_stories/helping-japan-now-pacific-command-s-top-priority/article_913becd-5017-5bc4-a60a-8713114e6c7d.html
- Pesek, W. (2014). *Japanization: What the world can learn from Japan's lost decades*. John Wiley & Sons.
- Pew Research Center. (2011, June 1). *Japanese resilient, but see economic challenges ahead*. Pew Research Center's Global Attitudes Project. Retrieved December 15, 2021, from
<https://www.pewresearch.org/global/2011/06/01/japanese-resilient-but-see-economic-challenges-ahead/#impact-of-the-disasters>
- Pew Research Center. (2020, March). *Global Indicators Database: Pakistan*. 2019 Global Attitudes Survey. Retrieved December 15, 2021, from
<https://www.pewresearch.org/global/database/indicator/1/country/pk>
- Rajagopalan, M. (2013, November 12). *China's meager aid to the Philippines could dent its image*. Reuters. Retrieved December 15, 2021, from
<https://www.reuters.com/article/us-china-philippines-aid-idUSBRE9A B0LM20131112>
- Ratcliffe, R. (2020, November 2). *Typhoon goni: Thousands of homes in Philippines feared destroyed*. The Guardian. Retrieved December 15, 2021, from
<https://www.theguardian.com/world/2020/nov/02/typhoon-goni-philippine-president-visit-storm-hit-area-death-toll-climbs>
- Rojanasakul, M., & Sullivan, B. K. (2020, December 5). *This Year's Wild Hurricane Season Is an Ominous Sign of What's Ahead*. Bloomberg News. Retrieved December 15, 2021, from
<https://www.bloomberg.com/graphics/2020-hurricane-season-overview/>
- Rosén, F. (2009). Third-generation Civil-military Relations Moving Beyond the Security- Development Nexus. *Security Dialogue*, 40(6), 597–616. <https://doi.org/10.1177/0967010609350633>

- Samuels, R. J. (2013). *3.11: Disaster and change in Japan*. Cornell University Press.
- Schaefer, B. D., & Eaglen, M. (2007). Clarifying the Future of AFRICOM. *Heritage Foundation*.
<https://doi.org/www.heritage.org/Research/Africa/wm1644.cfm>
- Selth, A. (2008). Even paranoids have enemies: Cyclone nargis and Myanmar's fears of invasion. *Contemporary Southeast Asia*, 30(3).
<https://doi.org/10.1355/cs30-3b>
- Serafino, N. M., Dale, C., Grimmett, R., Margesson, R., Rollins, J., Salaam-Blyther, T., Tarnoff, C., Woolf, A., Wyler, L., & Bowman, S. (2008). (rep.). *The Department of Defense Role in Foreign Assistance: Background, Major Issues, and Options for Congress* (pp. 1–105). Washington, DC: US Congressional Research Service.
- Shadbolt, P. (2013, November 19). *Typhoon relief effort boosts U.S. soft power in Asia Region*. Retrieved December 15, 2021, from
<https://www.cnn.com/2013/11/18/world/asia/philippines-relief-us-soft-power/index.html>
- Sherwood, A., Bradley, M., Rossi, L., Guiam, R., & Mellicker, B. (2015). (rep.). *Resolving Post-Disaster Displacement: Insights from the Philippines after Typhoon Haiyan* (pp. 1–82). Washington, DC: Brookings Institution and International Organization for Migration.
- Singapore Red Cross. (2010, September 15). *Pakistan floods: The deluge of disaster - facts & figures as of 15 September 2010 - Pakistan*. ReliefWeb. Retrieved December 15, 2021, from
<https://reliefweb.int/report/pakistan/pakistan-floodsthe-deluge-disaster-facts-figures-15-september-2010>
- Sumida Wyatt Olson, C. (2011, December 7). *Disaster relief efforts push Japan public sentiment toward U.S. military to all-time high*. Stars and Stripes. Retrieved December 15, 2021, from
<https://www.stripes.com/disaster-relief-efforts-push-japan-public-sentiment-toward-u-s-military-to-all-time-high-1.162658>
- Torode, G. (2013, November 15). *No sign of help for Philippines from China's Hospital Ship*. Reuters. Retrieved December 15, 2021, from
<https://www.reuters.com/article/philippines-typhoon-china-idINDEE9AE06520131115>
- Townsend, S. (2021, April 20). *Africa: Securing U.S. Interests, Preserving Strategic Options.* "Statement Before the Committee on Armed Services. United States Africa Command. Retrieved December 15, 2021, from
<https://www.africom.mil/about-the-command/2021-posture-statement-to-congress>
- Treisman, R. (2020, November 1). *Powerful typhoon goni slams the Philippines, leaving at least 10 dead and 3 missing*. NPR. Retrieved December 15, 2021, from
<https://www.npr.org/2020/11/01/930117656/powerful-typhoon-goni-sl>

- ams-the-philippines-leaving-at-least-10-dead-and-3-missi?t=1628601394658
- UN Office for the Coordination of Humanitarian Affairs. (2011). (rep.). *Japan Earthquake & Tsunami Situation Report No. 3* (pp. 1–4). New York, NY: United Nations.
- UN Peacekeeping. (2022). *Military peacekeeping*. United Nations Peacekeeping. Retrieved December 21, 2022, from <https://peacekeeping.un.org/en/military>
- UNHAS. (2022, May). *United Nations Humanitarian Air Service (UNHAS) Annual Review 2021*. UN World Food Programme. Retrieved December 21, 2022, from <https://www.wfp.org/publications/united-nations-humanitarian-air-service-unhas-annual-review-2021>
- United Nations Office on Drugs and Crime. (2019, October 23). *Climate Change Could Mean More Terrorism in the Future*. UNODC Nigeria. Retrieved December 15, 2021, from <https://www.unodc.org/nigeria/en/climate-change-could-mean-more-terrorism-in-the-future.html>
- United States Africa Command. (2021). *About the command*. United States Africa Command. Retrieved December 15, 2021, from <https://www.africom.mil/about-the-command>
- US Department of the Navy. (2007). (rep.). *A Cooperative Strategy for 21st Century Seapower* (pp. 1–20). Washington, DC: US Department of Defense.
- US Forces Japan. (2011). (rep.). *Operation Tomodachi Factsheet*. Washington, DC: US Department of State.
- US Joint Chiefs of Staff. (2019). (publication). *Joint Publication 3-29: Foreign Humanitarian Assistance* (pp. 1–212). Washington, DC: US Department of Defense.
- US State Department. (2021, August). *GREECE: Fires Continue Even as Multitude of Countries Provide Assistance*. Retrieved December 15, 2021.
- Widen, J. J. (2011). Naval Diplomacy—A Theoretical Approach. *Diplomacy & Statecraft*, 22(4), 715–733. <https://doi.org/10.1080/09592296.2011.625830>
- Xinhua. (2004, December 31). *China to give 60-mln-USD more aid to tsunami victims*. ReliefWeb. Retrieved December 15, 2021, from <https://reliefweb.int/report/myanmar/china-give-60-mln-usd-more-aid-tsunami-victims>