



Center for a  
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Security

# **The Presence Problem:**

## Naval Presence and National Strategy

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## INTRODUCTION

In comments to a Washington, D.C., think tank in 2014 Admiral Jonathan Greenert, then Chief of Naval Operations, expounded on the central importance of providing naval presence in his day-to-day activities, stating that he spent “90 percent of his time” working to ensure that the Navy could fulfill this critical mission. He spoke of altering deployment schedules and establishing forward operating hubs in Spain, Australia, and Singapore along with existing bases in Japan and the Middle East to keep approximately 100 ships out of the force of then 289 (it’s 272 today) deployed continuously in order to satisfy current regional combatant commander presence requirements around the globe. His comments conveyed both frenzy and frustration as he described the decisions to extend deployments and shorten maintenance availabilities in order to keep an increasing percentage of an ever decreasing fleet forward deployed.<sup>1</sup> Within 12 months he made the decision to gap the presence of an aircraft carrier in the Arabian Gulf, the first such gap since the terrorist attacks on September 11, 2001, in order to keep a promise to sailors to shorten carrier deployments.<sup>2</sup>

But naval leaders and strategists may have a bigger problem than the practical questions involved in fleet size. At issue is the very concept of naval presence, which is widely misunderstood in America’s defense establishment and national security community. This confusion comes both in the form of the theoretical elements of naval presence and why it matters, and the practical elements of how it is achieved. Without proper understanding of the role of sea power in geopolitics and national strategy, this misunderstanding will continue to have potentially negative impacts on America’s foreign policy and defense policy and our ability to face the challenges of a multi-polar world.

Based on two centuries of American naval history, our naval leaders have long touted the importance of presence but have done a less impressive job explaining what it means. Even for today’s practicing national security professionals, naval presence all too often appears to mean that at any given time the Navy will have a certain number of ships bobbing around on the world’s oceans waiting for things to happen. The idea that American naval assets are all over the world just waiting around is a false impression. But it is one that most naval strategists and leaders miss because we already understand there is more to it, and as a result nothing is done to explain it.

This raises questions at strategic, operational, tactical, and economic levels such as, “What is presence?”; “How do we measure its value?”; and “Is there a substitute for it?” These questions and many others must be asked and should be thoughtfully answered if we are to be both efficient and effective in fulfilling the mission of the Navy, and effectual in our execution of national strategy.

## PRACTICAL REALITIES OF NAVAL PRESENCE

Naval presence is not a passive activity, as the image of the ship patiently floating along waiting for orders would lead us to believe. Instead it is a very active mission. Reviewing the operational calendar of an American warship at sea quickly brings this reality into focus. “White space,” or time bobbing around just being present, is nonexistent. Instead, a ship’s deployment is filled with operations and activities that are assigned to achieve a multitude of purposeful military, diplomatic,

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<sup>1</sup> Jerry Hendrix notes of CNO presentation at the Center for Strategic and International Studies on October 15, 2014.

<sup>2</sup> David Larer, “Navy Plans to Pull Carrier from Central Command this Fall,” Navy Times, June 5, 2015, <http://www.navytimes.com/story/military/2015/06/05/navy-pulls-carrier-centcom-islamic-state-group-presence/28554047/>.

and geopolitical ends. If there is white space, it is generally the time spent in transit from one mission to another, and it is usually spent honing the sharp edge of the unit's combat training. The ocean is, after all, still a very big place.

Listing all of the operations and activities involved in naval presence is beyond the scope of this study. However, a brief overview is in order to help non-naval readers understand the range of capabilities. The presence missions conducted by Navy ships and squadrons, Marine Corps units, and Coast Guard cutters include theater security cooperation, also known as exercises, which are conducted with partners and allied navies and militaries. They also include port visits, community building efforts, and engagement between senior naval leaders, which all can play important roles in naval diplomacy. Freedom of navigation operations are also a part of naval presence, where the U.S. Navy sails in disputed or illegally claimed waters to reinforce the rule of law and the smooth functioning of the global order at sea.<sup>3</sup>

Naval assets also are more than simply missile silos at sea. Many ships and aircraft have important and sophisticated intelligence collection capabilities. These not only provide information on national level targets but also help build maritime domain awareness (MDA), which helps track and build understanding of what is happening on the world's oceans. Building on this MDA are missions like coordination with maritime law enforcement to help counter the illicit movement of people, narcotics, and weapons, as well as global search and rescue activities to help protect mariners from the natural dangers of the sea. Humanitarian assistance and disaster relief efforts are also regular elements of naval presence operations that not only have the altruistic result of helping those in desperate need, but also the self-interested one of building positive views of American foreign policy.<sup>4</sup>

These examples are just a few of the kinds of operations conducted by American naval assets from the Navy, Marine Corps, and Coast Guard all over the globe, every single day. During a deployment, which today can last 10 months at sea or beyond, most units will conduct some element of every one of these missions. Individually, each one is clearly in the interest of the nation, but it is when viewed together holistically that the concept of naval presence becomes critical to American national strategy.

### MORE THAN JUST 70 YEARS

National security discussions today tend to have a very limited view of world history. The period between our contemporary world and World War II appears long enough, and attracts the most attention because it lies within our collective memory. However, it frequently offers a poor model for looking at the new century. Our Cold War history offers examples of how things were done in a bipolar world with few economic or political parallels for today's burgeoning, multi-polar great power competition. Instead a longer view of history, to a time when the United States participated in a complicated and economically competitive global system with many equal peers shifting in political ideologies, is in order. Since the United States assumed a leadership role in the world after 1945, it

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<sup>3</sup> Robert Burton, et. al., *Small Ships in Theater Security Cooperation* (Santa Monica, CA: Rand Corporation, 2008); and DOD Annual Freedom of Navigation Reports, <http://policy.defense.gov/OUSDP/Offices/FON.aspx>.

<sup>4</sup> For a wider discussion of many of these elements see Ivan Luke, "Naval Operations in Peacetime: Not Just Warfare Lite," *The Naval War College Review*, vol. 66, no. 2 (Spring 2013), 11–26.

might be expected that our experience with naval presence would have changed at that time. In fact, it did not and it has not. In the first century and a half of the nation's history we find that multi-polar global competition meant that the U.S. Navy, even if smaller than it is today and smaller than some of its peers, still executed robust naval presence operations.

Historians have documented the wide-ranging activities of the U.S. Navy, which has been globally deployed from nearly its founding in 1798. The first American deployment to the Pacific was in 1800, when Captain Edward Preble sailed the frigate *Essex* to Indonesian waters and the South China Sea to protect American ships and merchants from pirates and privateers during the U.S. conflict with France. It was a conflict over freedom of navigation and open trade.<sup>5</sup> From the Barbary War, where U.S. forces took on the corsairs of North Africa to protect the global order and trade, to counter-piracy campaigns in the Caribbean and Greek islands in the 1820s, to gunboat diplomacy in Asia, to combating the slave trade off the west coast of Africa, and to diplomatic negotiations from Venezuela to Tokyo, the U.S. Navy conducted presence operations far from American shores and in defense of American interests. These were operations that had military, diplomatic, and economic impact just like the missions our forward ships conduct today. In the 19th century ships were forward deployed in rotational cycles to ensure the squadrons remained on station, a pattern that in many ways has remained the norm for the U.S. Navy for 200 years. During the Civil War, when nearly all ships were recalled by the Lincoln administration, the U.S. Navy's Pacific Squadron remained on station, because even during that great internal struggle naval presence was important to American interests.<sup>6</sup>

After the naval renaissance inspired by Admiral Stephen Luce and Captain Alfred Thayer Mahan and the victory in the Spanish American War, the United States began taking on an even larger role in the world. The American battle fleet grew in size and scope, but this growth was not at the expense of globally distributed naval presence. The Asiatic, Pacific, and Mediterranean Squadrons continued to operate even as the Great White Fleet sailed around the world. President Roosevelt's fleet conducted naval diplomacy but also exercises and cooperative efforts with friends as well as disaster relief efforts after the Messina earthquake in Italy during the White Fleet's voyage.<sup>7</sup> During the 1920s American gunboats on the Yangtze patrols sailed the rivers of China to help provide maritime security and stability. In the immediate aftermath of the victory in World War II, U.S. naval presence and diplomacy in the Mediterranean helped keep the developing conflict with communist expansion cold instead of hot. Naval presence is not just something that keeps our world-leading navy occupied when they are bored; it has been a central part of American sea power for more than two centuries.<sup>8</sup>

## THE POST WORLD WAR II MARITIME SYSTEM

Following World War II, the United States might have chosen to retreat to an isolationist and non-interference role in great power affairs and left the world to the instability that surely would have

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<sup>5</sup> George Henry Preble, *The First Cruise of the United States Frigate Essex* (Salem, MA: The Essex Institute, 1870).

<sup>6</sup> David Foster Long, *Gold Braid and Foreign Relations: Diplomatic Activities of US Naval Officers, 1798-1883* (Annapolis, MD: Naval Institute Press, 1988); and Charles O. Paulin, *Diplomatic Negotiations of American Naval Officers, 1778-1883* (Baltimore: Johns Hopkins Press, 1912).

<sup>7</sup> Jerry Hendrix, *Theodore Roosevelt's Naval Diplomacy*, (Annapolis, MD: Naval Institute Press, 2009), 155-163.

<sup>8</sup> Donald Yerxa, *Admirals and Empire: The United States Navy in the Caribbean, 1898-1945* (Columbia, SC: University of South Carolina Press, 1991); Bernard Cole, *Gunboats and Marines: The United States Navy in China, 1925-1928* (Wilmington, DE: University of Delaware Press, 1983); and Edward Sheehy, *The U.S. Navy, the Mediterranean, and the Cold War* (Westport, CT: Praeger, 1992).

followed. Instead, since the signing of the surrender document onboard the battleship *Missouri* on September 2, 1945, the U.S. Navy and Marine Corps, possessing an average fleet of 740 ships, have grown the size of the force forward deployed, and to a lesser degree forward based, throughout the world in order to uphold the nation's basic core national interests of free trade and free navigation of the seas.<sup>9</sup>

Since 1945 there have been no major international wars on land or at sea, but especially not at sea. It has been nearly 70 years since the world's oceans have witnessed even a significant regional conflict, an interval without precedent since the 15th century when the oceans emerged as major avenues of trade. What, if any, are the links between this era of *pax oceanica* and the U.S. sea services?

Throughout this era the Navy has shrunk, expanded, and shrunk again (dramatically), with wave after wave of technologies populating and repopulating its ships and aircraft. Today the Navy is larger in terms of gross tonnage (admittedly a shaky standard of measurement) than the next 10 navies combined, and more than half of those navies are treaty allies or partners of the United States.<sup>10</sup> However, it should be noted that this disparity is not due so much to the overwhelming size of the U.S. Navy (currently comprised of 272 ships, a paltry 37 percent of its post-World War II average) but rather is an expression of the dramatic retraction in the size of navies across the globe.

While it is true that there have been no major wars at sea since World War II, this is not to say that there haven't been numerous smaller battles, skirmishes, and violent acts of maritime insecurity like piracy. The wars in Korea and Vietnam and the Falklands brought small dustups (from a naval perspective), and instability ashore has given rise to piracy around Africa and in the archipelagic Pacific. The rise of piracy in the past 20 years has largely coincided with the shrinking of global navies and the ability to maintain a consistent level of operations in global trouble spots.<sup>11</sup>

These past 70 years of U.S. Navy operational deployments have been global in scope and scale and far from just military in nature. Just as the examples from our nation's earlier history, they also contained elements of political and judicial operations: first establishing new political norms and then upholding and enforcing them by force if necessary, built upon the kinds of missions discussed in the introduction. The Navy became familiar with all of the world's maritime domain, from the littoral green to the deep water blue, and learned not only the physical elements but also the concerns and habits of the local people who sailed upon them and lived on the coasts. American sailors and Marines, operating from frigates, carriers, amphibious ships, submarines and even hospital ships, have served a variety of roles, from social workers to civil engineers, while responding to every emergency, from hurricanes to pirate attacks to tsunamis, and have delved deeply into local cultures and individual lives. Tribal leaders in littoral environments witnessed infant mortality and overall disease rates shrink dramatically following naval visits and clamored for more interactions in the future. These operations, conducted for 70 years in areas deemed vital to U.S. national interests, comprised one long, slow campaign that continuously deterred challenges to global order, supported

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<sup>9</sup> US Ship Force Levels, 1945-Present, Naval History and Heritage Command, <http://www.history.navy.mil/research/histories/ship-histories/us-ship-force-levels.html>.

<sup>10</sup> Daniel R. Deakin, "Let's Sea The 10 Biggest Navies in the World," <http://www.therichest.com/rich-list/rich-countries/lets-sea-the-10-biggest-navies-in-the-world/?view=all>.

<sup>11</sup> Martin Murphy, *Small Boats, Weak States, Dirty Money* (New York: Columbia University Press, 2009), 60–63.

the structures needed for a stable world economy, and built the long *pax Americana* that all have enjoyed.<sup>12</sup>

### AN ANALOGY ASHORE

In the last several decades the national security policy community has not focused much on the maritime world, perhaps believing that American dominance was not only a given but everlasting. Expertise in other areas, like counterinsurgency, grew in the past decade and a half. To better understand naval presence and the strategic role it plays in the world, it is necessary to conceptualize it in simple terms and in terms that today's policy world might better understand. Therefore, an analogy to recent conflicts ashore might help. In 2003 the United States invaded Iraq in search of Saddam Hussein and his weapons of mass destruction. His forces were quickly destroyed and a civilian authority was put in place to allow for the withdrawal of American forces and the transition of Iraq back to self-rule. A series of mistakes, including the disbanding of Iraq's army and de-Bathification efforts, led to the growth of an insurgency that occupying forces were unprepared to handle, garrisoned as they were in large and heavily fortified bases and making occasional mounted patrols. This was the problem that Generals David Petraeus and James Mattis aimed to bring under control by developing the counterinsurgency strategy.<sup>13</sup>

The counterinsurgency strategy that American forces employed focused on protecting the Iraqi people from the terrorist insurgent forces in the cities and villages on the streets of Iraq, but also providing them with stable basic services like electricity, water, and food. American soldiers stopped driving down the middle of streets at high speed, offending local pride, and instead walked patrols, getting to know the local population and their interests. Local culture, history, and economics became important aspects of American interactions with the Iraqis they were supporting. Over time this stability combined with the cruel excesses of the terrorists and turned the local population toward the American position, causing local leaders to identify insurgent elements and terrorists, pushing the enemy out of the urban areas into the open where they could be defeated. The surge and the counterinsurgency strategy were based on the presence of the U.S. Army and Marine Corps. When that presence was removed, along with its support for the immature Iraqi security forces, it contributed to a power vacuum, which invited the rise of ISIL (Islamic State of Iraq and the Levant) and the destabilization of the region.<sup>14</sup> This local example of the role of presence in military and national strategy can help inform our view of what naval presence on a global scale means and its contribution to the security and stability of the global system, as well as the potential implications of reducing or removing that presence.

### TOWARD A DEFINITION

The people of the United States have long held their Navy in special trust. The Constitution commands the government to maintain a Navy while it allows the Congress to raise an Army, apparently an impermanent institution in their minds.<sup>15</sup> This trust, thus far, has not been misplaced.

<sup>12</sup> Geoffrey Till, "Navies and the New World Order," *U.S. Naval Institute Proceedings*, vol. 131, no. 3, (March 2005), 60–63.

<sup>13</sup> Department of the Army, U.S. Marine Corps, *Field Manual 3-24, Marine Corps Warfighting Publication 3-33.5* (Chicago: University of Chicago Press, 2007).

<sup>14</sup> Tim Arango and Eric Schmitt, "U.S. Actions in Iraq Fueled Rise of a Rebel: Baghdadi of ISIS pushes an Islamist Crusade," *The New York Times* (August 10, 2014), [http://www.nytimes.com/2014/08/11/world/middleeast/us-actions-in-iraq-fueled-rise-of-a-rebel.html?\\_r=0](http://www.nytimes.com/2014/08/11/world/middleeast/us-actions-in-iraq-fueled-rise-of-a-rebel.html?_r=0).

<sup>15</sup> Article 1, Section 8, *Constitution of the United States*, [http://www.archives.gov/exhibits/charters/constitution\\_transcript.html](http://www.archives.gov/exhibits/charters/constitution_transcript.html).

The U.S. Navy has been uniquely successful in its recent history as a hegemonic power in maintaining peace upon the world's oceans. Previous hegemony from Greece to Great Britain have had periodic naval uprisings and never achieved a peaceful equilibrium across their span of governance. With the exception of Great Britain, no previous power has had to manage a system that spanned the entire globe, or against such a wide array of actors. Yet the United States has done so, with a steadily decreasing fleet size, against a rapidly expanding commercial sector that has placed more assets and wealth at sea at any given moment than any other time in history. Its tool to accomplish this task has been consistently referred to as "naval presence."

Yet attempts to define this term or test its characteristics have been a challenge. The term itself lacks consensus definition, with other concepts like naval diplomacy and naval irregular warfare frequently used to discuss the same subject. Part of the reason for this lack of consensus is the fact that, despite the long history of operational employment in naval presence operations, there is little discussion of the strategy or theory of why these kinds of missions are worth pursuing. In his studies of naval diplomacy, Commander Kevin Rowlands of the British Royal Navy has concluded that "most [naval strategists] offer little more than oblique reference to what navies have historically done on a day-to-day, year-by-year basis."<sup>16</sup> While the great navalists like Alfred Thayer Mahan and Julian Corbett do mention "showing the flag" and other elements of presence, it is not the focus of their seminal (and therefore most read) books. To find their thoughts on the subject one has to read their other books and essays, something which few people do. *The Influence of Sea Power Upon History* and *Some Principles of Maritime Strategy* tend to avoid explicit discussion of the subject, instead focusing more on wartime naval strategy.<sup>17</sup> During the Cold War this began to shift, as James Cable, Edward Luttwak, and Soviet Admiral Sergey Gorshkov examined gunboat diplomacy and other parts of presence. However, their examinations are bounded by the Cold War reality in which they lived, instead of today's multi-polar world.<sup>18</sup>

The Chief of Naval Operations staff began down this path several years ago under the leadership of Admiral Gary Roughead. The "Vision for Confronting Irregular Challenges," which was published in 2010, began to make an effort to examine what the Navy does outside of major combat operations. There were structural and definitional flaws in the Navy's approach, yet it was an important effort. That effort, however, died almost as quickly as it started. The Naval Irregular Warfare Office, which the vision document established, was shuttered within a few years and the community of interest that they attempted to create was abandoned.<sup>19</sup>

This lack of clarity, and this glaring omission in strategic thinking, cannot be allowed to continue. Given the legitimate and oft-stated importance of naval presence, some attempt to provide a framework for definition must be made. In an effort to begin that discussion, first we will examine the macro level with some models for thinking about naval presence and the global system. Then we

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<sup>16</sup> Kevin Rowlands, "Decided Preponderance at Sea: Naval Diplomacy in Strategic Thought," *The Naval War College Review*, vol. 65, no. 4 (Autumn 2012), 89.

<sup>17</sup> Alfred Thayer Mahan, *The Influence of Sea Power Upon History: 1660-1783* (Boston: Little Brown, 1890); and Julian S. Corbett, *Some Principles of Maritime Strategy* (London: Longmans Green and Co., 1911).

<sup>18</sup> James Cable, *Gunboat Diplomacy 1919-1991: Political Applications of Limited Naval Force* (New York: St. Martin's Press, 1994); Edward Luttwak, "The Political Application of Naval Forces - A Precis" *The Naval War College Review*, vol. 26, no. 3 (November-December 1973), 38-40; and Sergei Georgi Gorshkov, *The Sea Power of the State* (Oxford: Pergamon Press, 1980).

<sup>19</sup> *The U.S. Navy's Vision for Confronting Irregular Challenges* (Washington, D.C.: Department of the Navy, 2010), [http://www.navy.mil/navydata/cno/cno\\_signed\\_navy\\_vision\\_for\\_confronting\\_irregular\\_challenges\\_january\\_2010.pdf](http://www.navy.mil/navydata/cno/cno_signed_navy_vision_for_confronting_irregular_challenges_january_2010.pdf).

will examine the micro level by examining the attributes of naval presence through the lens of an individual naval asset.

### SAND PILES AT SEA

Tensions inherent in ongoing, inexorable competition between nations and cultures rise over time. Any loosely organized group of people this side of the Stone Age has some sense of history's overarching lesson: At any given moment someone is rising and someone is declining. The internal question of whether a nation is coming or going drives all states toward some level of competition. Competition leads to friction, and friction often leads to war.

It is commonly beneficial to examine challenges through comparative models that can help us understand the philosophical arguments that swirl around an issue. We might suggest that great power competition is like the large tectonic plates moving slowly over the earth's molten core, grinding against each other along defined fault lines, building up tensions and pressure until the fault slips, resulting in violent wars until someone is victorious, shocks subside, and a peaceful equilibrium is established again. Within this analogy, fault lines characterized by high molten viscosity as expressed in a ring of small, active volcanoes are preferred because they provide the system with an opportunity to bleed off pressure on a regular basis, forestalling massive, destructive events.

This visual analogy has found actual scientific expression within a school of thought called power-law theory. In 1996 the Danish theoretical physicist Per Bak constructed a computer model based upon the physical characteristics of a sand pile. In nature, sand slowly streamed onto a pile will, at some point, trigger rapid disruptions or avalanches. The net result, a reestablishment of stability following disruption, is what Bak referred to as a self-organizing criticality (SOC). SOC describes slow systems that are preponderantly stable but periodically suffer from significant failures that fall within a predictable, log-rhythmic scale of casualties and material loss. Bak's work demonstrated that the surest method of avoiding cataclysmic avalanches within the sand pile was to induce interaction consistently by gently vibrating the table beneath it. Subtle, regularly managed disruption and interaction prevents large system failures.<sup>20</sup> SOC has since been used to analyze everything from earthquakes to forest fires – and wars.

Historically states situated next to each other, either geographically or with proximate interests within international commons such as the sea, space, or cyber, position themselves for advantage and bargaining. Those endowed with a fortunate alignment of resources emerge as leaders, first attracting neighbors to voluntarily join them and sometimes expanding via conquest. It is by this means that “great powers” emerge against a backdrop of lesser or “normal” powers.

As the process matures, great powers begin to interact. Aware of each other's destructive potential, the tendency is to seek peace while also demonstrating resolve by investing in and exercising an ever growing military. At this point, the theory goes, an equilibrium emerges. This equilibrium represents a self-organizing criticality. Yet entropy continues to exert its influence upon the SOC. Technological innovation occurs. Great powers tend to rise upon a certain class of technologies and then, investing in their evolutionary development, ride those technologies throughout their life cycle.

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<sup>20</sup> Lars-Erik Cederman, “Modeling the Size of Wars, From Billiard Balls to Sand Piles,” Harvard University, August 19, 2002, 4–7.



Greece trusted in the long wall of ships, Rome in the legion, England in its archers and then its ships of the line, France in artillery, and the United States in aircraft and aircraft carriers. The historic challenge for great powers is recognizing when the technology that took them to the top of the heap is no longer effective enough to keep them there. Large technologies represent sunk costs and the instinctive urge is to invest in ancillary technologies that preserve the existing platforms, but this act of preservation presents a stable target to rising powers, allowing them to build challenging technologies – often for pennies on the dollar – shifting the costs burden to the established power.<sup>21</sup>

This often comes at inopportune times. Internal demographics change. Leadership and governing philosophy alter over time. Previous relationships and alliances come into question. Powers that once were close allies slowly and inexorably find themselves increasingly at odds, and day-to-day interactions decrease out of resentment or fear of disclosure of a dwindling advantage. Challenges and tensions build up and collude to erode the great power's strength and suddenly, the sand pile suffers an avalanche, and chaos and casualties ensue.

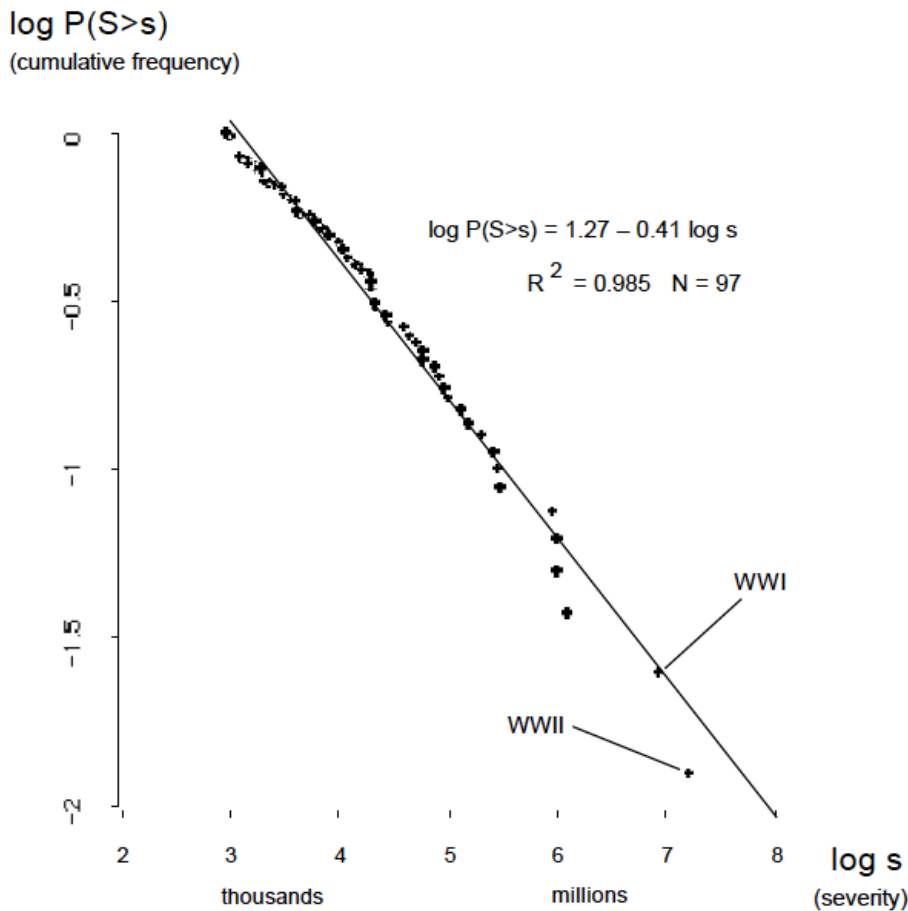
A number of studies have looked at this phenomenon and discerned a relationship between the frequency of interactions and the magnitude of wartime casualties. One in particular, “Modeling the Size of Wars” by Lars-Erik Cederman, strongly suggests that the more frequent the interactions, the smaller the eventual conflict and the fewer the casualties. Interactions provide opportunities for direct competitions between nation states, opportunities that provide insights into new technologies, tactics, and strategies, opportunities for great powers to discover that they are on the wrong path or that they have been on one path too long.

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<sup>21</sup> Be it Rome, Great Britain, or IBM, the lesson holds. Richard Rumelt, *Good Strategy, Bad Strategy*, (New York: Crown Business, 2011), 77–84.

The following graph, presented within Cederman’s work, suggests the net effect of naval presence, the persistent expression of national interests through operations and exercises. The undefined area in the upper left hand portion suggests the benefits of interactions: Continuous interactions between nations provide opportunities for all to demonstrate their interests in real-time competition. Such consistency avoids precipitous or sudden increases in tensions.

A Relationship between the Frequency of Interactions and Casualties<sup>22</sup>



**Figure 1.** Cumulative frequency distribution of severity of interstate wars, 1820-1997  
 Source: COW data

It is understood that zero casualty outcomes cannot be guaranteed in real life. Emergent issues and unpredictable behaviors can lead to unforeseen and unplanned outcomes. One never knows when the assassin will show up in Sarajevo or when two riverine boat crews will be captured Iranian Revolutionary Guard forces when they drifted off course. However, what should be understood is

<sup>22</sup> Cederman, “Modeling the Size of Wars,” 35.

that increased interactions provide opportunities to demonstrate the interests, intentions, and resolve of the parties involved, hence reducing confusion and clarifying relationships.

## THE ATTRIBUTES OF PRESENCE

Nearly 40 years ago Rear Admiral J. C. Wylie, in his book *Military Strategy: A General Theory of Power Control*, attempted to provide a definition of strategic presence and its application in its broadest application, much as Albert Einstein with his general theory of relativity had done at the macro level for gravity. This strategic level view of naval presence matches with the models just discussed. What is now needed is an attempt to understand presence at the micro level, much as Stephen Hawking provided with his exploration of gravity within a black hole. With apologies to Wylie, Einstein, and Hawking and in full acknowledgement of analogy-overstretch, an attempt to look at naval presence at the micro, individual ship, short timeframe, and limited geographic area level might approach the topic in the following manner.<sup>23</sup>

The chief component of naval presence is **effect**, or the act of being materially present in a specific geographic place at a particular moment in time, which is to say that naval presence has both physical and temporal characteristics. A ship manifests its maximum effect at the moment it occupies a geographic location, but that manifest influence remains even after it departs, declining as a factor of its distance from the location, time of transit, and probability of return. If local actors are either assured or unsettled by their confidence that the ship can or will return, then that platform can be said to still be exerting effect within the environment.

The “effect” factor is aided most by a strategy of forward basing with regular forward deployment coming in a distant second. No one can dispute the powerful influence the forward basing of the *Ronald Reagan* Carrier Strike Group exerts over the whole of northeastern Asia, even while tied up to a pier in Japan, just as no one can dispute that American influence in and around the Philippine Islands, even with regular deployments, has never been as absolutely effective as when large portions of the American fleet were based out of Subic Bay. That being said, no one should doubt the effectiveness of deployed forces conducting normal operations at sea, participating in exercises with allied and partner nations and making port visits around the world, allowing sailors to act as visible ambassadors of the United States and its values.

Another critical attribute of naval presence is **persistence**. To succinctly state its importance, it comes down to a “We’re so glad you’re here! How long can you stay?” relationship, especially since naval units have no footprint or dependency upon host nation infrastructure or support. In other words, persistence builds confidence in the availability of U.S. support to allies and partners. U.S. Navy ships are generally built to be self-deployable, which is to say that they can get themselves across the vast oceans with minimal assistance and then have the ability to remain on station. Part of persistence is controlled by engineering and naval architecture, because endurance is affected by the ship’s fuel storage capacity, the fuel’s energy density, and energy burn rate. Fuel oil is more energy dense than coal, and ships operating at higher speeds consistently will have less endurance than ships operating at lower speeds. Another element of persistence is the importance of logistics. Availability of underway replenishment from supply ships greatly affects the “How long can you

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<sup>23</sup> Joseph Caldwell Wylie, *Military Strategy: A General Theory of Power Control*, (New Brunswick, NJ: University of Rutgers Press, 1967).

stay?” portion of the strategic conversation. Navies that have mastered at sea re-supply methods, especially alongside and under adverse conditions, are more influential than those who have not, simply because they can remain at sea longer. A navy in possession of an ample number of supply ships will earn the trust and/or respect of other nations in the regions where it chooses to operate. So in the end, persistence becomes an expression of the individual ship’s endurance and the availability of sustainment.

Another aspect of persistence is the Navy’s understanding of the local geography, environment, people, and culture. Geography is important in naval operations. Land changes, but slowly. However, sandbars and other underwater obstacles shift more quickly, and given the size of the planet, it is difficult to keep up with an ever changing ocean. Navy ships often act as the scout force for the merchant fleet – in this case a global, international merchant fleet – keeping them from harm’s way and preventing the loss of ships and cargo and damage to the environment. The environment, ranging from weather to habitat to local aquatic life, has risen in priority in recent years, and the United States and its Navy have taken a leading role in protecting it. From monitoring temperature changes throughout the water column to reporting on illegal whaling operations, to protecting fragile coral reefs, the Navy has evolved to take its place as a defender of a broader scope of national and international interests.

Knowledge and appreciation of a wide cast of local populations has long been part of the Navy’s experience. Long before the foreign area officer designation came into being, the terms “West Pac sailor” (Western Pacific) or “Med sailor” and a number of other descriptors had long been part of naval parlance. These terms described sailors who had accumulated expertise of the maritime conditions associated with certain regions and an appreciation of local customs and languages through repeated deployments. Naval officers have often served as the only diplomatic link between the United States and local governments and were trained to act accordingly.

Another aspect of presence is **influence**, which can be visualized as a multi-layered bubble of sensors and weapons that surrounds a naval platform and tracks with it through the ocean. Influence can be broken down into three subcomponents: *awareness*, *knowledge*, and *reach*. Awareness can best be understood in day-to-day life by the question, “How far can you see?” At sea this extends both above and below the water and is dependent upon acoustic and non-acoustic sensors, to include off-board sensors such as satellites. These sensors provide a sense of who and what else is present in the environment.

Knowledge goes beyond simple awareness to the question of understanding. Once we perceive other actors and objects within our environment, to what extent do we understand their intent and capabilities, and to what level of detail? Humans evolved in the presence of bacteria and viruses but until relatively recently were unaware of their presence. Once their presence was detected, it was later still that we came to understand their purpose and the threat they posed. The U.S. Navy has developed a tremendous assortment of sensors to examine the environment around it, but it has only recently begun to mature the systems required to integrate all of the information generated by the sensors into something roughly approaching an understanding of the overall environment.

The last element of influence is reach, or the ability to directly alter the environment around a platform. This can be accomplished by placing traditional kinetic weapons, such as shells, torpedoes, or missiles, on targets or with newer weapons such as directed energy. Additionally, the environment can be altered through the actions of personnel such as by deploying Marines from amphibious ships to assault a beach or offloading SeaBees (Naval Construction Battalions) from a ship to build schools or dig wells in local villages. The range of these actions to influence the environment highlights the rapid evolution of the maritime domain and the role of the military within it. The age of line-of-battle ships defining maritime operations is long gone. Today, everything from humanitarian assistance to building partnership capacity to power projection ashore falls within the spectrum of influence. These factors imply another scale between lethality, which has a profound yet coercive influence, and assistance, which has a positive but ethereal effect.

All of these elements – effect, persistence, and influence – combine to create in naval presence a decisive tool of statecraft and a possible remedy for international distress. They are the attributes that allow naval presence to maintain constant interaction with the sand pile and limit the size and scope of international conflicts.

## UNDERSTANDING THE ELEGANT SOLUTION

In physics or engineering, an elegant solution that solves the problem in the simplest and most effective manner is always the aim. Naval presence has been presented here as a culmination of influence, persistence, and effect brought to bear in regions of critical interest to our nation. Power law theory suggests that the daily interactions provided by naval presence act to demonstrate the boundaries of U.S. interests and levels of U.S. resolve, decreasing the potential for misunderstandings and the outbreak of conflict.

Approached from another vantage point, a decrease in naval presence brought on by the downsizing of the Navy and Marine Corps due to the increasing cost of platforms, or perhaps the belief that the sophisticated capabilities integrated on fewer platforms or offsetting lower ship numbers by posturing the remainder in forward outposts means we don't need as many, would result in a greater probability of friction, conflict, and war as the extent of American interests fall into question. The classic example of South Korea being left outside of the United States' defensive perimeter as misstated by a U.S. secretary of state, resulting in the outbreak of the Korean War and 34,000 American casualties, illustrates this risk.<sup>23</sup> A smaller Navy will, by necessity, create vacuums and regions that lack interactions where U.S. interests will become ill defined, risking conflict. There are 19 separate and distinct maritime regions that, due to diplomatic, commercial, or military characteristics, have been identified by regional combatant commanders as representing important national security interests for the United States.<sup>24</sup> Given the unique presence requirements of these regions and the standard five ships to keep one forward deployed ratio, these regions represent a requirement for a 330-355-ship Navy, depending upon forward basing decisions.<sup>25</sup>

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<sup>23</sup> James Chace, *Acheson*, (New York: Simon and Schuster, 1998), 222.

<sup>24</sup> North Atlantic, North Sea, Baltic Sea, Arctic, Eastern South Atlantic (Coast of Africa), Western South Atlantic (Coast of South of America), Mediterranean, Black Sea, Red Sea, Gulf of Oman, Arabian Gulf, Indian Ocean, South China Sea, East China Sea, archipelagic Pacific, North Eastern Pacific, South Eastern Pacific, Central Pacific, Antarctic. This list was generated by Jerry Hendrix while assigned as an action officer in the Office of Secretary of Defense Office of Force Development from 2008–2010 based upon inputs from Regional Combatant Commanders.

<sup>25</sup> A ship forward based in Japan is counted as forward deployed, alleviating the requirement for four additional ships back in the United States in varying states of training and maintenance to keep it there.

Taken as a whole, these insights represent an elegant solution to the United States' long-term national security challenge: Forward deployed naval ships of varying classes and capabilities with embarked Marine Corps units provide the simplest and most effective tool for maintaining peace and upholding national interests. Naval presence is not a passive thing, and it requires naval assets actively carrying out missions to achieve its benefits. The quality of quantity thus defined provides decisionmakers with a compelling argument for increasing and then maintaining the size of the U.S. fleet in order to extend the long period of stability and peace that we have experienced for 70 years. This stability has led to the largest increase in wealth and the swiftest rise in the standard of living in history, not only in our own nation but around the world. The costs associated with the breakdown of peace recede from our memory, because of the decades since it was experienced. But they are just as stark.

There may appear to be movement in national security circles to push the Navy away from focusing on and thinking about naval presence – instead moving toward a focus on the posture of the battle fleet. However, at the same time national strategy documents are focused on the kinds of peacetime and pre-conflict ideas that historically have been central to maritime strategies of peacetime naval presence. The most recent *Quadrennial Defense Review* explicitly tells us that “the role of the Department of Defense in supporting U.S. interests is rooted in our efforts to reduce the potential for conflict, by deterring aggression and coercive behavior in key regions, and by positively influencing global events through our proactive engagements.”<sup>26</sup> In order to achieve this national objective the Navy cannot lose sight of the balance between wartime readiness and the requirements of maintaining the assets and the focus for successful peacetime naval presence.

The presence problem leaves naval leaders and strategists in a position that requires further efforts to explain, define, and refine the theory and strategy of active naval presence, while at the same time explaining its relevance. Based on the previous discussion, and with that challenge in mind, there are three particular areas of focus that require attention.

First, at a practical level, naval thinkers have to start working on better ways to measure and record the benefits of naval presence and the missions it entails. As our discussion demonstrates, there is ample qualitative and empirical evidence derived from historical analysis. This is work that can and should be done by the Pentagon, but also within the policy community of think tanks and academics. For example, we could better study theater security cooperation in building partner capacity as well as our own capacity – measuring not only the effectiveness of the training conducted but also the results of the efforts and training over time. Do better trained partners, or better cooperation resulting from our security cooperation missions, result in tangible benefits that can be measured and offered to the systems analysis researchers? We don't know unless we begin measuring and recording better data on the subject. Likewise, what are the medium- and long-term impacts of providing humanitarian assistance or disaster relief with maritime assets for diplomacy and American interests? How does cooperation with maritime law enforcement contribute to the national interest, both in the Western hemisphere and globally? These kinds of social science questions tend to be heavy on the social and harder on the quantitative science. But that does not

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<sup>26</sup> *Quadrennial Defense Review 2014* (Washington, D.C.: Department of Defense, 2014), [http://archive.defense.gov/pubs/2014\\_quadrennial\\_defense\\_review.pdf](http://archive.defense.gov/pubs/2014_quadrennial_defense_review.pdf).

mean that the work to find the right metrics cannot or should not be done in both a qualitative and quantitative way.

Second, we need to reassess how we analyze those metrics and naval presence generally. Inside the Pentagon the dominant methodology of the military staffs, and what is meant when anyone says the word “analysis” inside those corridors, is operations research (OR)/systems analysis. This is simply a reality and a legacy of administrative structures that were developed in the Pentagon in the 1960s.<sup>27</sup> In order to better understand naval presence we must embrace this reality. After determining the best ways to measure and record data on the elements of naval presence, naval leaders must ask their OR analysts questions about naval presence, push them to develop models, and help refine and improve the metrics collected.

However, it is important to realize that OR analysis is not the only path to insight and good decision making in the Pentagon. There is a great deal of experience in comparing the probability of kill for certain weapons systems, or modeling the numbers of tanks, ships, or aircraft needed to successfully execute a war plan. However, the probability of influence or probability of suasion of a politico-military maritime adversary prior to hostilities requires much larger assumptions and different models. In some instances it may even require us to admit that quantitative modeling is the wrong form of analysis to answer a question, and that despite the Pentagon’s narrow view of analysis, other methodologies like historical, economic, or sociological analysis might be in order. In many ways it was this realization by senior leaders in the 1970s that led to the creation of the Office of Net Assessment with its multi-disciplinary empirical approach.<sup>28</sup> Such an initiative will require us to train officers and analysts as historians, economists, or in other fields to work alongside the OR analysts to produce the required interdisciplinary support to Pentagon decisionmaking.<sup>29</sup> It will also require that precepts provided by the Secretary of the Navy for promotion and screen boards provide weight to these skill sets in the selection process to ensure officers thus trained are moved along career paths in their parent warfare communities.

Finally, we need to begin determining better ways to war-game maritime affairs beyond games that test operational concepts in combat scenarios. This need can build off recent calls for fresh approaches to war gaming and efforts within the Pentagon to adjust the gaming approach.<sup>30</sup> Clearly, it is difficult to war-game maintaining peace through naval presence. Proposing a scenario that begins in a benign setting and then seeks to maintain that peace meets with resistance from the traditional ranks of senior war games. It is not exciting to military participants who view war games as venues to test out the potential of new weapons and capabilities. Similarly, political science, international relations, and economics scholars generally lack the technical knowledge of the military components involved to adequately describe the closed systems within which they generally test their ideas. As a result, naval presence maintains an ethereal quality, an element caught forever between states, neither solid nor liquid or gas. But that can be overcome with the right sponsors and

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<sup>27</sup> Peter Haynes, *Toward a New Maritime Strategy: American Naval Thinking in the Post-Cold War Era* (Annapolis, MD: Naval Institute Press, 2015), 24–27.

<sup>28</sup> Mie Augier, “Thinking About War and Peace: Andrew Marshall and the Early Development of the Intellectual Foundations for Net Assessment,” *Comparative Strategy*, vol. 32, no. 1 (February 2013), 9–11.

<sup>29</sup> Educational background of naval leaders and impacts on strategic understanding discussed in Haynes, *Toward a New Maritime Strategy*, 243–252.

<sup>30</sup> Benjamin Armstrong, “The Navy Needs a Wider Look at Wargaming,” *USNI News* (March 18, 2015), <http://news.usni.org/2015/03/18/opinion-the-navy-needs-a-wider-look-at-wargaming>; Robert O. Work, “MEMORANDUM: Wargaming and Innovation” Office of the Deputy Secretary of Defense (February 9, 2015), <http://news.usni.org/2015/03/18/document-memo-to-pentagon-leadership-on-wargaming>.

institutions showing interest in developing the understanding of how naval presence supports our national security.

These three suggestions begin with the important step of understanding that naval presence is not passive. Active naval presence is conducted all over the world, every single day. Advocating for particular force structures, making the case for more ships or fewer ships, first requires an understanding of the responsibilities and requirements placed on naval forces by our national strategy and the United States' role in the world. The ability of our naval forces to maintain a decisive edge in combat is clearly important. But a dominant focus on war fighting posture risks eliminating the agility needed to overcome challenges before they happen, provide off-ramps from escalation, and offer that viscosity between the tectonic plates of rising powers. Predictions of the future are perilous, and weighing too heavily on one side of the scale will tend to reduce the agility needed to change course. The best policy decisions will maintain a weather eye on the balanced force of a sufficient size that has been the central discussion of American naval power since the founding.

Theodore Roosevelt once said that maintaining strong naval power was “the surest guarantee of peace.” In order to ensure that the U.S. Navy and Marine Corps can live up to his observation a century later, we must continue to maintain a healthy part of our focus on naval presence. This will require us to continue to build the strategic models, theory, and data to back up that statement. It will require the Department of Defense to understand the active role of naval presence, and to man, train, and equip for it. And it will require our naval leaders to maintain a continued effort to overcome the presence problem.

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