

Advantage at Sea

Prevailing with
Integrated All-Domain Naval Power



December 2020

**The United States is a maritime nation.
Our security and prosperity depend on the seas.**

The Naval Service—forward deployed and capable of both rapid response and sustained operations globally—remains America’s most persistent and versatile instrument of military influence.

Integrated All-Domain Naval Power, leveraging the complementary authorities and capabilities of the U.S. Navy, Marine Corps, and Coast Guard, advances the prosperity, security, and promise of a free and open, rules-based order.

PREFACE

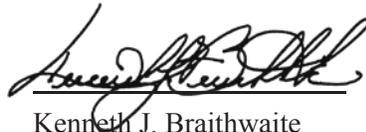
To the American People,

It's been 75 years since our combined Sea Services achieved victory in World War II. It took the valor and strength of every Sailor, Marine and Coastguardsman to achieve dominance on the waves, undersea, and in the skies, projecting strength overseas while protecting our shores at home. It also took innovation and cooperation within the Naval Service, across the Joint Force, and throughout the industrial base on an unprecedented scale. We won the war then, and have served side by side ever since, protecting the peace to the great benefit of our Nation, our allies, and the world.

As detailed in the following pages, the rules-based international order is once again under assault. We must prepare as a unified Naval Service to ensure that we are equal to the challenge. The men and women who wear our uniforms are ready, determined, and dedicated to serve with honor, courage and commitment. As leaders, it is our responsibility to ensure they are prepared, equipped, and trained to prevail in long-term strategic competition, win any potential fight, and preserve the future peace.

This strategy details the direction our Service Chiefs have designed together. It is a strong signal of support for our personnel, our allies, and our partners—and a cautionary warning for any would-be adversaries. We are and will always be one force—*Semper Fortis, Semper Fidelis, Semper Paratus*—always strong, always faithful, and always ready to protect and defend the United States of America, around the clock and around the world.

Very Respectfully,

A handwritten signature in black ink, appearing to read 'Kenneth J. Braithwaite', written over a horizontal line.

Kenneth J. Braithwaite

Secretary of the Navy

FOREWORD

Our actions in this decade will shape the maritime balance of power for the rest of this century.

The security environment has dramatically changed since we last published *A Cooperative Strategy for 21st Century Seapower* in 2015. Several nations are contesting the balance of power in key regions and seeking to undermine the existing world order. Significant technological developments and aggressive military modernization by our rivals are eroding our military advantages. The proliferation of long-range precision missiles means the United States can no longer presume unfettered access to the world's oceans in times of conflict.

Since the beginning of the 21st century, our three Sea Services have watched with alarm the growing naval power of the People's Republic of China and the increasingly aggressive behavior of the Russian Federation. Our globally deployed naval forces interact with Chinese and Russian warships and aircraft daily. We witness firsthand their increasing sophistication and growing aggressiveness. Optimism that China and Russia might become responsible leaders contributing to global security has given way to recognition that they are determined rivals. The People's Republic of China represents the most pressing, long-term strategic threat.

In the midst of fighting two wars, our three Services have worked to meet these global challenges. The Navy has prioritized controlling the seas, increased its forward deployed forces in Asia and Europe, and realigned its warfighting organizations. Today, roughly 60 percent of Navy forces are in the Indo-Pacific region. Sweeping transformation of the Marine Corps is generating greater expeditionary combat power with enhanced capabilities for sea control and sea denial. The Coast Guard is expanding its global engagements and capacity-building efforts in key vulnerable regions. Together, we are developing new operational concepts and redesigning our forces to provide the capability and capacity to execute them. However, we are not yet where we need to be. Getting there will require predictable budgets and on-time funding.

America's Naval Service defends our Nation by preserving freedom of the seas, deterring aggression, and winning wars. For generations, we have underwritten security and prosperity and preserved the values our Nation holds dear. However, China's behavior and accelerated military growth place it on a trajectory that will challenge our ability to continue to do so. We are at an inflection point. Our integrated Navy, Marine Corps, and Coast Guard must maintain clear-eyed resolve to compete with, deter, and, if necessary, defeat our adversaries while we accelerate development of a modernized, integrated all-domain naval force for the future. Our actions in this decade will shape the maritime balance of power for the rest of this century.

Together, we must act with urgency to integrate and modernize our forces as we prepare for the challenges ahead. The boldness of our actions must match the magnitude of our moment. The security of our Nation depends on our ability to maintain advantage at sea.



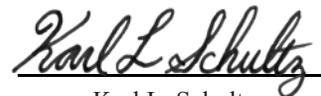
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INTRODUCTION

The United States is a maritime nation. Our security and prosperity depend on the seas. Since the end of World War II, the United States has built, led, and advanced a rules-based international system through shared commitments with our allies and partners. Forward deployed forces of the U.S. Navy, Marine Corps, and Coast Guard—collectively known as the Naval Service—have guaranteed the security of this system. Free and open access to the world’s oceans has fostered an extraordinary era of wealth and peace for many nations. That system is now at risk.

Advantage at Sea is a Tri-Service Maritime Strategy that focuses on China and Russia, the two most significant threats to this era of global peace and prosperity. We prioritize competition with China due to its growing economic and military strength, increasing aggressiveness, and demonstrated intent to dominate its regional waters and remake the international order in its favor. Until China chooses to act as a responsible stakeholder rather than brandish its power to further its authoritarian interests, it represents the most comprehensive threat to the United States, our allies, and all nations supporting a free and open system.

Other rivals, including Iran, North Korea, violent extremist organizations, and transnational criminal organizations, also continue to subvert the international rules-based order. We will address these challengers in a coordinated, multinational manner with forces developed to address more significant military threats.

The stakes of this competition are high. China’s aggressive actions are undermining the international rules-based order, while its growing military capacity and capabilities are eroding U.S. military advantages at an alarming rate. The Naval Service must act with urgency, clarity, and vision to take the bold steps required to reverse these trends.

Advantage at Sea provides guidance to the Naval Service for the next decade to prevail across a continuum of competition—composed of interactions with other nations from cooperation to conflict. This strategy emphasizes the following five themes. We must fully



Ten nations, 22 ships, one submarine, and more than 5,300 personnel participate in Exercise Rim of the Pacific (RIMPAC) 2020. The biennial exercise is a unique training platform designed to enhance multinational interoperability and strategic maritime partnerships. (USN photo by MC2 Dan Bard)

leverage the complementary authorities and capabilities of the Naval Service to **generate Integrated All-Domain Naval Power**. We must **strengthen our alliances and partnerships**—our key strategic advantage in this long-term strategic competition—and achieve unity of effort. We must operate more assertively to **prevail in day-to-day competition** as we uphold the rules-based order and deter our competitors from pursuing armed aggression. If our rivals escalate into conflict, becoming our adversaries, we must **control the seas** to deny their objectives, defeat their forces, protect our homeland, and defend our allies. And, we must boldly **modernize the future naval force** to maintain credible deterrence and preserve our advantage at sea.

This strategy connects the Service Chiefs’ statutory roles—developing naval forces and providing best military advice for employing naval forces. Section I outlines the security environment and the problems that we face. Section II articulates how Integrated All-Domain Naval Power addresses these problems. Section III describes how naval power can be applied across the competition continuum in day-to-day competition, crisis, and conflict to achieve national objectives. Section IV guides the development and integration of a modernized, all-domain naval force that will ensure our unfettered access to the seas and reverse our eroding military advantages.

The challenges we face require us to make hard choices. This strategy prioritizes our most pressing threats, emphasizes expanded cooperation with allies and partners, and relies on deeper Naval Service integration to mitigate strategic risk to the Nation. Additional detail regarding our priorities, capabilities, investments, divestments, and operational approaches is contained in supporting classified guidance, both existing and forthcoming. *Advantage at Sea* is complemented by separate Service Chief guidance, such as the Chief of Naval Operations’ Navigation Plan, the Commandant of the Marine Corps’ Planning Guidance, and the Commandant of the Coast Guard’s Strategic Plan.

I. THE SECURITY ENVIRONMENT

The world's oceans play a vital role in America's national security and prosperity. The sea has always been a competitive space that has served as both a strategic buffer and a vital connection to the world. As strategic competition continues to intensify, our rivals seek to exploit the openness of the maritime domain as they carry out campaigns of coercion and intimidation.

The oceans connect global markets, provide essential resources, and link societies together. By value, 90 percent of global trade travels by sea, facilitating \$5.4 trillion of U.S. annual commerce and supporting 31 million American jobs. Undersea cables transmit 95 percent of international communications and roughly \$10 trillion in financial transactions each day. For decades, the free and open international order has produced shared security and prosperity throughout the world.

A GLOBAL COMPETITION FOR INFLUENCE

Today, the People's Republic of China (PRC) and the Russian Federation (RF) employ all instruments of their national power to undermine and remake the international system to serve their own interests. Each conduct a variety of malign activities incrementally, attempting to achieve their objectives without triggering a military response. Both nations back their revisionist activities with regionally powerful militaries and obscure their aggressive behavior by mixing military and paramilitary forces with proxies. China's and Russia's attempts to exert control over natural marine resources and restrict access to the oceans have negative repercussions for all nations.

China has implemented a strategy and revisionist approach that aims at the heart of the United States' maritime power. It seeks to corrode international maritime governance, deny access to traditional logistical hubs, inhibit freedom of the seas, control use of key chokepoints, deter our engagement in regional disputes, and displace the United States as the preferred partner in countries around the world.

To enable its strategy, China deploys a multilayered fleet that includes the People's Liberation Army Navy, the China Coast Guard, and the People's Armed Forces Maritime Militia—naval auxiliaries disguised as civilian vessels—to subvert other nations' sovereignty and enforce unlawful claims. It continues to militarize disputed features in the South China Sea and assert maritime claims inconsistent with international law. Its state-subsidized distant-water fishing fleet steals vital resources from nations unable to defend their own exclusive economic zones. To support its multilayered fleet, China is also developing the world's largest missile force, with nuclear capabilities, which is designed to strike U.S. and allied forces in Guam and in the Far East with everything from ballistic missiles to maneuverable cruise and hypersonic missiles. Further, China has centralized its robust strategic, space, cyber, electronic, and psychological warfare capabilities.

With naval forces as the cornerstone of its efforts, China is aggressively growing and modernizing its military. Already commanding the world's largest naval force, the PRC is building modern surface combatants, submarines, aircraft carriers, fighter jets, amphibious assault ships, ballistic nuclear missile submarines, large coast guard cutters, and polar

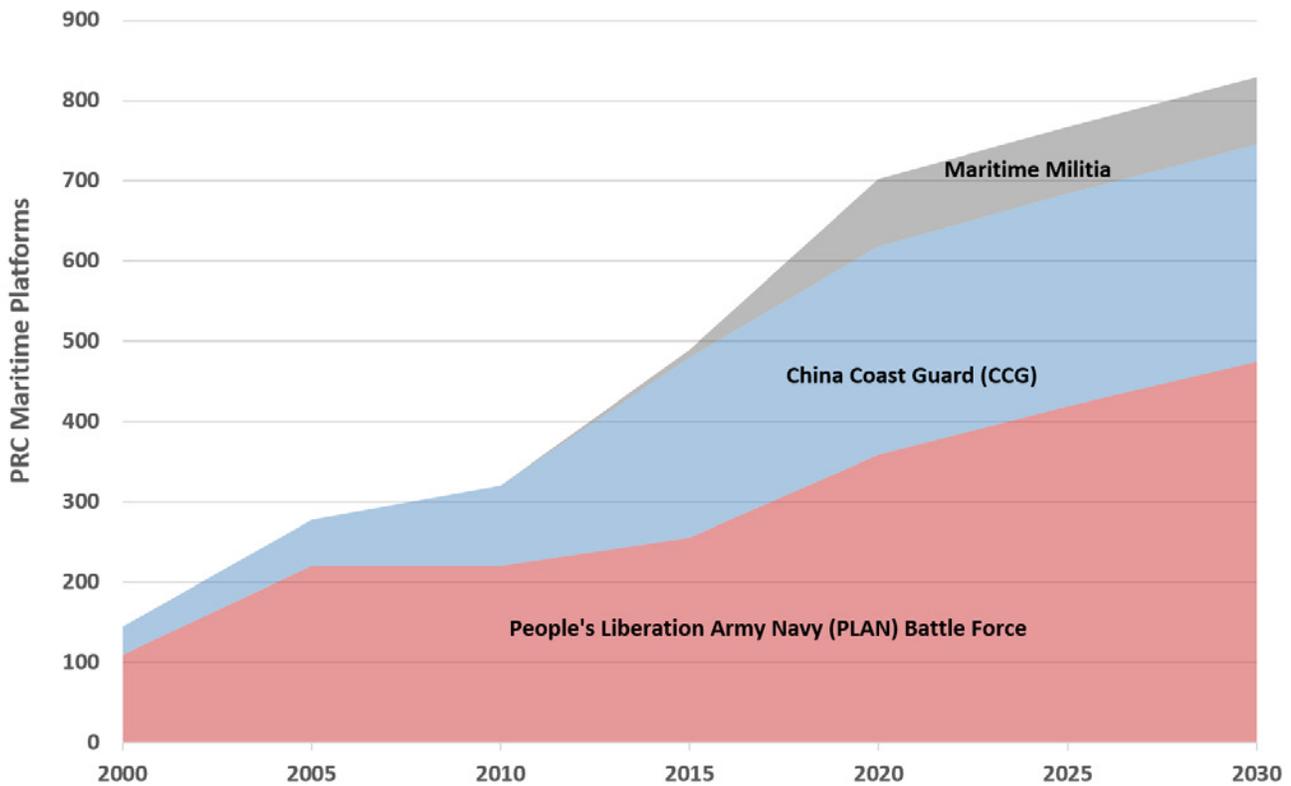


Figure 1: Growth of China's maritime forces since 2000. (Source: Office of Naval Intelligence)

icebreakers at alarming speed. China's navy battle force has more than tripled in size in only two decades (Figure 1).

This rapid growth is enabled by a robust shipbuilding infrastructure, including multiple shipyards that exceed those in the United States in both size and throughput. In conflict, excess PRC industrial capacity, including additional commercial shipyards, could quickly be turned toward military production and repair, further increasing China's ability to generate new military forces.

Whereas U.S. naval forces are globally dispersed, supporting U.S. interests and deterring aggression from multiple threats, China's numerically larger forces are primarily concentrated in the Western Pacific. However, as China seeks to establish regional hegemony, it is also expanding its global reach. China's One Belt One Road initiative is extending its overseas logistics and basing infrastructure that will enable its forces to operate farther from its shores than ever before, including the polar regions, Indian Ocean, and Atlantic Ocean. These projects often leverage predatory lending terms that China exploits to control access to key strategic maritime locations.

Modernization efforts are also underway in Russia. Its military prioritizes nuclear and advanced missile systems, attack and guided-missile submarines, bombers, missile frigates, fighter jets, air-to-air missiles, and state-of-the-art air defenses. In conflict, Russia may threaten cyber or kinetic strikes against Washington or European capitals, or attack undersea communications cables, causing severe impact to the global economy. It may also gamble that use of nuclear weapons might avert defeat in combat or preclude retaliation.

Russia's operations are designed to fragment the international order. Its pursuit of an expanded sphere of influence has been defined by opportunism and a willingness to violate international agreements and laws, as well as use of military force. Its campaign to restore strategic depth has motivated RF aggression in Ukraine and Georgia, as well as its intervention in Syria.

In the event of conflict, China and Russia will likely attempt to seize territory before the United States and its allies can mount an effective response—leading to a *fait accompli*. Each supports this approach through investments in counter-intervention networks. Each seeks to shift the burden of escalation by reinforcing annexed territory with long-range precision-strike weapons and make a military response to an invasion seem disproportionately costly.

Additional competitors, violent extremists, and criminal organizations all exploit weak governance at sea, corruption ashore, and gaps in maritime domain awareness. Piracy, drug smuggling, human trafficking, and other illicit acts leave governments vulnerable to coercion. Climate change threatens coastal nations with rising sea levels, depleted fish stocks, and more severe weather. Competition over offshore resources, including protein, energy, and minerals, is leading to tension and conflict. Receding Arctic sea ice is opening the region to growing maritime activity and increased competition. These forces and trends create vulnerabilities for adversaries to exploit, corrode the rule of law, and generate instability that can erupt into crisis in any theater.

New and converging technologies will have profound impacts on the security environment. Artificial intelligence, autonomy, additive manufacturing, quantum computing, and new communications and energy technologies could each, individually, generate enormous disruptive change. In combination, the effects of these technologies, and others, will be multiplicative and unpredictable. Militaries that effectively integrate them will undoubtedly gain significant warfighting advantages.

The United States and its allies will be challenged to build the necessary capability and capacity required to address these many threats. Increasingly sophisticated weapon systems and a shrinking defense industrial base will raise the price and extend the timelines for developing and procuring new weapons and platforms. Continuous budget pressures, including the economic impact of COVID-19, may constrain resources available for defense.

PROBLEM STATEMENT

China's and Russia's revisionist approaches in the maritime environment threaten U.S. interests, undermine alliances and partnerships, and degrade the free and open international order. Moreover, China's and Russia's aggressive naval growth and modernization are eroding U.S. military advantages. **Unchecked, these trends will leave the Naval Service unprepared to ensure our advantage at sea and protect national interests within the next decade.**

IMPLICATIONS FOR THE NAVAL SERVICE

Alliances and partnerships remain our key strategic advantage. Our allies, partners, and alliances such as NATO are an enduring asymmetric advantage over our rivals. They uphold international norms, generate naval power, and provide access to valuable strategic maritime positions. We must strengthen and expand our network of relationships to ensure our success in competition, crisis, and conflict.

Activities short of war can achieve strategic-level effects. The maritime domain is particularly vulnerable to malign behavior below the threshold of war and incremental gains from malign activities can accumulate into long-term advantages. Rivals are exploiting new avenues to advance their interests, including weaponizing social media, infiltrating global supply chains, and using space and cyber as warfighting domains. We must compete in these spaces.

Prevailing in competition is more than a conceptual challenge. Countering malign behaviors short of armed conflict requires sufficient naval capacity and integration to maintain forward presence, as well as targeted capabilities that expand our response options. To sustain deterrence and prevent competition from escalating into conflict, we must maintain our critical military advantages.

Operating forward deters coercive behavior and conventional aggression. We cannot build trust and interoperability with our maritime allies and partners from a distance. Nor can we contest malign activities without being present. Our force generation models must ensure we have sufficient combat-credible naval forces available to deter aggression, preempt a *fait accompli*, and win in conflict, all backed up by rapid surge capability and capacity.

Contested seas require a renewed emphasis on sea control. Denying our adversaries' use of the seas thwarts their direct wartime objectives and disrupts their efforts to threaten our allies and the American homeland from the maritime domain. We must increase our emphasis on controlling the seas in conflict to provide joint and allied forces with the freedom of maneuver to attack adversary forces and impose costs globally.

Maintaining advantage at sea requires modernization. In persistently surveilled, contested environments, agile naval forces offer dynamic and flexible options from which to project combat power. We must maintain our advantage at sea with new platforms, new thinking, and new technologies that enhance distributed naval operations, and develop our people and culture to meet the challenges of a complex security environment.

II. INTEGRATED ALL-DOMAIN NAVAL POWER

The Navy, Marine Corps, and Coast Guard have a proud heritage of serving and fighting together, but today's security environment demands deeper cooperation. Integrated All-Domain Naval Power—synchronizing the complementary capabilities, capacities, roles, investments, and authorities of the Naval Service—multiplies the traditional influence of sea power to produce a more competitive and lethal total force. Together, we expand our ability to deliver effects across the competition continuum and in *all domains*: from the sea floor to space; across the world's oceans, littorals, and coastal areas ashore; and in the information environment, cyber domain, and electromagnetic spectrum.

Integrated naval forces are uniquely suited for operations across the competition continuum. The Coast Guard's mission profile makes it the preferred maritime security partner for many nations vulnerable to coercion. Integrating its unique authorities—law-enforcement, fisheries protection, marine safety, and maritime security—with Navy and Marine Corps capabilities expands the options we provide to joint force commanders for cooperation and competition. In conflict, Navy-Marine Corps integration expands our ability to control the seas, as we combine distributed fleet operations and mobile, expeditionary formations with sea control and sea denial capabilities. These operations are guided by Naval Service concepts—Distributed Maritime Operations, Littoral Operations in a Contested Environment, and Expeditionary Advanced Base Operations—that combine the effects of sea-based and land-based fires, enabling our forces to mass combat power at times and places of our choosing. Closer integration allows our forces to distribute more broadly and increase our operational unpredictability across the competition continuum by varying our timing, location, domain, forces, and activities.

Naval forces' unique attributes generate options and decision space for national leadership, providing credible deterrence and prompt crisis response worldwide, regardless of access to overseas bases. Every day, the Naval Service operates on the front lines of global competition, interacting with China's and Russia's forces in every domain. Agile, mobile, expeditionary, scalable, sustainable, versatile, networked, and lethal, we provide critical advantages over our competitors through our ability to use the vast oceans to maneuver and sustain our forces globally. Working alongside our allies and partners, our operations, exercises, and engagements must set the conditions for a future in which our rivals are deterred from malign behaviors and aggression—and, if deterrence fails, a future in which they are defeated.

Multi-mission by design, the Naval Service leaves home port outfitted for the unpredictable. We have crucial peacetime missions, including responding to disasters, preserving maritime security, safeguarding global commerce, protecting human life, and extending American influence. We underwrite the use of global waterways to achieve national security objectives through diplomacy, law enforcement, economic statecraft, and, when required, force. We embody America's resolve, its might, and its commitment to uphold the values of a free and open order.

The Naval Service does not compete, deter, or fight alone. We are an integral part of the Joint Force and work closely with allies, partners, and other government agencies. We are also part of America's broader maritime enterprise, which includes commercial ships, merchant mariners, port infrastructure, and shipbuilders. All of these relationships are paramount to guarantee free use of the maritime domain, ensure our security, and protect our prosperity.



Legend-class cutter USCGC Stratton (WMSL 752) and Arleigh Burke-class guided-missile destroyer USS McCampbell (DDG 85) maneuver in the Coral Sea in 2019. (USN photo by MC2 John Harris)

III. EMPLOYING NAVAL FORCES

PREVAILING IN LONG-TERM STRATEGIC COMPETITION

American security objectives have remained broadly consistent since the end of World War II. The United States has sought to protect its territory and secure global conditions hospitable to liberty, commerce, and peace. We have opposed rivals' attempts to subjugate regions to their control or restrict access to the world's oceans. Wherever these lasting interests were threatened, the United States has worked alongside like-minded nations to defend our common goals and change the behavior of nations operating outside established international norms. America's Navy, Marine Corps, and Coast Guard have served as powerful, visible symbols of our commitment to these enduring values.

To counter China's and Russia's revisionist approaches in the maritime environment and to set global maritime conditions that support National Defense Strategy objectives, the Naval Service, as part of the Joint Force, will:

- Defend the homeland from attack and protect the U.S. marine transportation system
- Preserve a stable and secure global maritime environment that is free, open, and advances prosperity through transit, trade, and lawful pursuit of natural resources
- Defend allies from aggression and enable partners to counter coercion and subversion
- Expand collaboration and interoperability with allies and partners, and reinforce favorable balances of maritime power
- Deter strategic, nuclear, conventional, and cyber aggression to protect U.S. vital interests
- In the event of conflict, deny adversaries their objectives, defeat adversary forces while managing escalation, and set the conditions for favorable conflict termination

Given the scope of our global mission and the scale of our challenges, we must set priorities and manage risk. We cannot operate everywhere, at all times, with equal effectiveness. Therefore, the Naval Service will prioritize:

Competition with the PRC over other challengers. China is the only rival with the combined economic and military potential to present a long-term, comprehensive challenge to the United States. Naval Service operations and force posture will focus on countering PRC malign behavior globally and strengthening regional deterrence in the Indo-Pacific region.

Deny competitors strategic gains from malign behavior over minimizing tactical risk. Deterring and contesting incrementalism requires firm and persuasive operations to confront malign behavior. Ready, forward-deployed naval forces will accept calculated tactical risks and adopt a more assertive posture in our day-to-day operations.

Future warfighting readiness over near-term demand. To preserve our ability to modernize for the future in a fiscally constrained environment, the integrated Naval Service will carefully manage its resources to answer global force demands efficiently.

OPERATING ACROSS THE COMPETITION CONTINUUM

The Naval Service will partner, persist, and prevail across the competition continuum, employing Integrated All-Domain Naval Power through five lines of effort:

Advance global maritime security and governance. We will operate with allies, partners, other U.S. agencies, and multinational groups to maintain a free and open maritime environment, and uphold the norms underpinning our shared security and prosperity.

Strengthen alliances and partnerships. We will maintain and expand our large and diverse network of allies and partners. Acting with unity of effort, like-minded-nations generate enormous power to modify behavior in the maritime domain. Allies and partners must be ready and willing to bring capability and capacity to operations across the competition continuum.

Confront and expose malign behavior. Together with whole-of-government partners, we will deny the obscurity that our rivals exploit, holding them accountable to the same standards by which others abide. Exposing and attributing malign behavior imposes reputational costs, diminishes the effectiveness of propaganda, and galvanizes international resistance.

Expand information and decision advantage. We will maintain superiority in coordinating, distributing, and maneuvering our forces. We will sense, decide, and act more quickly and effectively than our adversaries. Maintaining decision advantage removes adversary leaders' sense of control, inducing doubt and increased caution in crisis and conflict.

Deploy and sustain combat-credible forces. Forward deployed, combat-credible forces enable all lines of effort. We will deter potential adversaries from escalating into conflict by making that fight unwinnable for them. Should our adversaries choose the path of war, naval and joint forces will defeat adversary forces and impose global costs by leveraging our wartime operational concepts.

In strategic competition, interactions between our forces and those of our competitors may occur at varying levels of intensity, in different locations, and in multiple domains simultaneously. In the following three sections—day-to-day competition, crisis, and conflict—we illustrate how our naval forces operate seamlessly across the competition continuum leveraging these five lines of effort.

IN DAY-TO-DAY COMPETITION

Effective competition upholds the rules-based order, denies our rivals' use of incremental coercion, and creates the space for American diplomatic, political, economic, and technological advantages to prevail over the long term. Building interoperability with allies and partners increases our collective deterrence and secures access, basing, and overflight to support our distributed operations. If conflict occurs, effective competition will have set the conditions for victory, enabling our naval, joint, and combined forces to defend the U.S. homeland, protect our allies, and defeat our adversaries.

Every day, the Naval Service deploys and sustains combat-credible forces around the world. In the homeland, the Coast Guard protects the marine transportation system that underpins America's economic vitality. In the littorals, Marine Corps forces at sea and ashore conduct all-domain operations to support combatant commanders with flexible response



A U.S. Coast Guard Law Enforcement Detachment conducts a visit, board, search and seizure (VBSS) drill aboard the Freedom-variant littoral combat ship USS Sioux City (LCS 11) in the Caribbean Sea in 2020. (USN photo by MCSN Juel Foster)

options. Navy and Coast Guard ships conduct freedom of navigation operations globally, challenging excessive and illegal maritime claims. Coast Guard cutters and law enforcement detachments aboard Navy and allied ships exercise unique authorities to counter terrorism, weapons proliferation, transnational crime, and piracy. All three services enforce sanctions through maritime interdiction operations, often as part of international task forces.

Naval Service operations uphold global maritime security and governance by setting the standards for acceptable conduct at sea through principled leadership in the International Maritime Organization and other multilateral institutions and forums. In concert with allies, partners, and other U.S. agencies, our maritime security operations uphold these standards around the world. We will continue to seek opportunities to cooperate with all nations, including our rivals, to overcome collective challenges and preserve a free and open international system.

A resilient network of alliances and partnerships is the fabric of the free and open order. We build trust and interoperability with our allies and partners through combined exercises, operations, theater security cooperation, global health engagement, foreign internal defense, and capacity-building efforts. Integrating and coordinating the efforts of like-minded nations bolsters maritime governance through improved law-enforcement capabilities, shared intelligence, and a common maritime operational picture.

Together with international and whole-of-government efforts, the Naval Service will detect and document our rivals' actions that violate international law, steal resources, and infringe upon the sovereignty of other nations. We will provide evidence of malign activities to U.S. and international officials to expose this behavior and increase the reputational costs for aggressors. Forward naval forces, leveraging our complementary law-enforcement authorities and military capabilities, will stand ready to disrupt malign activities through assertive operations. Our expanded efforts will refute the false narratives of our rivals and demonstrate the United States' commitment to protecting the rules-based order.

Naval Service cyber teams provide U.S. forces the ability to detect and defend against attacks on American and allied networks. Exposing our competitors' malign cyber activities—whether against military or civilian networks—allows network vulnerabilities to be closed, raises the reputational costs, and lowers the effectiveness of future cyber aggression.

We cannot cede influence in areas of emerging day-to-day competition, including U.S. regional waters and the Arctic. The coming decades will bring changes to the Arctic region that will have a significant impact on the global economy, given its abundance of natural resources and strategic location. China views this region as a critical link in their One Belt One Road initiative. Arctic nations are reopening old bases, moving forces, and reinvigorating regional exercises. These trends will persist in the decades ahead. We must continue to operate forward and posture our forces appropriately.

IN CRISIS

The Naval Service offers flexible options to respond to crises, manage escalation, and preserve decision space for national leaders. Because naval forces are globally maneuverable and persistently operate forward, we are often already on-scene at the onset of a crisis.

Operating our naval forces far forward—in harm's way and in contested environments—raises the risks for rivals considering the path of escalation and prevents crisis from escalating into war. Navy and Marine Corps forces demonstrate visible combat readiness, support deterrence, and missile defense. Coast Guard forces provide additional tools for crisis management through capabilities that can de-escalate maritime standoffs nonlethally.

Crisis operations require an accurate understanding of the operating environment. Manned and unmanned ISR platforms provide timely indications and warnings of competitors' military preparations, while naval forces—including submarines, surface ships, aircraft, and unmanned systems—gather intelligence from a variety of sources. Emerging technologies will



U.S. Marines offload joint light tactical vehicles from a U.S. Navy air cushioned landing craft in Okinawa, Japan during exercise Noble Fury 21. (USMC photo by Lance Cpl. Kolby Leger)

help us collect, analyze, and produce timely intelligence. Our networks, battle management aids, and data infrastructure will connect with other joint networks. Combining many informational inputs into a common, actionable operational picture will enable our forces to act more quickly and effectively than our competitors.

Alliances and partnerships are true force multipliers in times of crisis. Partner and ally deployments of combat-credible forces increase the legitimacy of our response, strengthen our deterrence, and demonstrate multinational resolve. They further contribute by providing intelligence, logistics, cyber, and space capabilities. They also provide specialty capabilities, such as mine warfare and antisubmarine warfare. Finally, our alliance and partner forces help secure sea-lanes and maintain global maritime security.

Naval special operations forces help prepare the operational environment in contested and denied areas. Their skills and access enable the Naval Service to insulate vulnerable partners and maneuver naval forces inside of contested areas. Unique functions, such as civil affairs and military information, inhibit potential adversaries from exploiting weak and vulnerable maritime governance structures during periods of crisis.

IN CONFLICT

If our adversaries choose the path of war, the Naval Service will fight alongside the Army, Air Force, Space Force, our allies, and our partners to deny enemy objectives, destroy enemy forces, and compel war termination. We will protect the U.S. homeland and our allies with ballistic missile defense assets and maintain continuous strategic deterrence against the use of weapons of mass destruction.

In combat, naval forces will leverage the concepts of Distributed Maritime Operations, Littoral Operations in a Contested Environment, and Expeditionary Advanced Base Operations to support Joint Force Commander objectives. Nested under the emerging Joint Warfighting Concept, our operations will mass the effects of joint, sea-based, and land-based kinetic and non-kinetic fires. Integrating and connecting our platforms, weapons, systems, and sensors improves our own battlespace awareness while complicating the enemy's scouting efforts. Distributing and maneuvering our forces across all domains allows us to exploit uncertainty and achieve surprise.

Controlling the seas enables the Naval Service to project power in support of Joint Force efforts and protect joint and allied forces surging to conflict theaters. Where adversaries must cross open water, sea denial robs them of the initiative, impedes a *fait accompli*, and prevents them from achieving their objectives. We control or deny the seas by destroying an adversary's fleet, containing it in areas that prevent meaningful operations, prohibiting it from leaving port, or by controlling sea lines of communication. In collaboration with allies and partners, we will be capable of controlling critical choke points, enabling us to safeguard joint forces flowing into theater and to impose military and economic costs on our adversaries.

Our combat operations will support, and be supported by, the Joint Force. Navy, Marine Corps, and Air Force aircraft will sustain dominance of the skies, supported by joint aerial refueling assets. Bombers and fighters will mass overwhelming anti-surface and land-attack fires. Marine Corps expeditionary forces ashore will support domain awareness, provide forward arming and refueling points, and deny adversaries the use of key maritime terrain. Rapidly deployable Coast Guard cutters, Port Security Units, and Advanced Interdiction Teams will provide specialized

capabilities, augmenting operations in theater. Joint long-range precision fires will hold high-value adversary targets at risk, allowing U.S. and allied forces to focus on destroying the adversary's fleet. Joint theater logistics will sustain and enable a high operational tempo in combat. Joint cyber and space effects will support all of these operations.

Allies and partners add capability, capacity, and legitimacy in combat operations. Leveraging our interoperable C2 networks, allies and partners provide all-domain fires to help establish sea control and project power. They interdict adversary war materials and commerce; provide access, basing, and overflight; and deliver additional critical capabilities, such as intelligence and logistics support. Allies and partners will also play a crucial role in deterring opportunistic aggression in additional theaters, as well as maintaining maritime governance and exposing malign behavior.

Within the most contested battlespaces, we will destroy adversary forces by projecting power from attack submarines, fifth-generation aircraft, naval expeditionary forces, unmanned vehicles, and maritime raids. Our seaborne forces will deliver devastating offensive strikes, surviving adversary counterattacks using coordinated jamming, maneuver, and defensive systems. Low-footprint and low-signature Marine Corps elements operating from the sea to the shore will use maneuver, cover, and concealment to employ lethal long-range precision fires. Combined volleys of networked munitions, coming from multiple axes of attack, will overpower adversary defenses. Resilience for protracted conflict, including communications, assured sustainment, survivable battle management networks, and reconstitution, will enable our forces to remain in the fight.

Complementing our forces closest to the threat, Naval Service warships will exploit our control of the seas. Maneuverable strike forces—composed of multiple carrier strike groups, surface action groups, and expeditionary strike groups, and augmented by unmanned platforms—will launch overpowering air and missile attacks from unexpected directions. Our long-range systems and hypersonic weapons will provide global strike capabilities against targets ashore. Logistics and auxiliary ships will surge to establish refueling, rearming, resupply, revive, and repair points. The Coast Guard will ensure the safe, secure, and efficient marine transportation system essential to sustaining forces in war.



The Ronald Reagan Carrier Strike Group, Japan Maritime Self-Defense Force, and Royal Canadian Navy participate in Exercise Keen Sword 21. (USN photo by LTJG Samuel Hardgrove)

IV. DEVELOPING NAVAL FORCES

DELIVERING INTEGRATED ALL-DOMAIN NAVAL FORCES

National guidance establishes the required capabilities for the Joint Force across the competition continuum and guides the Naval Service in developing its forces and capabilities. In day-to-day competition, joint forces must be able to protect the homeland, deter aggression, defend U.S. interests, and degrade threats from terrorism, piracy, transnational criminal organizations, and weapons of mass destruction (WMD). In conflict, joint forces must be able to defeat aggression by one major power while deterring opportunistic aggression elsewhere and disrupting terrorist and WMD threats. Throughout the competition continuum, the Joint Force must always be able to deter nuclear and nonnuclear strategic attacks and secure the U.S. homeland.

To reverse the erosion of U.S. military advantages from China's and Russia's aggressive naval growth and modernization, the Navy, Marine Corps, and Coast Guard, will develop integrated all-domain naval forces that, as part of the Joint Force, can:

- Recruit, train, educate, manage, and retain diverse, versatile, professional personnel—active, reserve, and civilian—able to adapt and succeed in ambiguous, dynamic environments
- Generate sufficient readiness and capacity to conduct and logistically sustain forward operations, support experimentation, and preserve combat-ready surge forces
- Expand capabilities and concepts to expose, disrupt, and deny malign activities in day-to-day competition
- Operate with allies and partners in day-to-day competition, crisis, and conflict
- Operate, survive, and sustain themselves under threat in a contested, persistently surveilled environment
- Provide persistent, all-domain, long-range precision fires, supported by agile, resilient, integrated networks, to deny adversary objectives and destroy adversary forces
- Operate and maintain the most survivable leg of the Nation's nuclear deterrent triad

Our ships, submarines, aircraft, and equipment have service lives measured in decades. As existing elements of our force structure continue to provide combat-credible power and strategic deterrence, increased integration will enable us to do more with the forces we already have. As we organize, man, train, and equip today's naval force, we are designing a future force that can prevail in any scenario.

Consistent with the findings of recent force structure assessments, we will generate a balanced, hybrid fleet that includes undersea, surface, air power, aircraft carriers, and expeditionary land forces. Cost-effective platforms and manned-unmanned teaming will increase the capacity of the fleet and expand our ability to distribute our forces. We will leverage the lethality of submarines in sea denial and focus on enhancing long-range fires, including aircraft and missile ranges, and manned-unmanned teaming in all domains. Marine Littoral Regiments, as part of Marine Air Ground Task Forces and Marine Expeditionary Forces, will bring additional ISR, C2, and long-range fires capabilities. A modernized Coast Guard fleet will



U.S. Marine Corps F-35B Lightning II aircraft land aboard amphibious assault ship USS America (LHA 6) in the Philippine Sea in 2020. These and other new technologies are capable of destroying adversary forces in the most highly contested battlespaces. (USMC photo by Cpl. Isaac Cantrell)

enhance global deployability and provide expanded options across the competition continuum. We will resource integrated force generation, with both funding and time, to ensure deploying forces are prepared for a global, all-domain fight. Finally, we will ensure we have the necessary capacity and capability for sealift and logistics to sustain our forces in contested battlespaces.

The Naval Service will continue to steward taxpayer dollars diligently. We will seek greater stability and predictability in our future budgets, which will be crucial to maintaining readiness to compete today while boldly modernizing for the future. Where necessary, we will divest of legacy capabilities. The following priorities will guide our decisions for developing an integrated all-domain naval force:

Concepts and capabilities that apply across the competition continuum over those that are narrowly focused. Dynamic environments, which can quickly transition from day-to-day operations into crisis or conflict, require concepts and capabilities that remain relevant across the competition continuum.

Emphasis on sea control relative to other naval missions. The maritime domain can no longer be considered a permissive environment. Establishing sea control is a critical enabler for all other naval missions that support the Joint Force, including power projection and sealift.

Greater numbers of distributable capabilities over fewer exquisite platforms. We will design our future naval force to support distributed operating concepts that rely on lower signature, highly maneuverable forces. Naval forces will mix larger platforms with standoff capabilities and smaller, more-affordable platforms—including optionally manned or unmanned assets—that increase our offensive lethality and speed of maneuver.

Integrated naval modernization. We will modernize our forces to ensure warfighting advantage well into the future, emphasizing maritime warfare within contested battlespaces. The Navy will prioritize lethality, capacity, readiness, and expeditionary logistics over sustaining legacy capabilities. The Marine Corps will prioritize modernization over force-structure size. The Coast Guard will prioritize readiness, capacity, and future capability—including cyber, C5ISR, and modernizing the cutter fleet—over legacy capability.

Training and education for warfighting advantage in dynamic environments. Investments in education and training will develop skills and experience that generate warfighting advantages. Building upon the Naval Service’s centuries-old culture of mission command, we will enhance our warfighters’ ability to prevail in complex, contested, and communications-denied environments.

INTEGRATING THE NAVAL SERVICE

The Naval Service will develop an integrated all-domain naval force through training and education; capabilities and networks; plans, exercises, and experiments; analysis and wargaming; investments and innovation; and force design. We will collaborate with our allies and partners across these lines of effort to build capability, enhance interoperability, and generate unity of effort.

Training and education. Our success in this long-term strategic competition depends upon our Sailors, Marines, and Coast Guardsmen. We will prepare them to be agile and adaptive in an era of rapid change and evolving threats.



A U.S. Marine Corps radio operator sets up a long-range communication system while demonstrating expeditionary advanced basing capabilities during Exercise Noble Fury 21. (USMC photo by Cpl. Josue Marquez)

Training, education, and warfighting development centers will provide distributed training events in a live, virtual, and constructive training environment. These efforts will sharpen our warfighting concepts, inform our doctrine development, aid in the rapid integration of new technologies and add valuable repetition of training to generate greater warfighting proficiency. To increase standardization and efficiency, we will establish common schoolhouses for shared skill sets and common equipment, such as small-boat handling and information warfare pipelines.

Through deployment certifications and large-scale exercises, we will train our personnel to operate with a mission command mindset. We will evolve our training through self-evaluation and intelligent adjustments to replicate the challenges posed by our most significant competitors. We will similarly resource sustainment training to this same high level.

To support the intellectual development of our Sailors, Marines, and Coast Guardsmen, we are creating Professional Military Education opportunities for all eligible personnel. Every Sailor, Marine, and Coast Guardsman will have the opportunity to accrue college credit toward a degree throughout their career. To forge unity of effort, we will collaborate with allies and partners to increase exchange opportunities, including education, shore-based tours, and operational billets.

Capabilities and networks. Prevailing across the competition continuum depends upon capabilities that expand our information and decision advantage.

The Naval Service will accelerate delivery of the next-generation Naval Operational Architecture, composed of the Naval Tactical Grid, battle management aids, data structures and infrastructure that underpin distributed operations. This network will be fully interoperable with Joint All-Domain Command and Control systems and will combine inputs into an actionable common operational picture. Leveraging artificial intelligence and machine learning, we will give our warfighters enhanced situational awareness and facilitate decision making at tactically relevant speeds.

We will expand our maritime ISR framework that coordinates both inter-service and inter-department collection strategies and priorities. This will allow us to better use national imagery and intelligence capabilities to deliver shared battlespace awareness. Linked with other ongoing joint efforts, we are also enhancing a maritime kill web that fuses data across domains from a variety of intelligence sources, sensors, and platforms.

Our unmanned campaign plan will synchronize our efforts to field a multi-domain portfolio of shore-launched and sea-launched unmanned platforms with urgency. Unmanned ISR platforms will add capability to monitor, record, and report instances of coercive behavior, providing evidence suitable for diplomatic engagement and public audiences. They will also add capability for scouting, targeting, communications, and battle damage assessment. Weapons platforms will add inventory depth while supporting platforms provide additional capacity and flexibility.

By developing new intermediate force capabilities (IFCs)—scalable armaments that can deliver effects short of lethal force—we can increase our options for responding to provocations and coercion in both competition and crisis. We will outfit deploying assets with IFCs and will factor them into requirements documents for appropriate future platforms.

We have not had to conduct logistics in a contested environment since World War II. Through increased integration and greater capacity, we will ensure we generate the logistics capability necessary to support joint, distributed operations in future battlespaces, both at sea and ashore.

Plans, exercises, and experiments. The Naval Service will test concepts, weapons, and systems and build interoperability with our allies and partners through our planning efforts, experiments, and exercises. Bold experimentation with new ideas, technologies, and concepts will accelerate our modernization efforts.

The Naval Service will explore different combinations of existing forces to improve our operational effectiveness. We will test new tailorable formations designed to optimize influence in day-to-day operations, leveraging Naval Service relationships, authorities, and capabilities. Similarly, we will create new formations that tightly integrate Marine Corps and Navy land-based and sea-based firepower. These formations will be designed for rapid deployment and maximum lethality for controlling the seas in crisis or conflict.

Expanded operational concepts, informed by joint operating concepts, will further develop how integrated naval forces compete more effectively in the day-to-day. Exercises with allies and partners will expand our C2 relationships and increase our ability to operate together in contested battlespaces. To master fleet-level warfare and refine the integration of our forces and capabilities, we will conduct fleet battle problems, large-scale exercises, and robust experimentation.

Analysis and wargaming. The Navy, Marine Corps, and Coast Guard will leverage our combined analytic capabilities to fully inform our investment priorities and find innovative solutions to our most significant challenges.

The Naval Service will define a common set of *key operational problems* in competition, crisis, and conflict that will unite our analytic agendas. The Naval Analytic Master Plan will align our studies, wargames, experiments, tests, and exercises. To expand upon our traditional focus on high-end, lethal combat, these efforts will include a series of joint, interagency, and international tabletop exercises and wargames focused on day-to-day competition and crisis.

Investments and innovation. Increased coordination on Naval Service investments and innovation efforts will help us achieve greater efficiencies, which we will reinvest into our highest priority programs, including next-generation technologies.

America's creativity and innovative spirit are an enduring advantage over our rivals. Integrated investments must reinvigorate and restore an agile, modern U.S. maritime industrial and innovation base. Our efforts will draw upon traditional defense suppliers, commercial companies, and institutions at the leading edge of emerging technologies, including next-generation communications, artificial intelligence, and quantum computing. Initiatives to improve U.S. public and private shipyards will help optimize national shipbuilding capacity, ensuring our readiness to regenerate forces—at speed and in sufficient number—in the event of conflict.

The Navy, Marine Corps, and Coast Guard will increase coordination of our independent budgets, science and technology strategies, and investments in emerging disruptive technologies. We will leverage a diverse group of senior engineers and subject matter experts to develop alternative platforms and capabilities. In select cases, the Services will coordinate



Sailors retrieve a Mark 18 Mod 2 unmanned underwater vehicle during a transit through the Northern Mariana Islands in 2020. (USN photo by MC2 Cole C. Pielop)

requirements documents that drive our programmatic decisions and place appropriate capacity and capabilities in reserve components to gain efficiencies. These efforts will eliminate duplicative efforts, accelerate our improvements in lethality and survivability, and enable rapid fielding of an improved mix of both high-end and attritable capabilities.

Force design. All the above integration initiatives will inform the Naval Service’s continuous force design process. Additionally, integrated future force attributes and design principles will help guide our decisions as we look across multiple future budget years.

We will design our forces for future operating environments. In addition to our doctrinal key attributes—*agile, mobile, expeditionary, scalable, sustainable, versatile, networked, and lethal*—future forces will have increased *scalable autonomy*, enabling us to distribute more broadly and accelerate our decision cycles. Effective operations also require our forces to have the *capacity* to meet global demands and generate sufficient *strategic depth*. We will also adhere to design principles that ensure our forces stay relevant throughout their service lives. For instance, they must have the ability to incorporate leading-edge technologies rapidly. They must provide capabilities for day-to-day competition, while being able to operate and deliver effects in contested and persistently surveilled battlespaces. In both netted and non-netted environments, they must maintain decision advantage and be logistically sustainable. Throughout our force design efforts, we must also address the possibility of combat damage and loss.

The Annex provides additional detail on Naval Service investments.

CONCLUSION

In this era of long-term strategic competition, the Naval Service must be prepared to defend our national interests, anywhere and anytime. China's and Russia's coercive actions, their attempts to undermine our alliances and partnerships, and their aggressive military modernization efforts pose an undeniable threat to global security and prosperity.

This Tri-Service Maritime Strategy prepares the Naval Service to prevail in day-to-day competition, crisis, and conflict while we accelerate development of a modernized, integrated all-domain naval force for the future. It emphasizes:

Generating Integrated All-Domain Naval Power. By synchronizing the capabilities, capacities, roles, investments, and authorities of the Naval Service, we will expand our influence across the competition continuum and in all domains—from the sea floor to space; across the world's oceans, littorals, and coastal areas ashore; and in the cyber domain, information environment, and electromagnetic spectrum.

Strengthening alliances and partnerships. The Naval Service will foster a global unity of effort to secure unfettered access to the maritime domain. A strong, worldwide network of maritime partnerships, united in common purpose, serves as an enduring advantage over our rivals.

Prevailing in day-to-day competition. The Naval Service will uphold maritime governance and counter malign behaviors below the threshold of war through assertive and persistent operations. We will enable our success by building unity of effort within joint, whole-of-government, allied, and partner activities.

Controlling the seas. In conflict, the Naval Service will establish, maintain, and exploit sea control in contested environments from the littorals to open ocean, including critical chokepoints. Investments in increased lethality, capacity, targeted capabilities, and transformed naval expeditionary forces capable of sea control and sea denial will support this effort.

Modernizing the future force. The Naval Service will pursue an agile and aggressive approach to experimentation and force modernization. Our future hybrid fleet will combine existing platforms with new, smaller ships, lighter amphibious ships, modernized aircraft, expanded logistics, resilient space capabilities, and optionally manned and unmanned platforms. We will deliver innovative training and education to ensure our Sailors, Marines, and Coast Guardsmen remain the world's premier naval force.

To prevail in long-term strategic competition, the Naval Service will promote a relentless drive to anticipate, think creatively, and lead through change. We cannot assume we will fight on our timelines, on our terms, from sanctuaries our opponents cannot reach, or with maritime superiority. Our success depends on boldly executing this strategy with collective resolve to preserve our advantage at sea.

Throughout our Nation's history, the U.S. Navy, Marine Corps, and Coast Guard have stood the watch. We will continue to deploy forward as our Nation's most persistent and versatile maneuver force—capable of winning any fight and ready for the challenges of an unpredictable future.

ANNEX: NAVAL SERVICE INVESTMENTS

While the U.S. Navy, Marine Corps, and Coast Guard have complementary functions, each service fills a unique role in the Nation's defense. The Services have different statutory requirements, roles, and missions requiring separate budget processes and investments. The following are the key investment priorities for the entire Naval Service.

Developing our warfighters. Sailors, Marines, and Coast Guardsmen remain our most important resource for prevailing in long-term competition. We will remain the world's preeminent naval force through recruitment, education, training, and retention of diverse active, reserve, and civilian talent. Transforming our learning model for the 21st century will enable us to adapt and achieve decisive advantage in complex, rapidly changing operating environments.

Nuclear deterrence. The Navy will deliver Columbia-class submarines on time to replace the retiring Ohio-class and continue to modernize nuclear command, control, and communications systems. As directed by current national guidance, Navy is fielding small numbers of low-yield, submarine-launched ballistic missile warheads and will continue development of a nuclear-armed sea-launched cruise missile to ensure the United States can credibly deter nuclear coercion or nuclear employment in any scenario.

Sea control and power projection. To maintain persistent forward presence, conduct sea control and sea denial, and enable power projection, Naval Service investment priorities include:

Surface Warfare and Air Warfare. We will increase investments in advanced, precise, long-range, and lethal fires to destroy enemy forces, with the objective of maintaining a sufficient inventory to sustain a protracted conflict. We will invest in a variety of weapons delivery platforms including Marine long-range anti-ship missiles, manned and unmanned surface vessels, submarines, and aircraft. We will increase investments in maritime domain awareness technologies to find, fix, track, and target adversary forces.

Undersea Warfare. We will maintain our undersea advantage through investments in Virginia-class attack submarines to replace the retiring Los Angeles-class. We will field P-8 Poseidon maritime patrol and reconnaissance aircraft, improve Integrated Undersea Surveillance System infrastructure, expand mine warfare capabilities, and build unmanned underwater vehicles for surveillance and strike.

Power Projection and Strike. Carrier and Expeditionary Strike Groups will continue to enable the Naval Service to operate and maneuver in the maritime domain with flexibility and lethality. Gerald R. Ford-class aircraft carriers will replace the retiring Nimitz-class. America-class amphibious assault ships will add unpredictability, while Joint Strike Fighters—with improvements in stealth, range, and ISR—will further complicate our adversaries' decision-making cycle. Investments in improved weapons ranges, modernized aircraft, and unmanned refueling capabilities will extend the strike range of the carrier air wing into contested areas.

Air and Missile Defense. The Naval Service will continue to invest in next-generation aircraft; defensive missile systems; advanced sensors, such as the Marine Ground/Air Task-Oriented Radar; the Navy Air and Missile Defense Radar; and emerging technologies, such as directed energy weapons that free-up magazine capacity for additional offensive weapons.

Sustainment. The Naval Service will generate resilient and adaptable logistics to sustain forces while under continuous multi-domain attack. We will prioritize prepositioned forward capabilities, stocks, and munitions; modernizing the maritime prepositioning force and prepositioning network; recapitalizing sealift; allied and partner support, and distributed logistics. Logistics investments include the Next Generation Logistics Ship, operational support vessels, and capabilities for sustainment platforms to conduct manned-unmanned teaming in support of naval expeditionary forces operating forward.

Strategic Sealift. We will accelerate our sealift recapitalization strategy to improve the readiness of our Surge and Ready Reserve Force. This includes increased resourcing for sealift operations, maintaining service life extensions, and prioritizing the efficient replacement of the oldest and least ready vessels. We will improve the capabilities and performance of inter-theater sealift and ensure persistent logistics from the industrial base and operationalized service installations. Further, we will work with the Department of Transportation and the Maritime Administration to foster a healthy commercial maritime industry that can more effectively support force mobilizations.

Building capable warfighting capacity. We will grow capacity to deliver a naval force that supports Joint Force dominance in all domains. The Navy continues to commission destroyers and amphibious assault ships, and to develop new platforms, including the FFG(X) and the Light Amphibious Warship. A modernized Fleet Marine Force, equipped with expeditionary vehicles and Naval Strike Missiles, will have the capability to maneuver naval expeditionary force units inside the weapons engagement zone in support of naval campaigns. The Naval Service will invest in unmanned and optionally manned systems to perform missions across all domains, including strike, Counter-C5ISR, C2, and logistics. The Naval Service will leverage its reserve components to generate additional warfighting capacity.

Information and decision advantage. Naval Service investments in electromagnetic maneuver warfare will support distributed naval operations in degraded warfighting domains. Investments in the Naval Tactical Grid provide the maritime component of the Joint All-Domain Command and Control network. Network modernization to improve bandwidth and resilience, battlespace management, and advanced C5ISR systems will enable decisive military advantage in the electromagnetic spectrum. Investments in the information environment in artificial intelligence, autonomous systems, and battle management aids will enable near real time awareness in the information environment.

Prevailing in day-to-day competition. Investments in multi-mission, low-signature, and distributable capabilities and platforms will support operations across the competition continuum. Intermediate force capabilities will provide options short of lethal force to contest coercive actions in day-to-day competition. The Coast Guard's fleet modernization, including acquisition of the Offshore Patrol Cutter, Polar Security Cutter, Arctic Security Cutter, and Waterways Commerce Cutter, will provide the capacity and capabilities necessary to facilitate advancing maritime governance and protecting U.S. maritime sovereignty. Investments in Naval Service exercises with allies and partners will build interoperability and enable the development of combined warfighting concepts to counter malign activities, uphold international norms, and contribute to deterrence.

Operational readiness. Competitive environments require deploying forces that are ready, trained, and equipped to defend U.S. interests against advanced rivals. To ensure our

forces will be ready to deploy on time, the Naval Service will improve ship and aviation depot maintenance throughput. Navy will ensure appropriate funding for warfighting training at sea, including ample sailing days, flying hours, and ammunition to expend. The Marine Corps will change force structure size and divest of superannuated capabilities, reinvesting those savings for modernization initiatives and maintaining current Fleet Marine Force readiness. Coast Guard will maintain investments in ships, talent, and infrastructure to operate a modernized cutter fleet. Trained and ready Naval Service Reserve personnel will be prepared for rapid mobilization to their assigned units.

Shore readiness. Shore readiness supports warfighting and operational readiness by enabling the manning, training, and equipping of naval forces. We will prioritize investments that most directly support fleet operations and readiness, support basing and maintenance for current and future platforms, enable research and development, and provide continuity of C5ISR.



U.S. Marine Corps aircrew lowers material from an MV-22B Osprey to the Ohio-class ballistic-missile submarine USS Henry M. Jackson (SSBN 730) in the vicinity of the Hawaiian Islands in 2020. Underway replenishment sustains the fleet anywhere and anytime. (USMC photo by Cpl. Matthew Kirk)

GLOSSARY

Adaptable: The ability to adjust competencies, shift between existing competencies, or generate entirely new skills in reaction to changes made by an adversary or to unanticipated circumstances.

Competition continuum: In Joint Doctrine, the “competition continuum” describes interactions between the United States and major rivals as taking place in three different circumstances: cooperation, competition short of war, and armed conflict. For purposes of *Advantage at Sea*, we break out naval interactions as occurring in day-to-day competition (which includes cooperation), crisis, and conflict.

Distributed maritime operations (DMO): An operations concept that leverages the principles of distribution, integration, and maneuver to mass overwhelming combat power and effects at the time and place of our choosing. This integration of distributed platforms, weapons, systems, and sensors via low probability of intercept and detection networks, improves our battlespace awareness while complicating the enemy’s own scouting efforts. Applying combat power through maneuver within and across all domains allows our forces to exploit uncertainty and achieve surprise.

Expeditionary advanced base operations (EABO): An operations concept to address challenges created by potential adversary advantages in geographic location, weapons system range, precision, and capacity while creating opportunities by improving our own ability to maneuver and exploit control over key maritime terrain. It does so by fully integrating Fleet Marine Force and Navy capabilities to enable sea denial and sea control as well as sustainment of the fleet.

Freedom of the seas: The Department of Defense (DoD) uses “freedom of the seas” to mean all the rights, freedoms, and lawful uses of the sea and airspace, including for military ships and aircraft, recognized under international law.

Intermediate force capabilities (IFCs): Describes capabilities between presence and lethal force to enable combat arms and support warfighters with expanded and enhanced options to deter, suppress and/or respond to adversary actions across the competition continuum.

Interoperability: The ability to act together coherently, effectively, and efficiently to achieve tactical, operational, and strategic objectives.

Kill webs: A scalable network that connects dispersed sensors and combatants to multiply the number of possible combinations to deliver fires. Kill webs can synchronize and sequence effects across several domains. They additionally allow for remote and over-the-horizon engagements by combatants that do not hold a target on their own organic sensors.

Littoral operations in a contested environment (LOCE): An operations concept that describes naval operations in the littoral environment in light of emerging threats to provide a unified framework for Navy-Marine Corps innovation. It places a renewed emphasis on fighting for and gaining sea control, to include employing sea- and land-based Marine Corps capabilities to support the sea control fight.

Maritime domain awareness (MDA): The effective understanding of anything associated with the maritime domain that could impact the security, safety, economy, or environment of a nation.

Maritime domain: The oceans, seas, bays, estuaries, islands, coastal areas, and the airspace above these, including the littorals.

Maritime governance: The exercise of government authority and responsibility to define policy objectives and to establish and implement laws, policies, and infrastructure to achieve national maritime security objectives. Includes negotiation and compliance with international obligations, regulation of the use of the maritime realm by competing interests, maritime training and education, stakeholder and intergovernmental coordination and communication, agency capabilities, and accountability under laws and ethical standards.

Maritime power projection: Power projection in and from the maritime environment, including a broad spectrum of offensive military operations to destroy enemy forces or logistic support or to prevent enemy forces from approaching within enemy weapons' range of friendly forces.

Maritime superiority: That degree of dominance of one force over another that permits the conduct of maritime operations by the former and its related land, maritime, and air forces at a given time and place without prohibitive interference by the opposing force.

Mobile: A quality or capability of military forces that permits them to move from place to place while retaining the ability to fulfill their primary mission.

Naval Service: The Navy and the Marine Corps and the Coast Guard.

Naval power: The influence of naval forces across all domains—from the sea floor to space; across the world's oceans, seas, bays, estuaries, islands, littorals, and from coastal areas ashore; as well as in cyberspace, the information domain, and across the electromagnetic spectrum. Naval power underwrites use of global waterways to achieve national security objectives through diplomacy, law enforcement, economic statecraft, and, when required, force.

Netted: Seamless but filterable interconnectivity between sensors, information systems, platforms, and weapons across Services and domains. Employs a combination of persistent overhead sensors, long-duration sensors, and platform organic systems.

Resilience: The ability to retain or rapidly recover operational effectiveness during or immediately following a kinetic or non-kinetic attack.

Scalable: The ability to modulate capabilities to achieve varying degrees of intensity, duration, size, or visibility to manage escalation.

Scalable autonomy: The ability to conduct a range of kinetic and non-kinetic effects involving manned and unmanned platforms that permit man-in-the-loop, man-on-the-loop, and man-out-of-the-loop applications.¹

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1. Man-in-the-loop: Human beings decide which targets to engage, and when, and initiate engagements manually.

Man-on-the-loop: Human beings retain a command-by-veto authority to break system-generated engagements

Man-out-of-the-loop: Fully autonomous systems sense, decide, and act without human intervention. Generally today, this is via discrete preprogrammed parameters. In the future, algorithms may be more intelligent and adaptive.

Sea control: The condition in which one has freedom of action to use the sea for one's own purposes in specified areas and for specified periods of time and, where necessary, to deny or limit its use to the enemy. Sea control includes the airspace above the surface and the water volume and sea floor below.

Sea denial: Partially or completely denying the adversary the use of the sea with a force that may be insufficient to ensure the use of the sea by one's own forces.

Strategic depth: Widely used to indicate resilience against friction and attrition. A fighting force's ability to survive an enemy's initial actions; surge active and reserve forces from outside the theater to support and relieve frontline forces; and sustain future operations. Strategic depth provides the time and decision space needed to create conditions favorable to war termination.

Sustainable: The ability to provide logistics and personnel services required to maintain and prolong continuous operations, at and from the sea, to include operations from austere locations.

Sustainment: The provision of logistics and personnel services required to maintain and prolong operations until successful mission accomplishment. The Navy provides maritime sustainment through five vectors: refuel, rearm, resupply, repair, and revive.

Theater security cooperation: All DoD interactions with foreign security establishments to build security relationships that promote specific United States security interests, develop allied and partner nation military and security capabilities for self-defense and multinational operations, and provide U.S. forces with peacetime and contingency access to allied and partner nations.

Versatile: Capable of a breadth of missions or functions simultaneously as opposed to platforms capable of single missions.

An integrated U.S. Navy, U.S. Marine Corps, and U.S. Coast Guard team developed this strategy. For further information, please contact Navy's DCNO for Warfighting Development (OPNAV N7), Marine Corps' DC for Plans, Policies and Operations, or Coast Guard's DC for Operations (DCO).

