

NOT FOR PUBLICATION UNTIL RELEASED BY
SENATE ARMED SERVICES COMMITTEE

STATEMENT OF

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ON THE POSTURE OF THE UNITED STATES NAVY

BEFORE THE

SENATE ARMED SERVICES COMMITTEE

June 22, 2021

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Chairman Reed, Ranking Member Inhofe, distinguished members of the Committee, thank you for the opportunity to testify today on the posture of the United States Navy. Moreover, on behalf of all our Sailors, Navy civilians, and their families, thank you for your continued leadership and support. With the funding provided by Congress these last several years, we are building back our readiness, strengthening our advantages at sea, and keeping our fleet deployed forward where it matters.

This hearing comes at a critical time for our country. Multiple nations are working to undermine the free and open rules-based international system that has benefited so many for so long. Our rivals are rapidly modernizing their militaries to erode our advantages. The COVID-19 pandemic threatens the health and livelihood of our people. Climate change puts our coast lines at risk with rising seas levels and more severe weather. And the maritime environment – a vital source of our nation’s prosperity and protection – has become increasingly contested. America’s Navy is ready to meet these challenges. As we have done since our founding, we will set sail to defend our Nation, take care of our people, and succeed through teamwork.

The President has made it clear – America stands at an inflection point. The choices we make today will have a dramatic impact on the future of our nation. The very nature of the free and open international system is threatened. To defend our nation, safeguard economic opportunity, and secure the blessings of liberty for years to come, we must renew our enduring advantages and work in concert with our allies and partners to secure the rules-based order at sea.

America is a Maritime Nation – Our people depend on the freedom of the seas

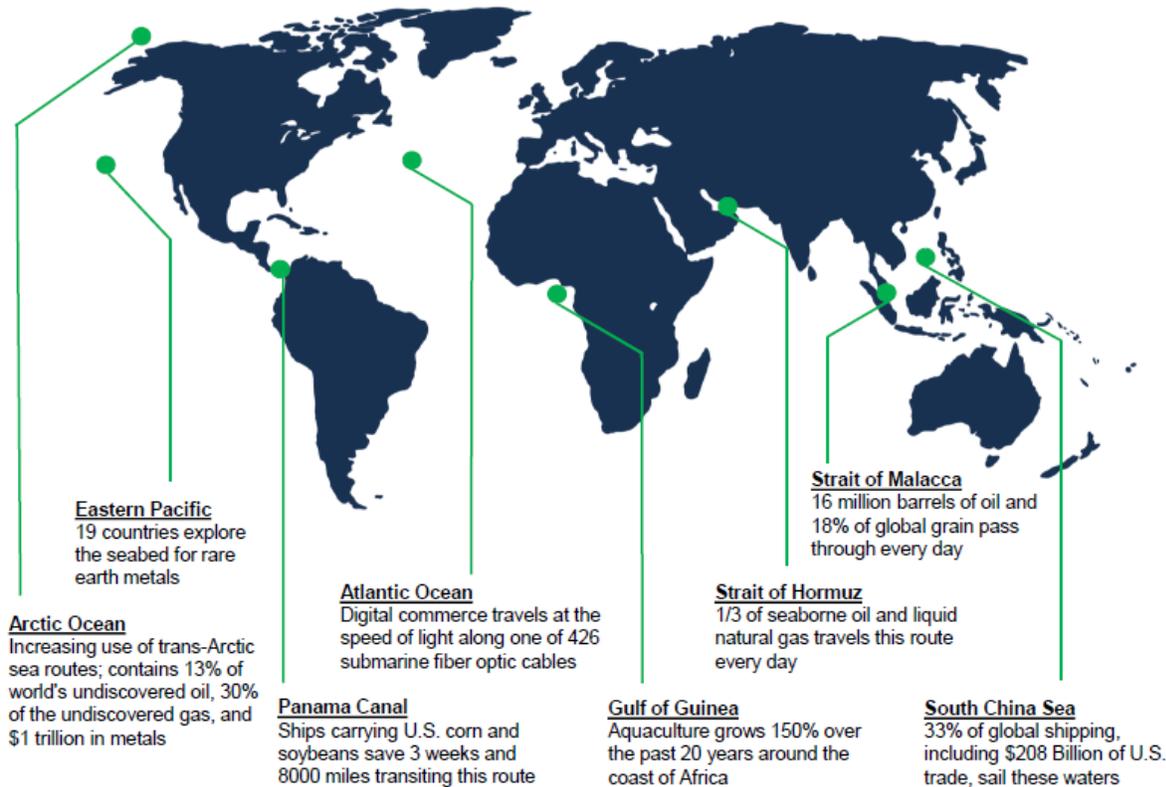
The United States Navy – alongside the Marine Corps and Coast Guard – provides a unique, enduring advantage to the American people. Since our nation was founded, Americans have relied on the seas for prosperity and protection. For 245 years, our Navy has deployed forward to ensure safe passage for our commerce and to keep fights far from our shores. Since the end of World War II, we have sailed with like-minded navies to build and sustain the open, rules-based international system at sea. Together, we have provided stability, deterred great power war, and ushered in prosperity for billions across the world.

Over time, our reliance on the seas has only grown. Today, 90 percent of global trade by volume travels by sea, facilitating \$3.7 trillion in U.S. commerce annually and supporting 31 million American jobs. 95 percent of global internet traffic travels along undersea cables, fueling our digital economy and accounting for \$10 trillion of financial transactions every day. The free flow of commerce – both physical and digital – cannot be taken for granted. It relies on the rules-based international system at sea and unimpeded access to markets through open waterways. Even minor disruptions can have extraordinary impacts. The recent grounding of the container ship *Ever Given* in the Suez Canal, which delayed hundreds of ships and cost the global economy an estimated \$9.6 billion per day, highlights the importance of predictable passage through the world’s strategic waterways. If a rival nation attempted to control passage through

the South China Sea – a strategic location where \$208 billion of U.S. commerce flows annually – the impact to the global economy would be extremely costly.

America Depends on the Seas

\$1.4 trillion U.S. exports
\$2.3 trillion U.S. imports



Meanwhile, the competition for offshore resources such as aquaculture, energy, and rare-earth minerals is increasing across the globe. Currently, 93 percent of the world's fishing stocks are overexploited, threatening a major protein source for 3.3 billion people. Several nations have deployed distant water fishing fleets and expanded the use of maritime militias in their quest to maintain their lucrative fishing industries. Additionally, many nations are increasingly looking to maritime sources of energy and mineral wealth. The global oil and gas industry, which generates an estimated \$3.3 trillion in annual revenue, is turning toward energy exploration along the seafloor to extract untapped reserves. With trillions of dollars in raw resources awaiting discovery on the unmapped ocean floor, states and multinational companies are racing to develop capabilities for deep-sea mining.

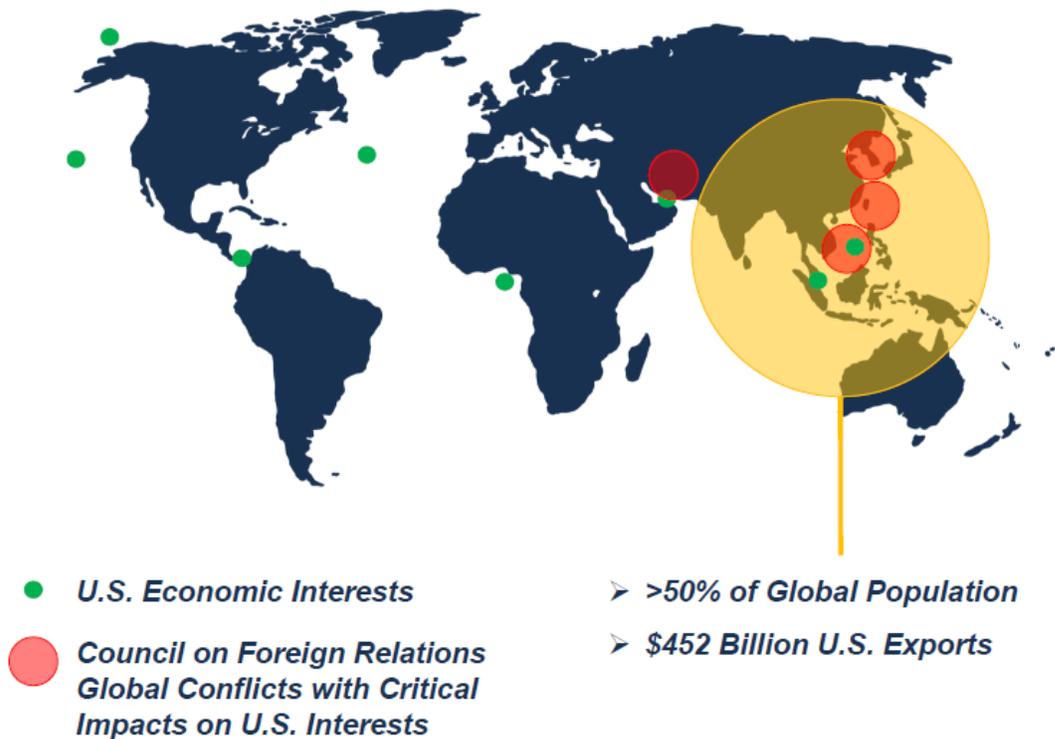
The world's oceans have always been a wellspring of wealth and prosperity. Today, and in the years ahead, they pose an increased risk of competition turning into conflict.

The Growing Challenge to the United States and the Open International System

Despite benefiting from free and open seas for decades, the People’s Republic of China (PRC) and Russia are currently working to undermine the rules-based international system at sea. Both are attempting to control access to key waters and the resources that lie within these waters, inhibiting freedom of the seas and overflight. Both are intimidating their neighbors and attempting to enforce unlawful claims with the threat of force. Both are expanding sophisticated networks of sensors and long-range weapons to hold important waterways at risk. Both are leveraging offensive cyber tactics to advance their competitive advantage, illegitimately obtaining U.S. intellectual property to close research and development gaps and disrupt our industrial base. And both are attempting to replace the free and open international system with a more unilateral and self-serving one by turning incremental gains from their malign actions into long-term advantages – such as militarizing contested features in the South China Sea or illegally annexing the Crimean peninsula.

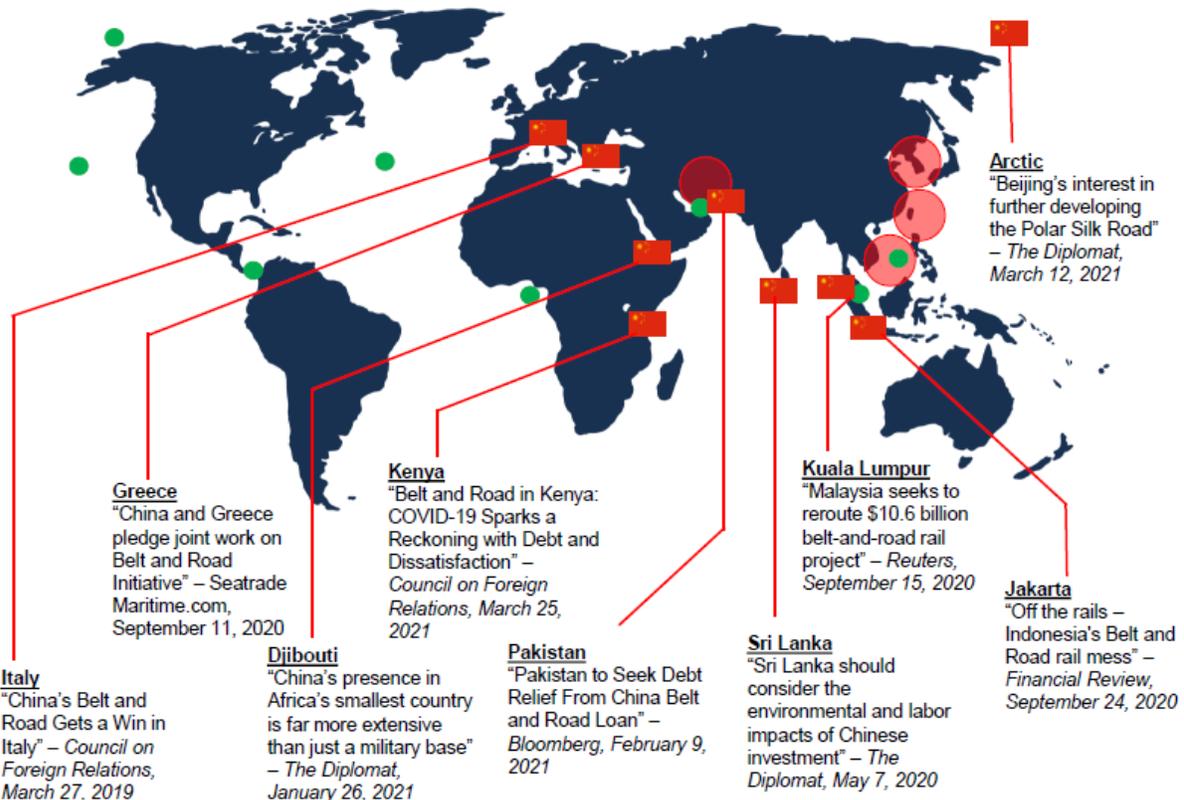
The PRC’s and Russia’s revisionist approaches at sea threaten U.S. interests, undermine alliances and partnerships, and degrade the free and open international order. Moreover, the PRC’s and Russia’s aggressive naval growth and modernization are eroding U.S. military advantages. Unchecked, these trends will leave the Navy unprepared to ensure our advantage at sea and protect national interests within the next decade.

Hotspots That Threaten Critical U.S. Interests



The PRC – our pacing challenge – is carrying out a strategy aimed at the heart of America’s maritime power. They are deliberately working to erode maritime governance, inhibit freedom of the seas and overflight, deter our engagement in regional disputes, and displace the United States as the partner of choice across the world. To achieve its strategic goals, the PRC has rapidly grown its Navy from 262 to 350 ships. Today, their fleet includes modern surface combatants, submarines, aircraft carriers, amphibious assault ships, and polar icebreakers. Expanding their robust naval force with a hundreds of Coast Guard and maritime militia vessels, they routinely harass neighbors to exert pressure at a level below traditional armed conflict. They have built the world’s largest missile force to target regional waters in an attempt to intimidate others. They have strengthened all dimensions of military power to contest the United States from the seafloor to space and in the information domain. Under the One Belt, One Road Initiative, they are extending their maritime infrastructure across the globe through aggressive investments, particularly in ports, to control access to critical waterways.

China’s One Belt, One Road: Maritime Expansion



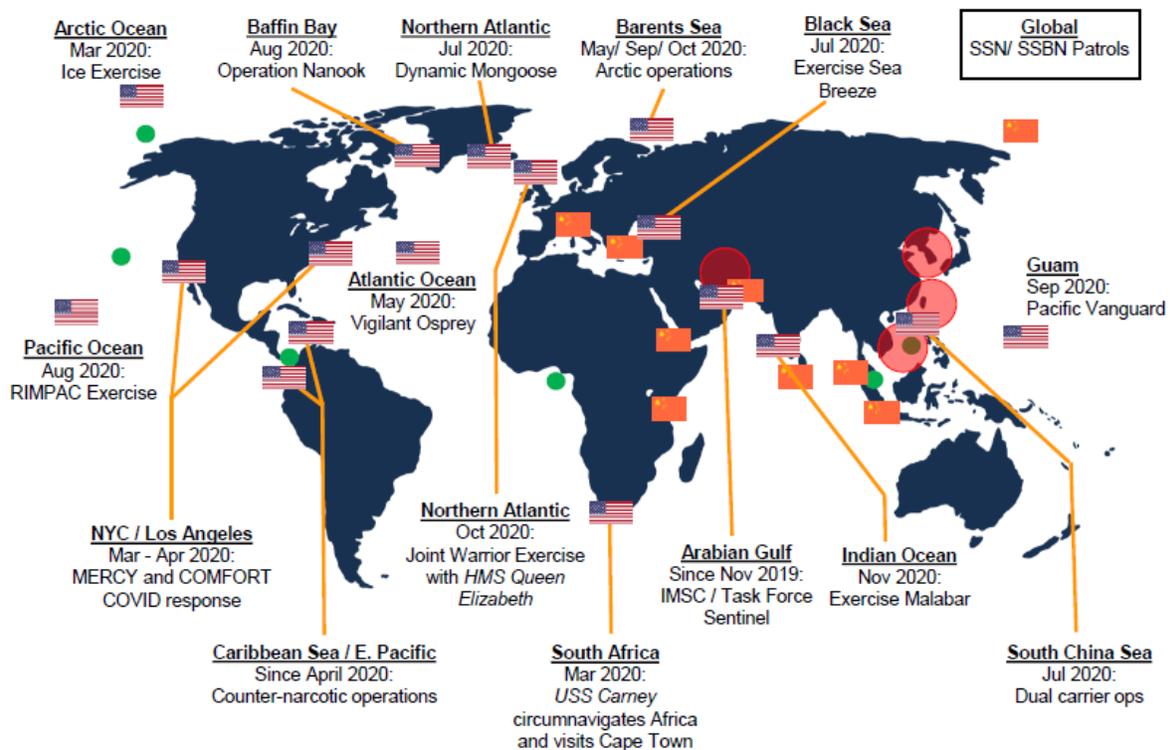
As our U.S. Indo-Pacific Commander recently stated, the greatest danger for America and our allies is the erosion of our conventional deterrence with respect to the PRC. Absent a convincing conventional deterrent, the PRC will continue to take action to undermine the free and open conditions at sea upon which our citizens rely. While the PRC is expanding its influence across

the globe, this challenge is most acutely present in the Indo-Pacific, including the East and South China Seas and increasingly in the Indian Ocean. History shows that a strong U.S. Navy provides a stabilizing influence across the world, assists in peaceful maritime dispute resolution, and expands economic opportunities for the American people. The future will prove no different.

U.S. Navy – Deployed Forward to Defend America and our Allies and Protect the Freedom of the Seas

The U.S. Navy is responding to the challenges to our free and open international system by demonstrating our global reach, enforcing common principles, sustaining the conditions that enable shared prosperity, strengthening our alliances and partnerships, and modernizing our fleet to control the seas in conflict and project power in contested environments. Today, over 42,000 Sailors are deployed on 111 ships and submarines to preserve freedom of the seas, deter conflict, and keep America and our allies safe. Together with the Marine Corps and Coast Guard, our Navy is delivering integrated all-domain naval power across the globe. And we are doing this in the midst of a global pandemic.

The U.S. Navy Deployed Around the World



Even with many parts of the world shut down in response to COVID-19, the worldwide demand for naval forces required us to maintain a high operational tempo, which included eight major Carrier Strike Group and Expeditionary Strike Group deployments in FY-20. Since I appeared

before you last year, the Navy has continued to steam and fly from the Arctic Circle to the Cape of Good Hope and from the Caribbean to the South China Sea. Our hospital ships provided relief to American communities; we executed underway training events for deployment certification; and we conducted exercises as part of the Joint Force and alongside our allies and partners. Our ability to sustain a forward posture rests on the individual commitments of over 600,000 Sailors and Navy civilians and their families. Their adaptive spirit and commitment to COVID-19 protocols kept the force healthy and our ships at sea.

The pandemic taught us a great deal about operating in a challenging environment. Our entire force learned how to adapt as we iterated and honed our COVID-19 Standardized Operational Guidance. Our logistics teams learned what it means to sustain our fleet with limited means. Our information technology workforce quickly scaled virtual private network licenses and supported the roll-out of virtual and remote environments to keep us connected. Our dedicated, patriotic shipyard and aviation depot workforce adapted to our COVID-19 protocols, came to work, and got our ships and aircraft back to sea. And we learned how brittle portions of our defense industrial base could be if not postured appropriately. We took every opportunity to learn throughout this dynamic year – and shared those lessons with our allies and partners – to improve the resiliency of our Navy in the years ahead.

We certainly did not address the challenges of continued maritime operations during this pandemic alone. Our broader Navy team – which includes Congress, industry, research institutions and laboratories, and our international allies and partners – overcame so much to design, build, and sustain our fleet through this pandemic. We cannot thank all of you enough. As our nation – and the world – emerges from this pandemic, we will continue to face the daunting challenge posed by long-term competition with the PRC and Russia. And we will need your support, now more than ever, as we modernize and recapitalize the Navy to sustain our enduring advantage at sea.

Timeless Roles of Sea Control and Power Projection

American security and prosperity is underpinned by the U.S. Navy's ability to control the seas and project power ashore in conflict. The world would be a less prosperous, more dangerous place if the seas were not open and free for the benefit of all. Every day, combat-credible naval forces operate forward to reassure our allies and partners, confront malign behavior, and deter potential adversaries from escalating into conflict. We preserve a stable and secure global maritime environment and advance prosperity through transit, trade, and the lawful pursuit of natural resources. Our ability to carry out these essential functions comes from our ability to credibly control the seas and project power ashore in conflict. These missions are timeless.

Controlling the seas protects friendly shipping, provides the Joint Force and our allies freedom to maneuver, and denies the use of the seas to our adversaries. In the past, sea control required us to

fight our adversaries on, under, and above the sea. Now, in our digital age, it requires us to also fight in space, cyberspace, and across the electromagnetic spectrum. In short, modern sea control demands the all-domain power of our Navy and Joint Force.

America also needs a Navy that can influence events ashore. This starts with deterring nuclear attack against our nation with our ballistic missile submarines – the most survivable leg of the nuclear triad. Projecting power and influence from the seas is vital to deterring aggression and resolving crises on acceptable terms to the United States. Our Navy must field capabilities in all domains – employing information warfare, cyber capabilities, special operations, and a host of conventional weapons launched from on, under, and above the sea – to convince our rivals they have no viable means of achieving their objectives through force. Our sea control and power projection capabilities, alongside our strategic deterrent, provide America and our allies their surest guarantee of peace. If the Navy fails to deliver a fleet that can control the seas and project power, our nation will lack the conventional deterrent needed to protect America and our allies and expand economic opportunities for the American people.

While America’s need for sea control and power projection capabilities has not changed over time, how we operate and what we operate with is changing. Emerging technologies have expanded modern fights at sea into all domains. Ubiquitous and persistent sensors, advanced battle networks, and long range weapons have made contested spaces more lethal. Advances in artificial intelligence have increased the importance of achieving decision superiority in combat. Additionally, autonomous systems have shown promise for an effective and affordable way for us to fight and win in contested spaces. These technologies offer clear advantages to the militaries that integrate them first. America cannot afford to fall behind.

Meanwhile, our fleet is adapting to operate in new ways. To preserve and promote the rules-based order, we are taking a more assertive posture in daily operations. We are challenging excessive maritime claims by sailing and flying wherever international law allows and expanding our decision advantage by persistently monitoring activities at sea to expose malign behavior that undermines the rules-based order. Our cyber teams are actively defending our networks and projecting power in the cyber domain to maintain a tactical advantage against our rivals. Furthermore, we are dynamically deploying our forces forward to deter our rivals from making incremental gains and to work alongside our allies and partners to keep the seas free and open.

Should deterrence fail, our Navy stands ready to confront aggression and decisively win a fight. Using concepts such as the Joint Warfighting Concept and Distributed Maritime Operations (DMO), we will mass sea- and shore-based fires from distributed forces. By maneuvering distributed forces across all domains, we will complicate adversary targeting, exploit uncertainty, and achieve surprise. Controlling the seas by constraining or destroying adversary fleets will enable freedom of movement at sea and power projection ashore. Working with the Joint Force and our allies and partners, Navy submarines, aircraft, and surface ships will launch massed volleys of networked weapons to overwhelm adversary defenses and compel a termination of

conflict on favorable terms. **Delivering an all-domain fleet that is capable of effectively executing these concepts is vital to maintaining a credible conventional deterrent with respect to the PRC and Russia.**

Delivering All-Domain Naval Power

To deliver the all-domain naval power America needs, our Navy must evolve our capabilities and grow our capacity. The Navy – working in close collaboration with the Joint Force – has studied, identified, and prioritized the future capabilities we need to execute our evolving warfighting concepts and maintain a credible deterrent with respect to the PRC. The PRC has invested heavily in anti-access capabilities. In conflict, they will seek to contest all domains and hold our forces at risk with sophisticated networks of sensors and a large number of long-range, precision weapons. To effectively deter the PRC as part of the Joint Force, our fleet must be imbued with distributed weapons of increasing range and speed, more magazine depth, more mobility, more stealth and deception, and more sustainability. This requires a deliberate adjustment to our naval force structure.

Based upon multiple rigorous, threat informed assessments conducted over the past five years – both inside and outside the Navy – it is my best military advice that America needs a larger Navy to counter the People’s Liberation Army Navy (PLAN) that is growing in both capability and capacity. To fill critical Joint Force demands, the Navy requires greater numbers of submarines, smaller and more numerous surface combatants, more lethal offensive capabilities, a host of integrated unmanned platforms – under, on, and above the seas – and a modern strategic deterrent. We also need a robust network infrastructure to link our distributed forces together and resilient logistics to sustain them. **In short, a balanced, hybrid fleet of manned and unmanned platforms is the most effective and affordable way to meet the security demands of our nation.**

Analysis has also confirmed that numbers are not the only factor – the composition and combat effectiveness of our fleet matters more. Naval power is not a function of ship numbers alone, nor is it simply a result of the lethal systems employed from those ships. It comes from the concepts that shape how we fight and the means to maintain, train, and equip our forces to win in combat. And it fundamentally comes from developing Sailors – the true source of our naval power – who can outthink and outfight and adversary.

Within the scope of the President’s FY-22 Budget request (PB-22), we are maximizing our Navy’s contribution to the Joint Force. We are prioritizing a fleet that is ready for combat over a larger fleet that is not ready to fight. We are divesting of legacy assets that do not bring sufficient lethality to the fight and investing in next-generation platforms and systems that close critical Joint capability gaps. Meanwhile, we are prioritizing the training and education needed to prepare our Sailors to outthink and outfight any adversary. And we are using every dollar we can to sustainably grow the fleet. As we prepare our fleet for long-term competition with the PRC,

we are focused on key objectives in the following areas – readiness, capabilities, capacity, and our Sailors.

Readiness

To sustain America’s advantage at sea, we must deliver combat-ready forces to deter aggression and keep the seas free and open. Deploying battle-ready ships, submarines, and squadrons around the world—from the South China Sea to the Arctic—deters aggression, reaffirms our commitment to allies and partners, and keeps the seas open and free. Readiness underpins our forward-engaged posture and touches all elements of the Navy, from our shipyards and aviation depots to the steaming and flying hours our Sailors use to hone their skills. With nearly 70 percent of the fleet we will have in 2030 already in service today, affordably sustaining our ships and aircraft is vital to meeting future demands. This is why PB-22 places such an emphasis on critical components of our Navy’s readiness.

Our force is in a higher state of readiness today than prior to 2017 with a healthier surge force, improved shipboard manning, better training for our crews, and improved parts availability. Increased funding, combined with cultural reforms throughout the fleet, have arrested the decline in our readiness and put us on a path to recovery. Still, we have much work to do.

Deploying combat-ready forces starts with taking expert care of our platforms. To this end, we are using data-driven reforms to improve maintenance processes, increase operational availability, and save taxpayer dollars. We have seen tremendous success with these methods in our aviation community. For years our F/A-18 aircraft were stuck at a 55 percent mission capable rate. At the time, we assumed only an increase in inputs – aircraft, manpower, or parts – could raise the number of ready jets available to our pilots. However, in FY-19 we shifted our focus to cultural reform and used the power of data-analytics to raise our F/A-18E/F mission capable rate to 80 percent – a rate we have continued to maintain throughout all of FY-20 and into FY-21. With higher numbers of aircraft available, our aircrew are more ready to fly and fight than at any point over the last decade.

We are now applying a similar approach to improving ship maintenance. On-time private shipyard surface ship availability completion rates rose from 37 percent in FY-19 to 67 percent in FY-20. Meanwhile, public shipyards reduced maintenance delay days by over 75 percent from FY-19 to FY-20. To generate these gains, we modified contracting strategies, increased dry dock capacity, and optimized facility and pier layouts. We improved planning and adjusted maintenance durations to better align workload with shipyard capacity. We also leveraged authorities provided by Congress, such as the three year “Other Procurement, Navy” pilot program, to increase flexibility and stabilize demand for our shipyard workforces.

Unfortunately, COVID-19 impacted our recent ship depot maintenance gains – as the need to protect our people caused delays in on-time completion of ship maintenance. Half of our

maintenance availabilities in both public and private shipyards are trending late due to workforce capacity reductions. To mitigate further impacts in our private shipyards, we accelerated awards of contract options and improved the cash positions of the industrial base. For our public shipyards, we mobilized over 1,300 skilled Navy Reserve Sailors, increased overtime usage, and rebalanced future workloads to address these delays. These efforts have stemmed the disruption COVID-19 caused to our shipyard maintenance and will mitigate work spilling over into FY-22. We are methodically and safely returning to normal operating conditions. Though some delays will continue to persist until the shipyards return to full strength, the production workforce in both public and private shipyards is returning to pre-pandemic levels.

Sustaining our advantage at sea requires us to make targeted investments in critical infrastructure. This includes ensuring our worldwide constellation of bases are postured to sustain and support our fleet at sea. Of particular importance are critical elements of our national defense industrial base such as our public shipyards and aviation depots. Our Shipyard Infrastructure and Optimization Program (SIOP) provides a strategic roadmap for necessary investments in dry-docks, capital equipment, and optimizing the layout of these vital national assets. We have already broken ground on a perimeter floodwall at Norfolk Naval Shipyard, and are building a new lock system at Portsmouth Naval Shipyard with many more projects on the horizon. We are also recapitalizing our aviation depot infrastructure. Through our Naval Aviation Fleet Infrastructure Optimization Plan (FIOP), we are developing a 10-year Master Plan that provides our aviation depots the capacity to sustain and modernize our aircraft, engines, components, and support equipment. Meanwhile, we are also transforming our Navy enterprise shore network infrastructure into a secure, resilient digital platform.

Sustaining our advantage also requires us to master all-domain fleet operations. To credibly deter aggression, we must integrate the all-domain power of the Navy with the Joint Force and our allies and partners. This starts with providing our Sailors adequate ranges to train for the high-end fight. The speed and scale of a potential fight for control of the seas has changed. The size of our premier Carrier Air Wing and SEAL training center – the Fallon Range Training Complex (FRTC) – is no longer sufficient. Within existing capacity, our Sailors cannot sufficiently train with longer-range weapons or practice the tactics and techniques they will need to employ against a near-peer threat. We will continue to work with Congress, tribal leadership, local communities, and key stakeholders in the year ahead to modernize the FRTC and ensure our Sailors have the infrastructure they need to train to win in combat.

Mastering all-domain fleet operations also requires a rigorous learning campaign. We are conducting a series of fleet battle problems, wargames, and exercises to refine our concepts and capabilities. For example, we recently conducted our most complex exercise to date involving unmanned systems, which brought unmanned surface vessels and aircraft under the control of a *Zumwalt*-class destroyer - the *USS Michael Monsoor* (DDG-1001). This summer we will conduct Large Scale Exercise 2021 – bringing together our fleets from across the globe to test out key components of our DMO concept. Overall, our campaign of experimentation and learning

prepares our Sailors for high-end warfighting and drives updated joint concepts, fleet requirements, and future naval capabilities.

Sustaining our advantage at sea depends on developing, training, and fielding battle ready surface force crews. As of the end of 2020, we have fully implemented all 111 Comprehensive Review/ Strategic Readiness Review recommendations. Over 1,700 junior officers have now graduated from our new Junior Officer of the Deck course with training aligned to International Maritime Organization's standards. We are broadening the use of instructor-led virtual reality training through the construction of two Mariner Skills Training Centers and the modernization of our Integrated Navigation Seamanship and Ship handling Trainers. With the support of Congress, we are investing in and employing meaningful reforms in how we man our surface fleet, train our crews, schedule and execute workups and deployments, and how we equip and maintain the surface force.

We will continue to invest in these key priorities and drive maximum efficiency from every dollar to deliver the naval power America needs. We are currently meeting operational demands while adapting to protect our Sailors and their families. But readiness recovery remains a long game and will require sustained funding over time to fully recover.

Capabilities

To sustain America's advantage at sea, we must deliver a more lethal and better connected fleet. The fight at sea is evolving rapidly. Emerging technologies have expanded into all domains and made contested spaces more lethal. Artificial intelligence and machine learning, autonomy, quantum computing, additive manufacturing, and new communications technologies are transforming the maritime environment. These changes emphasize the need for the Navy to develop sea control and power projection capabilities at speed and scale. That means more lethality, more survivability, better combat logistics, and a resilient network that connects command and control nodes, platforms, weapons, and sensors all together.

PB-22 prioritizes capabilities that amplify the fleet's ability to disperse and project synchronized lethal and non-lethal effects from multiple axes and in all domains. To achieve this vision, we are developing a Naval Operational Architecture (NOA) that integrates with Joint All-Domain Command and Control. The NOA is a collection of networks, infrastructure, data, and analytic tools that connects our distributed forces and provides decision advantage. Beyond recapitalization of our undersea nuclear deterrent, there is no higher development priority. We launched Task Force Overmatch this past October to align resources and expertise from across our force to field the NOA by the middle of this decade.

Developing longer-range, higher-speed weapons – such as hypersonic missiles – will give our warfighters the competitive advantage they need. Hypersonic missiles change the risk calculus for our rivals by providing a non-nuclear sea-based prompt, global strike capability. We are

working in close partnership with the Army to deliver a truly-joint, conventional hypersonic weapon across land and sea-based platforms. We conducted a successful test of our common hypersonic glide body in March 2020, which keeps our Conventional Prompt Strike program on-track to field this game changing capability by the mid-to-late 2020s. PB-22 signals our strong support for developing this vital joint capability.

Our adversaries are attempting to deter us with massive numbers of sea- and shore-based missiles. To complicate their ability to understand the potential battlespace, we are investing in Counter-Command, Control, Communications, Computers, Cyber, Intelligence, Surveillance, Reconnaissance, and Targeting systems. Our response also includes fielding an inexhaustible directed-energy system that accurately and reliably defeats anti-ship cruise missiles (ASCM). The High Energy Laser Counter ASCM Project is expediting the development of critical technologies to protect our ships from the cruise missile threat. At the same time, we are pursuing other directed energy initiatives in parallel – such as the 150 kilowatt class laser weapon system – to accelerate learning and fielding of this critical capability. The recent demonstration onboard *USS Portland* showed how we can disable an unmanned aerial vehicle using directed energy. We will continue to invest in laser technology and non-kinetic defensive systems to increase fleet survivability while maintaining free magazine space for our offensive weapons.

Our logistics enterprise and strategic sealift capacity are also vital to sustaining our advantage at sea and keeping the Joint Force operating forward. Accordingly, we are modernizing networks and communication and navigation systems of our Combat Logistics Force to best posture this aging fleet to operate in a contested environment. We are also investing in increased fuel distribution capacity as well as improvements in our expeditionary rearm capabilities and resuscitative care surgery systems. Specific to the Sealift Fleet, which provides inter-theater lift capability to the Joint Force, we have accelerated recapitalization, leveraging a “buy used” strategy to replace our least ready vessels, and invested in service life extension for the net effect of increased readiness. We are grateful for Congress’s authorization to affordably revitalize our Sealift Fleet with used vessels. We are moving ahead with purchasing two used ships in 2021 and five used vessels in PB-22, signaling our continued support for this approach. We will continue to work with Congress to efficiently recapitalize this critical capability in the years ahead and request that Congress remove remaining obstacles to used ship procurement. Our longer-term plan is to construct new vessels to replace prepositioned vessels in the Maritime Prepositioning Force as those ships begin to reach expected service life at the end of this decade.

Pivoting toward the future and resourcing needed capabilities – especially in the Indo-Pacific region – requires tough choices. To invest in the next-generation capabilities we need to meet the challenge of near-peer competitors, we need to divest of our legacy capabilities that no longer bring sufficient lethality to the fight. We will work transparently with Congress to make these critical divestment decisions and free up resources to modernize the fleet.

Capacity

To sustain America’s advantage at sea, we must field a larger, hybrid fleet that is designed for sea control and power projection. To provide a credible conventional deterrent in peace and win in war, we need to sustainably generate cost-effective platforms and mature unmanned systems. This transition will increase the capacity of the fleet, expand our ability to distribute our forces, and rebalance the fleet away from exquisite, manpower-intensive platforms and toward smaller, less-expensive ones. By growing a hybrid fleet – on, above, and below the seas – we will ensure our success across the continuum of day-to-day competition, crisis, and conflict.

As we design and build a larger, hybrid-fleet, our number one acquisition priority remains delivering the *Columbia*-class ballistic missile submarine on time. No mission is more important to our nation than providing a secure and reliable strategic nuclear deterrent. Our ballistic missile submarines are the most survivable portion of our nuclear triad and provide an assured response to any strategic nuclear attack on the United States. With our *Ohio*-class submarines nearing the end of their service life, we cannot afford to get behind in delivering on the *Columbia program*. The first submarine is starting construction this year with the second boat on-track for procurement in FY-24. We will continue to drive affordability, technology development, and integration efforts to ensure the program remains on schedule and our ballistic missile submarines remain on patrol in the decades ahead.

Meanwhile, our future fleet places a premium on expanding our undersea advantage. During conflict, sea control and sea denial from beneath the waves are among our Navy’s core advantages – we cannot afford to yield any ground to our competitors. We are now planning to construct the tenth Block V *Virginia*-class submarine with a Virginia Payload Module (VPM). PB-22 underscores our sustained support for procuring two *Virginia*-class submarines per year. Sustainable production of the *Virginia*-class submarine, in addition to the development of a follow-on attack submarine program, is key to sustaining our undersea advantage in the years ahead.

As we shift our focus toward smaller platforms that can operate in a more dispersed manner, there is a clear need to rapidly incorporate unmanned systems into our fleet architecture. They expand our intelligence, surveillance, and reconnaissance advantage, add depth to our missile magazines, enhance fleet survivability, and provide more risk-worthy vessels to operate inside the weapons engagement zone of any adversary. In other words, they give our operational commanders flexible and effective options to maneuver within a contested environment. The Navy is taking a deliberate approach to developing unmanned systems through our Unmanned Campaign Framework. Our framework lays out an overarching vision on how we intend to produce tested and proven systems at scale, as well as develop the core technologies required to successfully integrate unmanned systems on, below, and above the sea. By the end of this decade, our Sailors must have a high degree of confidence and skill operating alongside proven

unmanned platforms. The combined capability of manned and unmanned systems will provide our operational forces the advantage we need in a future fight.

Nuclear powered aircraft carriers are the most survivable and versatile airfields in the world. For decades to come, they will remain a cornerstone of the Navy's forward presence, sea control, and power projection capabilities. *USS Gerald R. Ford* (CVN 78) represents a generational leap in the aircraft carrier's capacity to project power. Over the past year, *Ford* has been underway, executing over 7,100 total launches and recoveries with the Electromagnetic Aircraft Launch System and Advanced Arresting Gear. Additionally, over 30,000 pounds of ordnance has been moved, loaded and expended by embarked F/A-18 aircraft using Advanced Weapons Elevators (AWEs). Seven of *Ford's* AWEs have completed certification and the remaining four are on track to certify by this summer. We expect *Ford* to be cleared for blue water operations later this year and ready for employment in 2022.

The striking power of our Carrier Air Wing is vital to controlling the seas and projecting power in a high-end fight, and the adaptability of the air wing keeps our carriers relevant for 50-plus years of life. The air wing of today is currently transforming with the addition of the F-35C, the E-2D Advanced Hawkeye, and the CMV-22B Osprey. PB-22 increases our F-35 inventory to get the fleet closer to a fourth generation and fifth generation fighter mix. Carrier Air Wing TWO – which includes the first operational F-35C squadron – is currently undergoing pre-deployment training and will deploy later this year. Meanwhile, we are rapidly developing the MQ-25 Stingray – the Air Wing's first unmanned platform – to extend the striking range of our fleet. And we are laying the groundwork for the highly networked air wing of the future – a 6th generation family of systems that leverages manned-unmanned teaming – which will deliver overwhelming firepower in contested spaces in the years ahead. Delivering a 6th generation family of systems is vital to keeping pace with PRC fighter development and sustaining our advantage over the seas. America cannot afford to fall behind.

We are also going through a surface combatant reset on ship design and construction to provide the next enduring hull forms for small and large surface combatants. Our surface combatant inventory is aging with limited options for future upgrades. At the same time, our future fleet design places an emphasis on greater numbers of small surface combatants. The *Constellation*-class frigate is a versatile, multi-mission platform capable of supporting day-to-day operations and the high-end fight. We began cutting steel on *Constellation* this year, and we are excited to incorporate this ship into the fleet in 2026. Meanwhile, the future large surface combatant (DDG(X)) will bring the space, weight, and power needed to incorporate future capabilities for the high-end fight such as high power lasers, long-range strike, and sensor growth. Together, both ship classes will bring more lethality, more survivability, more endurance, and more self-sufficiency to the fleet.

We are not just building better ships – we are building ships better. The Navy is mindful of past shipbuilding efforts that did not perform to plan, which is why we are moving ahead in ways

that deliberately reduce risk. Early and sustained industry involvement, robust land based testing, and focused design maturity are foundational to our shipbuilding approach. We appreciate the strong support from Congress in FY-21. Delivering ships on time, on budget, and within performance targets is our priority.

Sailors

To sustain America’s advantage at sea, we must recruit, develop, and retain a seasoned team of naval warriors. The strength of our naval power depends on the strength of our Sailors – active and reserve, uniformed and civilian. In the long-term strategic competition we face today, every Sailor must be able to outthink and outfight any adversary. Our Navy must remain the best trained, finest educated, and most ready maritime force in the world. We recognize the strength we gain from a diverse force and our actively pursuing combat-minded Sailors with varied backgrounds, experiences, and thought to build up our readiness and resilience. As we take care of our Sailors, we will accelerate their development and harness their talents to keep America safe and prosperous.

As we modernize our fleet, we are modernizing our talent management systems to better recruit, train, retain, and support our Sailors. We achieved our accession goal of 39,600 new active duty Sailors in FY-20 to further improve afloat manning and filled operational billets to their highest point in six years. PB-22 makes a slight reduction in our end-strength with the divestment of legacy ships. However, the demand for a highly trained, diverse force has not abated. We are grateful to Congress for the generous pay raises and personnel reforms. The Navy is leveraging both – alongside our talent management initiatives – to better recruit and retain our incredibly talented force. Meanwhile, we continue to transform our MyNavyHR infrastructure to rapidly deliver services to our Sailors and families at a reduced cost. This includes the DOD-leading mobile applications that help with the challenge of military moves and finding childcare or housing and the MyNavy Career Centers which proved vital during the COVID-19 pandemic.

We are continuing to cultivate a culture of excellence across the fleet, which builds resilience and strengthens our Navy’s enduring standards of professional competence and personal character. Over the past year, our culture of excellence campaign has strengthened the signature behaviors that define our service to prevent the occurrence of destructive behaviors – such as sexual harassment or discrimination. At the same time, we have maintained a resolute focus on preventing the scourge of sexual assault within our ranks. PB-22 increases our civilian Sexual Assault Prevention and Response workforce to provide greater support for our Sailors and drive down investigation timelines. Overall, we are providing more training, more tools, and more resources so every Sailor receives the support they need.

We are also actively building a workforce that represents the full diversity of America and the strength it brings. Task Force One Navy (TF1N) was launched last year to analyze and evaluate issues in our military that detract from Navy cohesiveness and readiness. The task force released

their report in January 2021 and highlighted 56 recommendations that will elevate a culture of diversity, equity, and inclusion throughout the fleet. Respect and the promise of opportunity are core to our Navy, and we are committed to implementing TF1N reforms and ridding discrimination, sexism, and other forms of structural biases from our ranks.

Without a doubt, the vast majority of Sailors in the U.S. Navy serve every day with honor, character, and integrity. However, we cannot be under any illusions that extremist behaviors do not exist in our Navy. As directed by the Secretary of Defense, each command across the fleet conducted a stand down to address extremism within our ranks. Racism, injustice, indignity, and disrespect keeps us from reaching our potential – an inclusive, respectful, professional fighting force that answers the Nation’s call with unparalleled readiness and lethality. The stand down was only a starting point; this will be an ongoing fight. We are committed to eliminating extremist behavior and all of its corrosive effects on our fighting force.

The intellectual investments we make in each Sailor provide a key advantage over our rivals. To strengthen our advantage in this area, we are aligning the curriculum and research of the Navy’s education enterprise to deliver warfighting advantage in our operations at sea and in how we design, deliver, and generate our forces. Additionally, the Naval Community College is on track to provide our Sailors opportunities for education in fields that strengthen the service. Maintaining educational relationships with our international partners through exchanges and scholarships remains a priority for us to deepen enduring relationships and broaden understanding between likeminded navies.

To ensure our Sailors are ready for any challenge on the horizon, we are scaling Ready Relevant Learning (RRL) and Live, Virtual, Constructive (LVC) training. RRL provides the right training, at the right time, in the right way for our Sailors. It replaces “one-and-done” classroom training events with career-long learning continuums through a mix of in-classroom instruction and modern training methods. LVC technology blends the intensity of underway operation with high-fidelity synthetic training, allowing our Sailors to master high-end tactics in secure and controllable conditions. Our force will always fall back to their baseline under the stress of combat – RRL and LVC will raise their baseline.

Conclusion

Let there be no doubt – America is a maritime nation. Our security and prosperity are inextricably linked to the seas. For 245 years – in both calm and rough waters -- your Navy has stood the watch to protect our homeland, preserve the freedom of the seas, and defend our way of life. For generations, we have provided a bulwark against aggression and have underwritten the international order that led to an unprecedented era of peace and prosperity. Now that order is under threat.

As the President stated, we are at an inflection point. The PRC's rapid military growth and aggressive behavior at sea has put it on a trajectory that will challenge our maritime advantage in the years ahead. Our naval forces – and the American people – must maintain a clear-eyed resolve to compete, deter, and – if necessary – defeat our rivals, while accelerating the development of a larger and more lethal future fleet. We must do so while integrating more closely with the Marine Corps and Coast Guard to generate integrated all-domain naval Power. Only by working as a team and taking care of our people will we be able to defend the nation in the years ahead. We must move deliberately, but also with speed. Our actions this decade will shape the maritime balance of power for the rest of this century.

On behalf of more than 600,000 active and reserve Sailors and Navy Civilians, thank you for giving me the opportunity to testify today. I am grateful to this committee, and to all of your colleagues in Congress, for your steadfast commitment to the Navy. We look forward to sailing alongside you to sustain our advantage at sea.