

NAVY LEAGUE OF THE UNITED STATES

2021-2022 MARITIME POLICY



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The Navy League's Maritime Policy statement is produced by the organization's Maritime Policy Committee. The analyses and recommendations therein are derived from multiple sources, including the expertise and decades of experience of our members, open-source materials and public information from the seagoing services. The views expressed in this document are those of the Navy League of the United States and do not necessarily reflect the official views of the U.S. Navy, Marine Corps, Coast Guard or Maritime Administration.

EXECUTIVE SUMMARY

America's economic prosperity and national security depend on free access to global sea lanes and oceanic shipping routes, a reality recognized by President Theodore Roosevelt, who assisted in the founding of The Navy League of the United States as a means of ensuring Americans never forget how their supplies and products reach our shores, how we support millions of jobs dependent on global trade, and how we keep our enemies an ocean's length away. The Navy League of the United States exists to educate the American public about the importance of the sea services to include the Navy, Marine Corps, Coast Guard, and U.S.–flag Merchant Marine.

The 2018 National Defense Strategy (NDS) summarized this new great power and near peer threat environment, while also emphasizing that lower-end malign actors still threaten regional and global stability. To achieve dominance in this increasingly hostile global environment will require a significant focus on our maritime forces with substantial investments to achieve technological superiority, maintain undersea dominance, facilitate greater integration between the naval and Marine Corps forces to operate within enemy weapon system threat range, ensure adequate sealift capacity for large-scale military conflict, and support the men and women who make up the sea services. Let us understand fully that meeting the challenges of a changing world will require significant investment in the people and technologies of the future.

It is people — men and women, sons and daughters, spouses and military families — that make up the core of the sea services. With a smaller and smaller pool of citizens serving, the sea services must build inclusive systems and infrastructure, along with robust youth programs to educate and attract the best and brightest from the burgeoning generations eager to take their place alongside the patriots of the past. But we must not only attract new talent, we must retain the dedicated and talented men and women who choose to serve by remembering that their families also serve, and providing the support prescribed by such sacrifice. Sea service plans Sailor 2025, Marine Force Design 2030 and the Coast Guard's Human Capital Strategy recognize we also cannot afford to lose talented servicemembers due to discrimination and inequality.

In a time of growing threats, it is imperative American leadership acknowledge we cannot go it alone. To that end, it is long overdue that the United States ratify the Law of the Sea, an international convention that establishes the basis for maritime rules. Our country utilizes it, and our leaders cite it, but we are not a party to it. Ratifying the Law of the Sea will give us greater legal leverage when confronting China's aggressive illegal fishing practices or Russia's attempts to dominate natural resource extraction in the Arctic.

As the Navy is forced to confront near-peer competitors, it is refocusing on its core mission while reimagining operational concepts by implementing distributed maritime operations. Instead of maritime forces concentrated around large capital ships, they will use the whole maritime operating area by dispersing assets. Along with increasing the lethality and survivability of U.S. maritime forces, this complicates enemy decision making. To successfully implement this strategy, the Navy must modernize while restoring readiness and increasing capacity. It must continue major investments in research and development, in addition to expanding the size of the fleet and the capability of its platforms. To that end, Chief of Naval Operations Adm. Michael Gilday has determined the Columbia-class submarine is the service's No. 1 acquisition priority, followed closely by an integrated and resilient command-and-control network. Additionally, long considered the Achilles' heel of our sea service wartime capabilities, the strategic sealift fleet is long overdue for modernization.

The Navy League supports the bold leadership of the 38th Commandant of the Marine Corps and his Planning Guidance pursuing sea control and denial, and beginning with the individual Marine. Under this leadership, the Corps is getting lighter, more agile and more mobile to pursue amphibious operations in the littorals. To achieve this, the service is proposing profound cuts to reduce total end strength, with emphasis on units such as tank and heavy airlift. It is also adding more unmanned air and sea systems and is laser-focused on developing long-range precision fires. However, the Navy-Marine Corps team will not be able to build the maritime forces of the future without support from Congress. This means not just providing money to support the force of the future, but also not opposing divestments in systems and infrastructure solely for economic reasons.

As the premier global multi-mission maritime force, the Coast Guard is the ultimate return on \$12 billion of taxpayer investment. Demands on its 11 statutory missions continue to grow, from law enforcement and fisheries protection, to search and rescue and national defense. Additional funds are needed to meet these growing prerogatives while maintaining basic operations. The Coast Guard also needs investment in information technology and cybersecurity to secure the Maritime Transportation System, through which \$5.4 trillion in annual economic activity flows. After making do with 30- to 40-year-old ships, the service is successfully integrating new vessels, but consistent funding must continue for full recapitalization of the backbone of its oceangoing fleet and inland waterways vessels. Thanks to Congress, the Coast Guard is building Arctic capacity with a new heavy icebreaker, but it is on a tight timeline for deploying to the fleet. The service will ultimately need six icebreakers to meet the demands of the nation.

The U.S. -flag Merchant Marine, the umbrella term for all civilian government-owned and commercial ships under the U.S. flag, is the unseen foundation of our economy and armed forces. National Security Directive 28 (NSD 28) calls for the government to "ensure that the U.S. maintained the capability to meet sealift requirements in the event of crisis or war," and we are currently falling short of that goal. Government-owned sealift fleet readiness has fallen to dangerous levels and tanker capacity is severely limited. U.S. mariners are the best in the world, trained at the national Merchant Marine Academy and six state academies, but the certification process is complicated and expensive and positions are limited. The Maritime Administration (MARAD) estimates our nation would require an additional 1,800 mariners in the event of a prolonged crisis. There are many options available for building the health of the fleet, but they will require attention and investment from the nation. Given that these investments will safeguard 30% of gross domestic product and over 650,000 jobs, the Navy League believes that the return on investment is more than sufficient.

The sea services' ability to meet the 21st century's challenges are within reach and do not require unrealistic amounts of funding or technological improvement. But they require the support of Congress, the understanding of our fellow Americans, and the continued advocacy of policymakers. They also require sustained, stable, and predictable funding. Throughout this document, we shall provide you with the rationale, justification, and national/economic security implications of specific investments in our vital sea services.

AMERICAN SEA POWER Key to National Prosperity and Global Security

The National Security Strategy and the Department of Defense's (DoD's) 2018 National Defense Strategy clearly describe a strategic environment that has reverted to an era of "great power competition" for the first time since the Cold War. Adversarial great power states such as China and Russia are destabilizing the rules-based international order by exploiting widening technology gaps and disorganized U.S. foreign policy decisions. The weakening of traditional alliances has emboldened both our state and non-state adversaries. For these reasons and many more, it is essential for America to chart a bold course ahead with the future force structure and revitalization of its Navy, Marine Corps, Coast Guard and U.S.-flag merchant fleets. Sea power is America's enduring and unique advantage.

Challenges to the status quo do not emanate solely from competition among nation-states and are no longer found only in traditional warfare domains. They are embodied by a complex set of state, nonstate, transnational and regional actors, combined with significant impacts from increasingly destructive climatic events and transformative shifts in the world's population and demographics. As a maritime nation dependent on the free movement of goods and people across the oceans, the United States cannot afford to lose control over these global concerns.

A rising and more confident China is making significant daily investments in its sea services, building a robust and capable fleet of cruisers, destroyers, frigates, polar icebreakers and its first domestically constructed aircraft carrier. It continues to exert sovereign claims in international waters, building artificial islands in the South China Sea by dredging reefs and building airfields and other military assets on these "islands." These structures are a direct provocation to China's neighbors. Its Maritime Silk Road initiative is replicating American intermodal systems by investing in other nations' ports, maritime communities, and infrastructure — building influence to trap American partners and coerce them into greater integration with China's economic and military ambitions.

Russia's illegal invasion and annexation of Ukrainian territory, ongoing military operations in Syria, growing influence in the Baltic States and increasingly sophisticated cyberattacks on the United States are challenging American interests, along with our partners and allies. Russia has also invested significant resources in its own maritime fleet alongside advancements in cutting–edge technology such as hypersonic weapons. Its new submarine classes continue to demonstrate significant improvements in technology and sophistication. Russia is committed to destabilizing inter– national order to further its authoritarian vision and end the United States' role as the premier global superpower.

Both Russia and China are developing layered defense systems that could significantly constrain American operations during a potential conflict. North Korea and Iran also remain persistent and unpredictable threats. Iran's harassment of U.S. Navy vessels is constant and threatens one of the most critical oil transit lanes in the world in the Strait of Hormuz. Both North Korea and Iran continue to sponsor terrorist activities and act as malign agents globally. While these known threats show no signs of abating, other transnational threats, cyberattacks, and severe-weather events linked to climate change, continue to rapidly expand in scope and severity. The United States must be prepared to face these new threats with greater strength and innovation than in the past.

American sea power plays a key role deterring and mitigating these threats with its inherent flexibility and lethality. Whether the threat be man-made or a force of nature, American maritime forces are called on first. This constant demand has put significant strain on the sea services to maintain readiness and capability to respond to a wide range of operations.

The mandate for the United States is clear: invest in our sea services or risk abrogating our standing as a great power. Our sea services must be ready and remain forward deployed to operate freely without obstruction on the ocean commons, and our merchant fleet must have the capability to provide war surge capacity by maintaining peacetime capacity. Finally, our shipbuilding industry must grow in capacity and resilience to face the challenges of great power competition.

The four pillars outlined in the current National Security Strategy are timeless and clearly demonstrate the need for strong American sea power, regardless of which party controls Congress or holds the White House.

PILLAR I: PROTECT THE AMERICAN PEOPLE, THE HOMELAND AND THE AMERICAN WAY OF LIFE

Sea power allows the United States to play the away game, rapidly responding to threats around the globe and taking the fight to the enemy in order to protect the American people. "The Navy the Nation Needs," outlined by 31st Chief of Naval Operations Adm. John Richardson, and furthered with the vision of the 32nd CNO, Adm. Mike Gilday in his Fragmentory Order One, describe how the U.S. Navy must build. For the last five years, studies have recommended expanding the naval fleet and investing in next-generation aircraft and weapons to secure dominance in the maritime domain. Under the direction of 38th Commandant Gen. David Berger, our Marine Corps has charted a new and bold course that requires immediate bipartisan support. The Coast Guard protects our shores from a host of regional and domestic threats, and assumes an increasing role in the Arctic as that region continues to open into a new maritime common. The ships, men and women of the U.S.-flag fleet give us the capacity to sustain and support any long-term engagements. They cannot be reconstituted overnight and represent a critical strategic element of risk mitigation during unexpected or protracted events around the world.

PILLAR II: PROMOTE AMERICAN PROSPERITY

International trade continues to account for 30% of the U.S. economy, and over 99% of cargo tonnage moves by sea. American prosperity requires open and secure sea lanes and the most effective guarantee is American hulls in the water. The consistent and persistent presence of the U.S. Navy, Marine Corps, Coast Guard and U.S.-flag Merchant Marine guarantees hard-won maritime security and remains a critical and visible deterrent against those who seek to undermine it. A healthy U.S.-flag fleet and Navy force structure designed for a contested environment requires a congressional focus on innovation in our shipbuilding industrial base.







Hospital Corpsman 2nd Class Shane Miller, assigned to Fleet Surgical Team 9, prepares a COVID-19 vaccine at the Naval Base San Diego fitness center. Operation Warp Speed is a national initiative to accelerate the development, production, and distribution of COVID-19 vaccines, therapeutics, and diagnostics. The maritime transportation system is the most cost-effective and environmentally sound mode of moving goods. The Coast Guard ensures the safety of that system, along with the mariners that steer it. While water-borne transportation is the lifeblood of much of the nation's domestic commerce and international trade, it also underpins our economy, with nearly 50 million American jobs dependent on the openness of the global maritime environment.

PILLAR III: PRESERVE PEACE THROUGH STRENGTH

The United States has allowed its sea services to shrink after achieving unprecedented global military dominance. Introduced in 2011, the Budget Control Act set arbitrary funding limits for defense spending, creating a budget-driven defense strategy instead of one that reflects an arena of "continuous competition" as described by the National Security Strategy. We face continuous competition as rival powers seek to push forward their own national priorities over those of the United States. This new, competitive playing field will not be as binary as war and peace. These challenges can and will be fought over a variety of domains across a wide spectrum of involvement, from peacetime saber rattling to clandestine coercion to potential conflicts in multiple regions simultaneously. This new challenge will require a constant state of high readiness and a military that can deter all types of potential threats, from kinetic to cyber, from space to the depths of the oceans, and everything in between. The National Security Strategy recommends investing in modernization, capacity and readiness to ensure the United States will renew its capability to an extent that will deter potential threats.

It is imperative the United States maintain naval forces that can sustain our national commitment to global maritime security. However, the biggest impediment to maintaining that force is the consistent underfunding and excessive acquisition timelines of our shipbuilding programs. We need to produce the right quantity and quality of ships, with the right capabilities, for the right price, in economically affordable numbers over the next 30 years, for all of our sea services. While the current naval force structure calls for a 355-ship Navy as codified in law, new and bold naval force structure assessments are emerging that may need to replace the 355ship force structure assessment for something that better addresses the strategic threats emerging over the next several decades. We must make the right investments to achieve these new numbers with cost-saving acquisition strategies to best steward taxpayer dollars.

PILLAR IV: ADVANCE AMERICAN INFLUENCE

There is no doubt that the global system led by the United States has produced an unprecedented period of peace among great powers as well as the expansion of freedom and representative government around the world. In addition to championing freedom and liberty, the continued application of American "smart power" from the sea is critical in dealing with transformative issues such as shifting global demographics, massive urbanization of coastal areas and increasing population growth in many unstable regions of the world. These shifts in demographics lead to greater competition for resources, new adversarial nonstate actors, potential conflict between nations and other threats requiring leadership and action from the United States. The U.S. sea services provide unique characteristics that enable them to address these challenges. Our history of support provided to our fellow nations following natural disasters consistently demonstrates the value of our forward-deployed maritime force structure and strategy. Military exercises like Rim of the Pacific (RIMPAC) and PANAMAX bring the sea services together with our allies and partner nations and should be funded appropriately. Our Coast Guard partnerships with allies in the Pacific help those nations to better police their territorial waters and defend them from aggressive Chinese actions. There is no doubt that America's global preeminence and influence are largely the result of the actions of our sea services.

EVOLVING STRATEGIES FOR STRENGTHENING AMERICAN SEA POWER

With a new National Security Strategy that posits a return to great power competition, we must explore all the domains and strategies that will preserve American maritime superiority to meet our national security goals, both now and well into the future.

Forward presence remains an integral part of carrying out the four pillars. Forward deployment buys decision makers that most rare and important resource in the midst of a sudden crisis — time. The power and potential of a forward-deployed naval force, ready and able to respond within hours instead of days, is unparalleled. We can react quickly and pivot as needed from a wide range of complex operational and tactical capabilities. Forward presence is also one of the major contributors to America's status as a world power. It signals our resolve to protect American interests, promote global prosperity and defend freedom of navigation. Being forward deployed, the sea services provide the only forcible entry option that can operate completely independent of second-nation constraints. Positioning resources at sea, either from a distributed maritime operations (DMO) or an expeditionary advanced base operations (EABO) construct, enables maritime forces to respond rapidly and decisively at sea and ashore.

The most critical mission of our military services is maintaining a safe, secure and effective nuclear strategic deterrence capability to deter adversaries and defend the United States and our allies. As confirmed in the 2018 Nuclear Posture Review, the ballistic-missile submarine force (SSBN) provides the most survivable leg of the nuclear triad. SSBNs will be responsible for approximately 70% of deployed warheads under the current treaties. The Columbia class will be the next generation of SSBNs. With no daylight between the retirement of the Ohio class and the deployment of the Columbia class, it is critical this program be well funded to prevent delays that would leave us without a credible deterrent.

These critical advantages do come with a cost. Congress has shown its commitment by making a 355-ship Navy law and has demonstrated its commitment to Coast Guard recapitalization and proper sealift capability. However, Congress must follow through and fund these programs appropriately and consistently regardless of changes in administrations or short-term economic challenges. The growing demands on the sea services and U.S. merchant fleet continue to exacerbate readiness challenges. A larger fleet is demanded now and in the future. If Congress does not consistently provide adequate funds, our maritime forces can continue to expect deferred maintenance, less training, overstressed ships and crews, and greater risk.

The Navy, Marine Corps, Coast Guard and U.S.-flag Merchant Marine must:

- Maintain and expand as the world's finest maritime force.
- Execute needed recapitalization programs without operations, maintenance and training bearing the cost.
- Preserve the quality of the all-volunteer force and take care of our Sailors, Marines, Coast Guard men and wom-en, and civilian mariners.
- Be forward deployed as America's first response to crises around the world.

LAW OF THE SEA

As the nation's foremost citizens' organization committed to preserving U.S. security through strong sea services, the Navy League of the United States strongly supports U.S. accession to the U.N. Convention on the Law of the Sea. We urge the president to resubmit this to Congress and for the U.S. Senate to give its immediate advice and consent to this important treaty.

Joining the convention would reinforce and codify the freedom-of-navigation rights on which U.S. naval forces depend every day for operational mobility, such as unre-stricted passage through critical international straits and



U.S. Marines with Alpha Company, Battalion Landing Team 1/4, 15th Marine Expeditionary Unit (MEU), rehearse onload and offload drills on the flight deck of the amphibious transport dock ship USS San Diego (LPD 22). The Makin Island Amphibious Ready Group and the 15th MEU are conducting operations in the U.S. 6th Fleet area of responsibility.

freedom to operate in the exclusive economic zones that cover nearly 40% of the world's oceans. Additionally, the convention provides a firm foundation for maritime counterterrorism, counter proliferation and law enforcement operations. As long as the United States remains outside the convention, our critical maritime activities must find legal support in a complicated combination of older, less advantageous treaties, as well as "customary international law," which is unwritten, easily distorted and potentially changed by those who do not share our interests.

The Navy League believes it is long past time for the United States, as the world's premier maritime nation, to reassert its leadership and secure the substantial benefits of a convention the United States proposed and helped create more than 40 years ago. The United States should join the Law of the Sea Convention immediately.

THE SEA SERVICES TEAM

Nearly 70% of our planet is covered by oceans. The American economy, and the economies of our trading partners, rely on the unencumbered transport of goods across these oceans. The U.S. sea services are integral in keeping these marine transportation systems safe and secure, and those sea services are only as strong as the brave men and women serving within them. While it is crucial to maintain modern military hardware, every service leader acknowledges that properly supporting their people is fundamental to success.

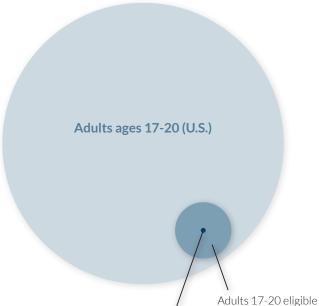


Navy recruits march in formation at Recruit Training Command in Great Lakes, III., June 2, 2020.

To execute and achieve the aspirations listed in the National Security Strategy, all of the supporting strategies in defense, homeland security and transportation require robust investment in the life cycle of personnel, from recruitment, to retention, education and training, to ongoing professional growth, as well as supporting transitions and families. Concerted investment in new technology, vehicles, ships, boats and infrastructure is needed, but without the workforce to perform the missions, conduct the maintenance, provide transportation services and support the front-line personnel and their families, airplanes and ships would sit empty on the ramps and piers. As adversaries continue to improve their own education systems, invest in their support services and implement policies of national conscription, the United States must make a substantial commitment to its workforce, today and tomorrow. The sea services need congressional support to ensure they continue to attract military and civilian employees as well as the best and brightest Merchant Marine in the world. Education and training systems must be funded so their service-specific technological needs can be operated and maintained by tomorrow's workforce. Proper funding of education and training systems would also ensure that generational issues and concerns are addressed by the services, and that each of the sea services have an inclusive environment to reflect and attract the diversity of the American population. Finally, fully funded end strength support remains critical.

PROPENSITY AND ABILITY TO SERVE

In 2019, James Stewart testified before the House Armed Services Committee that "just 29% of America's youth are eligible to serve without a waiver for things like drug use or minor criminal infractions ... and, just 2% are eligible and have a propensity to serve." Recruiting relies heavily on social media and working with influencers (coaches, counselors, teachers, religious leaders, parents and others) to ensure the message is individually crafted and understood.



Adults 17-20 eligible and wanting to serve in the military

Adults 17-20 eligible to serve in the military

Additionally, much has changed in a COVID-19 impacted recruiting environment, with the long-term effects unknown. Enlistment stations have been shuttered as recruiters work from home. Enlistments slowed and some services worried they would have to rely on reenlistments and bonuses. For example, naval enlistment bonuses, physical fitness and education bonuses, and repayment of student loans all reached an all-time high, yet it is unclear if these will meet the needs of the service.

JROTC and U.S. Naval Sea Cadet programs have also been affected. The Junior Reserve Officers' Training Corps (JROTC) was established in 1916 as a part of the National Defense Act to function as a leadership and citizenship program for students enrolled in secondary schools. In 1958, the Navy League established the U.S. Naval Sea Cadet Corps (NSCC) to "create a favorable image of the Navy on the part of American youth." However, the majority of in-person programs for both JROTC and NSCC were canceled due to COVID-19. Prior to the pandemic, RAND Corp. found JROTC was more successful in addressing demographic representativeness than it has been in addressing geographic representativeness. They also found that several factors affect a school's ability to start and sustain a unit, and three of these factors in particular — school and community awareness, instructor availability, and unit selection for closure and reopening at a different school— can be shaped and directly addressed through changes to service policy. Returning to in-person leadership and teamwork training will be essential as the nation adjusts to a post-COVID environment. Continued investment in youth programs, particularly in the areas of STEM, is critical to build a cadre of men and women with a propensity to serve in the sea services.

TECHNOLOGICAL NEEDS AND SERVICE SPECIFIC TRAINING

The Secretary of the Navy's fiscal year 2021 (FY21) budget includes proposals to achieve "All Domain Dominance" by creating a force (hardware, software, infrastructure and its personnel) with recapitalization, readiness and prioritization of capable capacity. The budget proposes reducing 2,100 Marines from the FY20 level, and the 38th Commandant's Planning Guidance proposes a reinvestment and restructuring plan for 2030 in part to address amphibious ready group and Marine expeditionary unit requests from combatant commanders remaining under-resourced. Marine Corps recruit training remains the only service boot camp that is not integrated with both women and men until the final weeks in training. Other organizations, including the Defense Advisory Committee on Women in the Military Services (DACOWITS), believe initial entry training is an integral component in building service members' readiness to serve. DACOWITS remains concerned that the Marine Corps is the only military service not fully gender integrated during recruit training. Any funding shortfalls or impediments to achieving the full funding of requested end strength and recruit training integration should be immediately addressed by Congress.

Based on the 2020 MARAD Goals and Objectives for a Stronger Maritime Nation, "the United States maintains a workforce of highly qualified maritime professionals, reflecting a strong tradition of maritime education and training. As large U.S.-flag commercial vessels have left the fleet and international credentialing and certification requirements have become more stringent and costly, it is possible the size of the mariner workforce will decline." Without enough mariners to provide logistics support for military equipment (food, medicine, arms, vehicles, etc.), mission execution for contingencies may be significantly impacted. The U.S. is currently short about 1,800 qualified mariners, which is an historic low. This calls for careful monitoring and appropriate investment.

GENERATIONAL ISSUES

Critical to recruiting and retention issues are support strategies that take care of not only the serving member, but the family as well. Fully funding areas such as childcare, tuition assistance and scholarships, and spouse employment policies are more crucial than ever. A lack of availability within the DoD and Coast Guard childcare infrastructure is a pervasive and persistent issue for service members and their families. As of 2019, the military services cumulatively reported tens of thousands of children on waitlists for DoD and Coast Guard childcare, indicating the substantial backlog of military parents awaiting access to this support. According to service briefings provided to DACOWITS in June 2019, service members wait an average of four to six months or more for DoD and Coast Guard childcare. In testimony before Congress in February 2019, Master Chief Petty Officer of the Navy Russell Smith stated that during every fleet visit, he heard from Sailors in all pay grades who raised the issue of access to affordable, quality childcare. Childcare availability issues are exacerbated in areas with greater military presence or a high cost of living such as California, Hawaii and the area around the District of Columbia, where many military families are seeking care outside of DoD childcare options. Inadequate childcare capacity and long waitlist times affecting their access to childcare resources are unacceptable.

The Navy's FY21 personnel initiatives include its Sailor 2025 plan, focusing on three pillars: a modernized personnel system, an enriched culture, and career continuum of learning, according to blog postings by COMSUBPAC. These investments are critical in continuing to provide for the Sailors of tomorrow. Also critical is the need to fully fund the quality of life pay raises of 3% for the military services. On a related note, the Navy released an "Education for Seapower" strategy, with a focus on Sailor education outcomes based on their specialties and training received in the Navy. While this strategy remains under review by the office of the Secretary of the Navy, its aspirations to invest in the

THE NAVY LEAGUE OF THE UNITED STATES RECOMMENDS:

- Fully funded quality of life initiatives for military members and their families, including a 3% pay raise.
- Recruiting and retention policies that ensure adequate personnel for the current and future operational tempo to support multiple, regionally dispersed contingency operations and natural/man-made disaster response, while ensuring the readiness to fight and win in a major theater combat operation.
- Authorized end strength for the Navy of 347,800 active duty.
- Authorized end strength for the Marines of 184,100 active duty.
- Authorized end strength for the Coast Guard of 44,500 active duty.
- Action to close the 1,800 merchant mariner shortage in the United States.
- Unencumbered education and training, including providing the material and equipment necessary to accomplish the training to meet the demands of full-scale spectrum of operations, combat and irregular warfare.
- Funding the education and training of merchant mariners to ensure a sufficient pool of skilled personnel for the commercial maritime industry and military strategic sealift activities.
- Appropriate full funding at authorized levels for the U.S.
 Merchant Marine Academy and state maritime academies.
- Full funding and support of family readiness, including maintaining and improving housing, childcare, and other related initiatives.
- Increased support for the U.S. Naval Sea Cadet Corps, the Navy and Marine Corps Junior ROTC, STEM programs, and maritime-related high school programs.
- Support Military Officers Association of America (MOAA) legislative efforts to assure the viability of the Tricare program and blended retirement system and preclude another hollowed-out force like the United States experienced in the 1980s and 1990s.
- Support and require all inclusion initiatives for the services, including supporting sea service efforts for recruitment and retention and supporting recommendations by DACOWITS that ensures recruit training is fully integrated and berthing spaces are adequate for an integrated workforce, among others.

schools, colleges and universities that serve the Navy and, in some capacity, the other sea services, make sense for the 21st century Sailor.

INCLUSIVE OPPORTUNITY TO SERVE

Stewart acknowledged that the various services have different outreach and marketing approaches, both to meet their own unique mission demands and to reach the widest audiences, "particularly talented women and minorities, because we rely on diverse backgrounds and perspective to address the complex challenges facing our nation today." The demographics of the Navy and Marine Corps are changing as the number of women joining the military services increases.

Despite improvements, the way berthing is assigned and whether female service members have equal access to seabound positions is still challenging. This can negatively affect these individuals' career progression; however, the Navy has committed to having all ships be "gender neutral" ships by 2025, and support for this initiative is imperative.

The Coast Guard has been systematically working to understand the challenges associated with retaining female and minority service members. The Coast Guard's Human Capital Strategy and its Diversity and Inclusion Strategic Plan 2019–2023 states, "Building the Coast Guard that America needs will not happen through study and/or aspiration. Inclusion is an action, and your senior leadership team is committed to making tangible differences in the diversity of our ranks and the inclusivity or our workplaces." A key part of the Coast Guard's objective is its advancement and retention of women and minority members. However, despite higher retention rates compared with those for the other military services, data showed the Coast Guard still retained women at a lower rate than men. This gap existed for both officers and enlisted members, with cumulative retention gaps between men and women emerging in the first 10 years of service, according to the DACOWITS 2019 annual report. The Coast Guard's recent budget submissions incorporated inclusion initiatives, and fully funding them is crucial.

Where not specifically listed in the various budget initiatives, the Navy League advises that Congress support a continued sea service focus on inclusivity.



U.S. NAVY

The United States is a maritime nation — this is an inescapable fact. Article I, Section 8 of the Constitution directs Congress "to provide and maintain a Navy," proving our Founding Fathers recognized nearly 250 years ago that a strong Navy was the most reliable guarantor of U.S interests at home and abroad. The U.S. Navy protects our waterways and sea lanes, ensuring the free movement of goods and services across the globe. It is forward-deployed, dissuading potential adversaries, assuring allies and building partnerships. The U.S. Navy ensures robust maritime logistics remain intact in times of conflict to support the other services, especially in a contested modern, multidomain environment. The U.S. Navy is also a first responder to any global crisis. Investing in America's Navy generates jobs, expands the pool of skilled American workers, and generates secondary and tertiary economic benefits. It is the bedrock of securing our nation and American interests for generations to come.

However, to accomplish its mission, the Navy must be resourced appropriately to balance all elements of being a forward-deployed fighting force. The fiscal year 2018 National Defense Authorization Act codified a goal of 355 ships for the Navy fleet. The Navy's 30-year Shipbuilding Plan, along with the DoD Future Naval Force Study, outlines how this goal will be accomplished. This plan, along with the Navy and Marine Corps Integrated Force Structure Analysis (IFSA) and the updated Cooperative Maritime Strategy, sets forth an ambitious vision for future inventory of maritime assets and capabilities needed to thwart increasing threats from potential near-peer adversaries. These plans explore not only new ship classes, but modernization and service life extension programs for most ships in the current fleet that will continue in service for decades to come. Additionally, aircraft, weapon systems and command and control must exist in sufficient quantities and be exercised in realistic scenarios. Finally, a steady flow of citizens must be recruited, trained and retained in our all-volunteer service.

With a rising China and bellicose Russia, the U.S. no longer enjoys a monopoly on sea control or sea power and mere numbers of maritime assets may no longer be the traditional measure of maritime strength. Adversarial regimes such as North Korea and Iran persist in taking actions that threaten regional and global stability. And while the Navy's priorities have been clearly defined by the National Security Strategy, which directs our Navy to protect the American homeland, promote economic prosperity and advance American influence throughout the world, new technologies and expanding warfare domains have caused the U.S. Navy to look at its future force structure in a new light. The National Defense Strategy operationalizes these new imperatives and articulates a plan to compete, deter and win in a newly competitive security environment. Crucial to this strategy is the strength of America's friendships, particularly in the Pacific. Large-scale exercises such as the largest international maritime exercise, RIMPAC, build vital interoperability with our allies and partners to deter forces seeking to undermine the rules based international order.

In 2018, then-CNO Adm. Richardson put out the "Navy the Nation Needs" as the maritime vision that outlined the

Navy's response to the National Defense Strategy. It articulated the Navy's role as part of the broader military joint force across three lines of effort. First and foremost was the restoration of readiness, while building a more lethal joint force. The next area of focus was strengthening traditional alliances while building new partnerships to expand American influence and fortify global resolve. Finally, the Department of the Navy was charged with achieving greater performance by adopting agile acquisition processes, such as digital engineering processes and capability iterations that would take advantage of new technology while being a good steward of America's tax dollars.

As Adm. Mike Gilday took the helm as the 32nd Chief of Naval Operations in September of 2019, he released his overall vision for the future structure of the Navy in his fragmentary order, FRAGO 01/2019. In it, he focused on three main areas of effort: warfighting, warfighters and the future Navy. The desired end state is a Navy that is fully prepared to "fight and win." In order to meet this criteria, the nation's Navy needs to sail out to sea, fly, fire munitions, train effectively, have logistics in place, and have all the parts to do maintenance and keep readiness high. Most importantly, our Navy must not be perceived as a diminishing maritime power, incapable of sustaining its capability as the most lethal, ready and globally engaged geo-strategic force on the planet.

Released in December 2020, the tri-service maritime strategy "Advantage at Sea — Prevailing With Integrated All-Domain Naval Power" identifies how the Navy, Marine Corps and Coast Guard will design, organize and employ naval forces in support of the national security interest and homeland security objectives. The strategy emphasizes five themes the combined naval services must address over the next decade in an increasingly competitive and unstable world. These are:

- Generate integrated all-domain naval power,
- Strengthen our alliances and partnerships,
- Prevail in day-to-day competition against all aggressors,
- Control the seas, and
- Modernize the future naval force.

This cooperative strategy should be considered in congressional deliberations as a compliment to the DoD Future Navy Force Study and the Navy 30-Year Shipbuilding Plan.

SHIPS AND SHIPBUILDING

The new Navy-Marine Corps leadership team is pushing a more integrated and sustainable force design and structure than ever before. A fully integrated naval force is at the forefront of all discussion, plans and driving policies regarding resources. While the guidance used to design force planning and structure around great power competition was laid out in the 2018 National Defense Strategy and the Marine Corps' 38th Commandant's Planning Guidance, there will be further guidance for congressional authorizers and appropriators in the upcoming Integrated Force Structure Assessment, the DoD Future Naval Force Study, and the Navy's 30-Year Shipbuilding Plan.

Since the end of the Cold War, America's naval forces have focused on power projection with no comparable peer competitor. However, the past decade has forced Navy and Marine Corps planners to change, consistent with pacing threats. Centered on the Navy's distributed maritime operations (DMO) concept, the Navy and Marine Corps team is contemplating a major transformation. Instead of building maritime forces around large capital ships, they would utilize the entirety of the maritime theater by disaggregating assets and complicating the adversaries' counteroperations. Though the Navy has not abandoned the 355-ship goal over the last year, the focus has rightly shifted to the total capabilities of the fleet rather than the number. Whatever the final number, the type of ships the Navy is expected to buy will change significantly. This may very well include a slightly smaller manned force structure mix, backfilled by the introduction of new medium and large unmanned surface vehicles (USVs). While a 355-, 500- or 581-ship Navy is an important aspiration, the final tally must be grounded on the threat, the tactical capability, as well as affordability. As former Navy Secretary Richard V. Spencer stated prior to his departure in 2019, "more important is ensuring that we have the maximum capability to address every challenge we're going to be facing."

In late 2020, the Hudson Institute released its landmark Navy force structure analysis, "American Sea Power at a Crossroads: A Plan to Restore the U.S. Navy's Maritime Advantage." This was the first plan to be released on paper following a tumultuous period where the Navy's force structure assessment was taken over by the Office of the Secretary of Defense and several additional studies were commissioned, including Hudson's. This detailed study proposed a "Battle Force Fleet Size" of 581 ships, including a mix of traditional aircraft carriers, submarines, destroyers



An artist rendering of the future U.S. Navy Columbia-class ballistic missile submarines. The 12 submarines of the Columbia-class will replace the Ohio-class submarines which are reaching their maximum extended service life. It is planned that the construction of USS Columbia (SSBN-826) will begin in in fiscal year 2021, with delivery in fiscal year 2028, and being on patrol in 2031.

and cruisers, amphibious ships and logistics ships, but also 139 unmanned surface and submersible vessels. "The Navy needs a new fleet design to affordably address its challenges and exploit its opportunities while maintaining today's operational tempo," says the report. Hudson's proposed force structure would rely on an "implicit or explicit concept for how the Navy will deter aggressors or win if deterrence is unsuccessful." The fleet design integrates the Navy's new generation of operational concepts: littoral operations in a contested environment (LOCE) and Expeditionary Advanced Base Operations (EABO). These concepts require a Navy that embraces a "decision-centric" warfare mindset that optimizes new characteristics widely considered mandatory for future platforms:

- A defensive capability in each platform designed to defeat "a prompt adversary attack and enable U.S. forces to effectively fire their offensive weapons."
- An "offensive weapons capacity distributed across numerous platforms and able to sustain strike and counter-maritime operations."
- Scalable "force package diversity" giving combatant commanders and the National Command Authority a wider range of options.

- A "force package complexity" designed to thwart adversary targeting capabilities.
- An affordable and sustainable procurement process that will bring this new fleet into reality.

There have been other official DoD sources advocating for a 500-ship Navy by 2045, dramatically increasing the size of the future submarine fleet as well as new smaller surface combatants and amphibious warships. They provided even more unmanned surface and submerged autonomous vessels designed to expand the battle space and complicate targeting for a potential Chinese adversary. So, while there is flux in the final Navy and Marine Corps force structure analysis with regard to specific quantity and capabilities, Navy leadership agrees we need to expand the future integrated naval force and be more modern, networked, talented and ready.

The Navy League strongly supports a U.S. Navy shipbuilding and conversion (SCN) budget of more than \$30 billion annually to meet the future shipbuilding goal, whatever that ultimately proves to be. We also highlight the narrow timeline of the Ohio replacement program (Columbia class) and the importance of recapitalizing the strategic ballistic submarines outside the SCN in the National Sea-Based Deterrence Fund. Congress should be attentive to the need to work around continuing resolutions, if necessary, to keep the program on schedule. Finally, and most importantly, the Navy League supports a larger share of the DoD fiscal year budget being dedicated to Navy acquisitions, operations and infrastructure as we move into an expanding great power maritime threat environment. Without additional funding for the Navy, a force structure size of 355, 500 or 581 ships will never be realized, and the nation will find itself at greater risk in protecting the maritime commons for U.S. and allied interests abroad.

Whatever the exact mix determined by Navy–Marine Corps planners, the current and future fleet plans will include the following ship classes:

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Ballistic Missile Submarines (SSBNs) and their Trident II D5 missiles: The nuclear triad of

strategic bombers, intercontinental ballistic missiles and sub-launched ballistic missiles has provided the United States with strategic deterrence that prevented global war for more than 50 years. The Navy's top acquisition priority and the most survivable leg of the triad, the SSBN, provides 70% of the deployed nuclear warheads under the New Strategic Arms Reduction Treaty. Today's 14 Ohio-class SSBNs are scheduled to be replaced by 12 Columbia SSBNs. This program has been shifted to the right, and all options in further delaying design and construction of the Navy's top shipbuilding priority have been exhausted. There is consensus on a fleet of 12 Columbia Class SSBNs to shore up this aging leg of the U.S. nuclear triad.

For the Navy to meet its strategic deterrence mission, the first replacement SSBN must be on patrol in fiscal 2031 and the 12 Columbia SSBNs must be fully funded and de-livered on schedule. Understanding that the cost for this national imperative is high, the Navy is driving program costs down to minimize the impact on other shipbuilding programs. The Navy League continues to support the fis-cal 2015 National Defense Authorization Act's creation of a National Sea-Based Strategic Deterrence Fund as a special repository to pay for the Ohio replacement program. Given the national mission of the SSBN, the infrequent need for recapitalization and the tremendous return on investment, we strongly encourage top-line relief for the Columbia. This is consistent with historical funding of previous SSBN classes.



Aircraft carriers: Supercarriers are needed to provide sufficient worldwide coverage of

combatant commanders' Title 10 directed requirements. It is vital to maintain the currently scheduled refueling of the Nimitz-class carriers, which are essential elements of a shipbuilding strategy that ensures our persistent forward presence well into the future. DoD and Navy officials have recently proposed a slightly smaller number of active supercarriers from the current requirement of 12.



Large surface combatants (LSCs) and small surface combatants (SSCs): Acquisition of Arleigh Burke-class de-

stroyers as well as the modernization of the Navy's cruiser and destroyer inventory will ensure the sustainment of the land-attack, fleet air, missile-defense and anti-ballistic missile capabilities. Additionally, introduction of the Large Surface Combatant to the fleet is a critical element of the Navy's future force structure. Finally, proven lethality and survivability enhancements implemented in the FFG(X) program will deliver much needed and cost-effective capability improvements to the fleet platforms. These ships will take full advantage of a proven parent design and incorporate lethality and survivability upgrades that will make this SSC a capable multi-mission addition to the surface fleet. The Hudson Institute and other defense planners advocate for a combination of nearly 200 cruisers, destroyers, frigates and corvettes.

Attack submarines (SSNs): In anenvironment with the growing threat of layered, offensive and

defensive precision missile systems, our submarine force's asymmetric stealth advantage and immunity from missile attacks enables success for the entire joint force. Sustaining the gold-standard Virginia-class acquisition program, to include procurement of at least two hulls per year through fiscal 2025 and the Virginia Payload Module (VPM), is vital to the sustainment of this critical capability. This strategy would minimize both depth and duration of a severe SSN shortfall below the current requirement of 48 and, with the VPM, the loss of undersea payload volume in the post-guided-missile submarine (SSGN) era. It also improves payload distribution across the force, complicating adversary planning. While there is not yet agreement on the exact size of the fleet, this platform is critical to contest a growing Chinese PLAN maritime force.



The amphibious fleet: Our forward-deployed amphibious warships, with a full comple-

ment of Marines embarked, are an essential element of our maritime security capability. The future fleet size and ship type are in flux, however. In 2019 Commandant Gen. Berger released his forward-thinking Commandant's Planning Guidance, which departed significantly from conventional wisdom. The document drops references to the two Marine Expeditionary Brigade (2.0 MEB) and 38 amphibious ship requirement included in the 2016 Force Structure Assessment. Additionally, since the ARG-MEU is primarily for support missions and not a warfighting construct, it will not be a focus of future force planning. What appears to be emerging is a new requirement for smaller, more agile amphibious ships to further new operational concepts. These platforms would better cover a large maritime theater and be employable across a variety of tailored amphibious operations in the area of responsibility. The Hudson Institute and other DoD sources see a major reorganization of U.S. amphibious assets. They advocate for eight to nine big deck amphibious ships, 22-24 LSD/LPDsized medium amphibious ships and a new, smaller class of amphibious ships that conforms to the commandant's new warfighting doctrine.



Combat Logistics Force: Construction of the 20 John Lewis-class oilers began in 2016 to

replace the 15 Henry J. Kaiser-class oilers. Two Supply-class fast combat support ships are essential to ensure combatant forces are capable of long-endurance, forward-deployed missions without having to replenish at distant, vulnerable shore bases. The Hudson plan sees a much greater need for combat logistics ships and sees a need for 38 large logistics ships (T-AO/T-AOE/T-AKE/T-AKM) and 18 smaller CLF assets (T-AOL) that could be used to support distributed operations and/or unmanned vessels.

Maritime preposition ships: While not in the battle force, the Navy plans to grow from 14 maritime preposition ships in two squadrons to 21 total in three geographically dispersed squadrons of seven ships each. Our forward-based maritime preposition squadrons with civilian mariner and military force protection detachments are critical to the nation's global humanitarian disaster and crisis response capabilities. The Hudson study argues for a more robust "command and support" ship mix with 45 to 53 different support ships.

Unmanned surface and submersible warships: By far, the most dramatic change in force structure planning revolves around a new and significant quantity of unmanned or optionally manned maritime vessels. In both the Hudson Institute and other assessments, these 100-200 new ships will become nearly half of the active battle fleet of the future.

While the debate on the fleet's composition and size carries on, the nation's capability to build naval ships is at risk due to unpredictable funding. As a result of years of unstable funding, an assortment of second- and third-tier suppliers have shrunk to sole domestic sources, with commercially capable suppliers reluctant to bid on unique naval demands. Shipyards must have strong signals and commitments from Congress to rebuild an offensive naval force. We are at an historic tipping point. Without full-service shipyards and a supporting supplier base, the future force structure of the Navy is in jeopardy. A robust industrial base comprising designers, planners, welders, pipefitters and electricians is critical to creating our future maritime force structure that must be sustained.

The U.S. maritime industry gives back in numerous ways. Its metal recyclers, principally located in Louisiana and Texas, employ thousands of American workers to recycle vessels to U.S. environmental and safety standards. The recycled metal is used by the U.S. steel industry and export markets. The money gained from the sale of obsolete government vessels funds maritime heritage grant programs and state maritime school initiatives.

AIRCRAFT AND WEAPON SYSTEMS

Aircraft

Essential to the combat strength of our fleet is the naval aviation capability provided by a minimum of 12 carrier air wings, a fully integrated maritime patrol inventory, a modernized fleet helicopter force and complementary unmanned aerial systems (UAS). Key to that capability is the timely introduction of the F-35C Lightning II joint strike fighter to our carriers and the continued upgrade of the fleet's F/A-18 E/F Super Hornet strike fighters. The multiyear procurement of the E/A-18G Growler electronic attack aircraft and the E-2D Advanced Hawkeye airborne warning and control aircraft should continue until the current programs of record are complete. F/A-18 depot work and spares funding needs to support an increase in aviation readiness to quickly reset our forces, rapidly conduct battle and collision damage, and enable them to quickly return to combat-ready status. Fleet Logistics Support also requires investment, including continued support for C-130 maintenance and procurement of the CMV-22B Carrier Onboard Delivery replacement. Full support for the procurement of the P-8A Poseidon long-range antisubmarine warfare, intelligence, surveillance and reconnaissance aircraft and the Triton Broad Area Maritime Support UAS will ensure our maritime patrol supremacy well into the future.

C4ISR

Cutting-edge command, control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR) is central to a naval strike group's combat capability and is a critical force multiplier. C4ISR is not just an enabler of more efficient and effective operations, it also provides the information, C2 and precision targeting essential to ultimate success, especially when executing DMO in a multi-domain battle environment.

Unmanned Weapons Systems and Non-Kinetic Weapons

Continued investments in weapons innovation, to include unmanned underwater and aerial vehicles, and non-kinetic weapons such as the rail gun and lasers, are an essential element of sustained surface and undersea dominance. A



Navy Petty Officer 2nd Class Bolivar Smith operates an advanced tactical display console aboard the guided missile destroyer USS Chung-Hoon in the Pacific Ocean, August 2020.

family of unmanned vehicles — from the Large Displacement Unmanned Undersea Vehicles to torpedo tube and 3-foot-launcher payloads — will enable execution of higher risk missions with low unit costs while furthering the undersea forces' reach.

Cyberwarfare

The Navy League continues to support the direction the Navy is taking in cyberwarfare and cybersecurity to promote assured C2, electromagnetic maneuver warfare, cyber and integrated fires. We must be ready to fight and win in contested and denied environments by leveraging our superior technology. The integration of all elements of cyberwarfare — from policy and requirements, to research and development, training, fielding and operations under the Navy Cyber Command/U.S. 10th Fleet — has established the Navy as one of the nation's critical resources in this complex and rapidly evolving warfare discipline.

INDUSTRIAL BASE

The United States must maintain our industrial base capacity and capability. Our industrial base — and our "intellectual industrial base" of research institutions — breeds competition that results in greater innovation. This innovation ensures our Sailors, Marines and Coast Guard men and women have the best that American industry can deliver. A strong industrial base guarantees we can rapidly build capability and capacity to enable us to prevail in war.

We are entering an era where we need a third "offset strategy" to counter the emerging threats around the world. The first offset strategy was designed to counter the advantage the Soviet Union had of sheer numbers. The destructive impact of nuclear weapons was the first offset. Once the Soviet Union achieved nuclear parity, our industrial base delivered increased stealth and guided munitions. The second offset strategy ensured our ability to perform deep-strike missions. This advantage delivered accuracy regardless of range, allowing the United States to win conflicts far from our shores.

In September 2018, the administration released its report, "Assessing and Strengthening the Manufacturing and Defense Industrial Base and Supply Chain Resiliency of the United States," the first step toward realizing a third offset. The technological margin that our military enjoys is eroding at an accelerated pace. This report details the drastic effects of intellectual property and research theft from our industrial base by other countries who seek parity with our forces. We depend on our industrial base to give our services the "technological overmatch" to give our allies confidence that we will be there when needed and that we can win. This shrinking margin may also undermine deterrence.

Today, we need a third offset strategy to sustain and advance our technological advantage over China, Russia, Iran and North Korea. There are three facets to this effort:

- What can we do now with what we have?
- What can we develop from basic research?
- What basic research can develop into long-range research?

The answers to these questions must form the basis for our current and future research, development, testing and evaluation of future technologies in the maritime environment. However, there are significant challenges ahead for both the Navy and the industries that support it. While the Navy is a smaller customer than it once was, today's industrial base is barely adequate to support the Navy at its present size. The surge capacity the service has depended upon in times of conflict is nearly gone. As a result, the sea services must employ more thoughtful acquisition processes and policies for repair parts because those spares cannot be manufactured with short lead times in a crisis. Low production rates and unstable funding cause costs to rise faster than current inflation rates.

The naval services are challenged to maintain decades-old aircraft, ships and submarines. The cost of maintaining this equipment is projected to continue to increase over time. The industrial base can help, but it requires informed acquisition policies to ensure key battle spares are on the flight line or the pier when and where they are needed to quickly return our fleet to operations. Performance-based logistics (PBL) is a time-tested way to incentivize our industrial base to provide the service and support our weapon systems need to be ready to fight and win. With the proper incentives, industry can provide effective readiness for the maritime services' weapon systems. With expanded use of PBL, the industrial base could be incentivized to invest in components that break less often.

The services are already seeing the readiness of non-deployed forces fall to unacceptable levels, and an enlightened procurement strategy to sustain our weapon systems is the only way to improve the readiness of these forces. Finally, to capitalize on new maritime warfighting concepts like DMO, LOCE and EABO, well-maintained and accessible fleet ranges must be ready, available and unobstructed to support the ongoing incorporation and crafting of new maritime combat doctrine that takes advantage of new technology and maximizes the U.S. naval force projection across the globe into every inch of international waters. You cannot have a credible maritime force unless it is thoroughly exercised and afforded the opportunity to test out new doctrine and tactics, which, incidentally, not only increases our maritime strength and capability, but also provides a very visible and potent deterrent to potential adversaries.

THE NAVY LEAGUE OF THE UNITED STATES RECOMMENDS:

- Navy-Marine Corps' use of experimentation and focus on force design to achieve a more integrated naval force. The Navy League also supports the aspirational goal of whatever force structure the Navy finally determines, while acknowledging the fleet of the future will change in mix of manned and unmanned platforms and adapt to supporting more distributed operations to take back the initiative in a great power competition.
- Full funding of the Navy's fiscal year 2021 shipbuilding plan with defined milestones to ensure the buildup of a more integrated and larger naval fleet.
- A larger allocation of the fiscal year defense budget to fully realize a larger and more integrated maritime force structure to effectively compete with near peers.
- Continued development, procurement and deployment of the Navy portion of the Ballistic Missile Defense System, including long-range surveillance and tracking capability to queue ground-based intercept systems and, ultimately, the ability to detect, track and engage medium- and long-range ballistic missiles distant from the United States.
- Support the sea services' maritime domain awareness effort, which integrates national and global partner intelligence resources and information systems to provide the best intelligence picture of the world's oceans.
- Support the Navy's efforts to upgrade the quality and scope of mine countermeasure capabilities and improve the forward-deployed readiness of mine warfare forces.
- Increased emphasis on, and funding for, Navy and Coast Guard operations in the polar regions to protect our access to natural resources, as well as preclude these regions from becoming sanctuaries for potential adversaries. Communications, logistics, ship and aircraft modifications are essential for such operations.

- Increased emphasis on antisubmarine warfare, as our skills in that arena have atrophied in the face of an increasing threat.
- Adequate numbers of Navy amphibious ships and sealift platforms to provide the expeditionary lift support for present and future combatant commander requirements.
- Continued funding for combat logistics force assets, including oiler/dry cargo carriers; large, medium-speed roll-on/roll-off ships; and new classes of sealift prepositioning vessels. These assets will be employed in the maritime prepositioning force (enhanced) squadrons.
- Realistic and sufficient operational training to ensure the safe, combat-effective performance of our men and women, to include adequate flight hours and steaming days, live-fire events, as well as active sonar operations in ocean environments (taking into consideration how such operations impact marine mammals).
- Accelerating the development of survivable tactical ISR UAS capability.
- Capitalizing on the significant goodwill fostered by cooperation with multiple countries in response to piracy concerns.
- Procurement of sufficient weapons and munitions to meet operation plan requirements, which are woefully inadequate. Additionally, there has been substantial war-gaming support to justify a recommendation that the Navy fund vertical-launch system rearming capability at sea to allow combatants to remain on station for longer periods of time.
- Expansion of maritime fleet ranges in terms of access and readiness, while reducing impediments and obstructions that may limit the usefulness of these ranges for critical technology testing, maritime combat doctrine development, and robust and realistic training opportunities for fleet assets in a variety of live-fire individual, combined and joint exercises.



U.S. MARINE CORPS

In July 2019, Gen. David H. Berger issued the Commandant's Planning Guidance for the Marine Corps. Notably, it provides the "38th Commandant's strategic direction for the Marine Corps and mirrors the function of the Secretary of Defense's Defense Planning Guidance. It serves as the authoritative document for service-level planning and provides a common direction to the Marine Corps' Total Force."

Specifically, the guidance sets out five priority focus areas of strategic emphasis for immediate attention: force design, warfighting, education and training, core values, and command and leadership. Significantly, the commandant identifies force design as the top priority and focuses on capabilities to operate in the maritime domain as the defining factor in shaping the Force.

According to the guidance, the Navy and Marine Corps "share a common understanding of the National Defense Strategy, the pacing threat, the future operating environment and of those capabilities that provide the greatest overmatch for our Navy."

The guidance also underscores the strategic need for the Navy and Marine Corps to fully develop expeditionary advanced base operations (EABOs) and distributed operations. EABOs are contrasted with legacy forward-based installations that, because of their deepwater ports and long runways, are considered to be unacceptably vulnerable to long-range precision fires. With an expeditionary approach, the footprint is reduced, and the capacity to provide a persistent stand-in capability is dramatically increased.

THE WAY FORWARD – FORCE DESIGN 2030

Vision

The vision that drives Force Design 2030 is a defined effort to focus on the Marine Expeditionary Force (MEF) as the organizational structure for warfighting, but with a well-recognized emphasis on III MEF and its capability to support U.S. Indo-Pacific Command (U.S. INDOPACOM) and the Commander, 7th Fleet. The key element of this capability will be a stand-in force with the ability to fight inside an adversary's weapon systems threat range and the capacity to transform the effectiveness of the broader naval campaign.

Constraints

The guidance identifies the need to reshape the Marine Corps to have sufficient capability to meet the threat posed by the leadership of the Chinese Communist Party as it directs the actions of the People's Liberation Army. As a pacing threat, Force Design 2030 anticipates the need to face a peer challenge that is equipped with long-range precision munitions and advanced surface-to-air missiles, and that is trained in the sophisticated use of electronic warfare while possessing a prolific stockpile of unmanned systems.

Each of these challenges provides defined constraints in countering the threat based on current Marine Corps structure and capabilities. As stated in Force Design 2030, the Marine Corps "must acknowledge the impacts of proliferated precision long-range fires, mines, and other smart weapons and seek innovative ways to overcome these threat capabilities."

Strategy

The Marine Corps will meet these challenges by divesting itself of legacy organizational structure, equipment and doctrine. Concurrently, it will develop a new organizational structure, invest in next-generation equipment and develop supporting doctrine.

The top line of these reductions includes a reduction in the end strength of the total Fleet Marine Force of approximately 12,000 Marines relative to the current total force by 2030. Further, it also includes the divestment of five infantry battalions, three heavy helicopter squadrons, three medium-lift tiltrotor squadrons, two light attack helicopter squadrons, three law enforcement battalions, three bridging companies, two Amphibious Assault companies, all Marine Wing Support Groups and all tank battalions.

Emerging from this organizational downsizing will be a more agile, autonomous force of light naval infantry functioning as a more tightly integrated force, especially with the naval component command. Assumed within this approach is the need for capabilities that are no longer resident within Marine Corps organizations and which must be sourced from the Joint Force Component Command.

To maximize the opportunity created by this divestment, the Marine Corps will aggressively restructure the force and invest in critical force increases. Force Design 2030 advocates the following force restructuring: 18 active component fighter attack (VMFA) squadrons, with a reduction in F-35 aircraft from 16 per squadron to 10 per squadron; restructuring of infantry battalions to increase lethality, and a decrease of approximately 200 Marines per battalion; and expanded training and education to pro-vide a clear emphasis on training modernization.

Significantly, Force Design 2030 directs a series of force increases to provide critical stand-in capabilities for the combatant commander. The necessary increases include: an increase of 14 rocket artillery batteries, an increase of three Light Armored Reconnaissance companies, an increase of one active component aerial refueler transport (KC-130) squadron and an increase of three active component unmanned aerial vehicle (VMU) squadrons.

INCREASING

- **14** Rocket Artillery Batteries
- **3** Light Armored Reconnaissance Companies
- 1 Active Component Aerial Refueler Transport (KC-130) Squadron
- **3** Active Component Unmanned Aerial Vehicle (VMU) Squadrons

DECREASING

- 12,000 Marines
- 5 Infantry Battalions
- **3** Heavy Helicopter Squadrons
- **3** Medium-Lift Tiltrotor Squadrons
- 2 Light Attack Helicopter Squadrons
- **3** Law Enforcement Battalions
- **3** Bridging Companies
- **2** Amphibious Assault Companies

Readiness and Manpower

With protracted combat deployments in support of the Global War on Terrorism, the Marine Corps is rebuilding its combat readiness with a substantial focus on serviceability and aviation readiness. Similarly, the Marine Corps has significant initiatives exploring force structure changes as it makes reductions in end strength.

Readiness

With three years of stable funding, the Marine Corps has been able to make substantial gains in readiness across its key lines of effort. In the ground sector, the Fleet Marine Force availability has increased to 90%, and serviceability stands at 94% for principal end items in FY 2019.

In aviation readiness, the FY 2019 fleet aircraft non-mission capable supply average stands at 26.4%. However, with an increased investment in parts availability and other improvements, Marine aviation is on track to meet the goal of 75% mission capable aircraft by the end of FY 2021.

Amphibious readiness continues to challenge the integration efforts of both the Navy and the Marine Corps, however. The amphibious fleet developed an average availability

THE NAVY LEAGUE OF THE UNITED STATES RECOMMENDS:

- Robust Congressional support of the commandant of the Marine Corps's Force Design 2030 force restructuring, including:
 - F-35 aircraft squadron reductions.
 - Restructuring of infantry battalions to increase lethality and decrease total Marines per battalion.
 - Expanded training and education to provide a clear emphasis on training modernization.
- Force increases in rocket artillery batteries, light armored reconnaissance companies, one active component aerial refueler transport (KC-130) squadron and three active component unmanned aerial vehicle (VMU) squadrons.
- Force reductions:
 - Total end strength of the Fleet Marine Force of approximately 12,000 Marines relative to the current total force by 2030.
 - Divestment of infantry battalions (three Active and two Reserve Component), heavy helicopter squadrons, medium-lift tiltrotor squadrons, light attack helicopter squadrons, law enforcement battalions, bridging companies, assault amphibian companies and a reduction of assault amphibious vehicle and amphibious combat vehicle requirements, all Marine wing support groups, all tank battalions.

of 66%. Moreover, approximately 31% of amphibious ships satisfy the requirements of the Optimized Fleet Response Plan. To mitigate the near-term shortfalls in amphibious readiness, the Navy and Marine Corps will explore nontraditional employment options such as L-class, E-class, Expeditionary Sea Base class ships and unmanned platforms.

Manpower

The guidance stresses that everything starts and ends with the individual Marine.

Manpower is the Marine Corps' critical enabler as it evolves into a leaner, more modernized, naval expeditionary force-in-readiness by 2030. Marine Corps end strength reduction means more will be demanded from current and future Marines. Therefore, attracting and retaining a diverse and modern force requires the Marine Corps to compete with the commercial marketplace by prioritizing effective talent management through a refined human resource development Stand-in Forces are designed to generate technically disruptive, tactical stand-in engagements that confront aggressor naval forces with an array of low signature, affordable and risk-worthy platforms and payloads.

- USMC Commandant Planning Guidance

process. To support and sustain this priority, the Marine Corps must be fully funded to meet current and future force structure, infrastructure, training and readiness demands.

Force Design 2030 modernizes the composition of the Marine Corps to fight and win on tomorrow's battlefield. Over the next three years, the Marine Corps will under-take a bold plan to consolidate and converge its manpower information technology systems into a single personnel system operating in a cloud-hosted environment. Through this portfolio consolidation effort, the Marine Corps will realize cost and operating efficiencies through economies of scale, posture its data for use by artificial intelligence capabilities, strengthen its cybersecurity posture by reducing its cyberattack surface and maximize the return on manpower information technology expenditures.

EVOLVING CHALLENGES

To meet the inevitable evolving challenges of combat in a dynamic battle space, the Navy League supports aggressively pursuing the following technology enhancements:

1. Partnering with technology innovators to strategically investigate the use of 5G solutions to secure smart bases, create bandwidth for persistent counter intrusion and support architecture connected vehicles.

2. Evaluating the use of artificial intelligence, machine learning and deep learning to create a defined capacity for near instantaneous data synthesis and analysis to consistently outpace enemy decision cycles.

3. Investigating the use of low cost, low profile, semisubmersible vessels with anticipated autonomous operating capability as a logistics solution to the stated need for "low signature, affordable and risk-worthy platforms."

The cuts proposed in Force Design 2030 are profound and are expected to transform some elements of the functions and capabilities of the Marine Corps. This transformative approach is also expected to dramatically affect both programs of record, as well as future programmed appropriations.



U.S. COAST GUARD

The Coast Guard continues to provide a tremendous return on the taxpayers' investment as a unique strategic instrument of national power, the only agency that is simultaneously a military service, a law enforcement/regulatory agency, and a member of the intelligence community. This provides broad authorities for the service to execute its 11 statutory missions, managed within six mission areas: maritime law enforcement, maritime response, maritime prevention, Marine Transportation System (MTS) management, maritime security operations and defense operations.

Given this expansive mission set, the Coast Guard's operational environment covers a broad spectrum of threats and challenges. Aggressive great powers are attempting to diminish U.S. influence in the Pacific, Western Hemisphere and the Arctic, while transnational criminal organizations are trafficking humans and drugs. Maintaining operational readiness is critical for responding to time-sensitive missions such as massive emergency and environmental responses, as well as search and rescue. Persistent cyberthreats exist against the critical infrastructures of the Coast Guard and the maritime sector, presenting challenges to the Marine Transportation System which impacts \$5.4 trillion in economic activity and 30 million jobs. The system now uses more complex vessels, higher traffic volumes, and advanced autonomous surface and subsurface vehicles. Our ports serve as a gateway for over 90% of all overseas trade, and

any disruption of the MTS could have devastating impacts to the global supply chain as well as to America's economy and national security.

Over the past several years, the service has seen its mission effectiveness degraded, in large part, by budgetary constraints. The Coast Guard needs an immediate injection of funding to restore readiness and at least 5% annual increases to maintain its readiness and meet its ever-increasing operational demand signals. As a military service, one with unique legal authorities that contribute to a more robust national defense and homeland security capability, it was strategic short sightedness to exclude the Coast Guard from DoD's recent multi-year budget plus-ups.

Addressing these mounting challenges in the Coast Guard Strategy 2018-2022, Commandant Adm. Karl Schultz has provided the major elements of his three strategic priorities for the service:

Maximize Readiness Today and Tomorrow. The top priority remains service readiness. With an increasing demand for Coast Guard services, an ongoing constrained and uncertain budget environment has eroded operational readiness. It is critical to enhance a mission-ready total workforce by improving support programs, sharpening workforce skills, recruiting and retaining a diverse workforce, and strengthening the reserve and auxiliary forces. Continuing the modernization of assets and infrastructure will strengthen the reliability of C4ISR systems, while maintaining momentum on current acquisition efforts. Shore infrastructure and long-term homeporting facilities must also be modernized. Lastly, the service must continue examining and employing the right combination of technology, including unmanned platforms and data analytics.

Address the Nation's Complex Maritime Challenges. A hallmark of the service is its ability to build and lead coalitions to strengthen maritime governance. The service does this by enhancing situational awareness to secure maritime borders, promoting acceptable behavior in the maritime domain and employing effective presence to deter and disrupt maritime threats. The Coast Guard must continue a united effort to strengthen integration with DHS, leveraging joint capabilities and authorities to complement DoD and enhancing partnerships with maritime stakeholders. Additionally, the Coast Guard is the federal entity best suited to protecting U.S. interests and projecting national sovereignty in the Polar Regions. Given sufficient resources to develop and sustain a modern icebreaker fleet, the service will be able to maintain a year-round persistent presence in both the Arctic and Antarctic.

Deliver Mission Excellence Anytime, Anywhere. Responsive mission delivery means strengthening resilience by leading in crisis, intensifying integrated emergency management and execution, and advancing resilient IT and command and control (C2) in a crisis. Rapid advancements in technology and the evolving operating environment demand mature enterprise-wide preparedness, resiliency, and responsiveness. The functions that enable operations, mission support and organizational structure must evolve alongside the external environment, partner and stakeholder capabilities, and innovative adversaries.

These strategic priorities are based on the key challenges facing the service:

1. Restoring readiness remains the No. 1 priority, and it comes down to funding. The service needs the right personnel, resources and assets to meet its mission. The budget still lags operational needs, losing over 10% in real purchasing power for operations and maintenance over the last seven years. Underfunded Operations and Support budgets have required that the service incur substantial operational risks in the following areas:

Personnel – The service continues to require additional funding for workforce readiness to address challenges in recruiting, retention, diversity, training and health care. In recruiting, the Coast Guard faces similar challenges to the other services in finding and attracting qualified people, and COVID-19 has significantly impacted training capacity at Cape May. A successful campaign to retain needed pilots has concluded, but critical personnel challenges, including the recruiting and retention of cyber and IT expertise, continue

to put undue pressure on readiness and operations. Additionally, the commandant ordered changes in 2019 to address a RAND Corp. study commissioned by the service that recommended creative solutions to address the gender retention gap. As with other services, family support and health care remain a challenge with adequate childcare hard to find, particularly at the many geographically dispersed Coast Guard locations. Chronic health care challenges like operational tempo for corpsmen, and adequate childcare, have been exacerbated by COVID-19, while fewer health care providers are willing to sign up for the Tri-Care program. The DoD and Coast Guard also still have limited mental health capacity, and it remains under heavy demand, although the Coast Guard is hiring new Public Health Service mental health counselors with additional funding provided by Congress in the FY 2021 appropriation. Coast Guard medical personnel have also been in high demand on the front lines of national crises, including deployments to the Southwest border to support migrant families and assignments to U.S. airports to screen passengers during global pandemics, further stressing the small Coast Guard medical community.

The Reserve Force also remains small, and has been surged often in the last decade to support contingency operations, putting it under heavy stress. To that end, a strategic review is underway to reassess how to best employ the reserves and to identify the force's requirements, makeup and organization.

Assets and infrastructure – Over the past two years, the Coast Guard's offshore fleet lost nearly 500 patrol days due to unplanned repairs, as well as 9,000 aircraft flight hours due to unplanned maintenance and repairs, the loss-equivalent of three Medium Endurance Cutters (MECs) and 14 helicopters per year. In fact, the aviation community regularly cannibalizes older aircraft for spare parts to keep the rest of the aging fleet flying.

Aircraft: The ongoing recapitalization of the HC-130H with the HC-130J is a key acquisition priority for the service, and is critical to maintaining operations as the HC-130Hs reach the end of their service life. Support for service-life extensions and avionics upgrades must continue for the MH-60T and MH-65 helicopter fleet, as well as missionization of the HC-27J and HC-144A fixed-wing aircraft. The transition at Air Station Borinquen, Puerto Rico from MH-65s to MH-60s, funded for FY 2021, is critical to improving mission capability in a critical region. This represents the first step in a larger process to shift the Coast Guard's rotary-wing fleet balance toward more MH-60s, an essential move to secure the longterm sustainability of rotary-wing capability. *Cutters and boats:* The service-life extension for the Polar Star, as well as the 47-foot motor lifeboats and 270-foot medium endurance cutters (WMECs), must continue apace. Additionally, in late August 2020, the medium icebreaker Healy experienced a main propulsion motor fire en route to the Arctic and had to return home for repairs, putting additional unplanned pressure on the budget and preventing mission completion.

Shore infrastructure: While some progress has been made on the Coast Guard's shore infrastructure readiness needs, the service's \$2-billion recapitalization and \$1 billion maintenance backlogs continue to grow, with additional requirements emerging. For example, while Charleston, South Carolina, is scheduled to become a Coast Guard center of gravity, hosting five National Security Cutters (NSCs) and potentially several Offshore Patrol Cutters in the future, it currently has just a single major pier. This pier is not rated to service these newer, more capable cutters, forcing the service to rent a crane barge for maintenance.

Technology – The service is still using 1990s hardware and software, and budget tradeoffs have precluded needed investments for years. The Commandant has noted, "Our people will never fail our country, but our technology is failing our people." In response, the Coast Guard has developed a Tech Revolution Road Map to lay out the next steps and investments needed, including next-generation satellite communications, enhancing network security, modernizing cyber defense tools, increasing its internet speed for cloud access, upgrading to 4G connectivity for its smaller vessels and doubling the satellite connectivity bandwidth of its major cutters. The service needs annual O&S budget growth to improve IT infrastructure and enhance an enterprise-wide platform, and leverage mobile technologies for more efficient frontline operations.

2. Continue recapitalization and shipbuilding. An aging fleet well beyond its designed service life has degraded readiness and operations. However, five major programs require continued strong management and consistent funding:

Offshore Patrol Cutter (OPC) – The OPC will replace two classes of medium endurance cutters, the oldest of which have been in service for over 56 years and are well beyond their designed service lives. Delivery of the first of 25 hulls in the largest acquisition program in DHS history is expected by the end of FY22, with OPC No. 2 delivered in the fourth quarter of FY23.

Polar Security Cutter (PSC) – Russia has over 50 polar icebreakers, including four nuclear-powered vessels, with

Icebreakers of the World

Top 7 Countries and Number of Polar Icebreakers Owned

| Russia | 55 |
|---------------|----|
| Finland | 11 |
| Canada | 10 |
| Sweden | 7 |
| China | 4 |
| Denmark | 3 |
| United States | 2 |

nine more heavy icebreakers on the drawing board able to conduct year-round high-latitude operations, some with weapons. Additionally, China has declared itself a "near-Arctic" nation and called for a "Polar Silk Road." China is planning to build both conventional and nuclear icebreakers and could surpass U.S. icebreaking capabilities by 2025. To address our national strategic need, VT Halter Marine of Pascagoula, Mississippi, was awarded a firm-fixed price incentive contract to build PSCs and will begin cutting steel in 2021. Congress enacted \$555 million in FY 2021, including continued program management for construction of PSC 1 and full funding for construction of PSC 2. This is the initial build toward the strategic goal of "6-3-1" for six icebreakers, three of which are heavy hulls, with one needed immediately. The FY 2021 appropriation also included \$15 million for sustainment of the 45-year old Polar Star, which is expected to remain in service until PCS No. 2 comes online in 2026.

National Security Cutter (NSC) – Although the program of record stands at eight hulls, Congress has fully funded 11 NSCs to replace the high endurance fleet. Continued support is needed for these extremely capable platforms, particularly for post-delivery activities and the critical logistics tail for maintaining and sustaining these assets.

Fast Response Cutter (FRC) – Congress appropriated funding in FY 2021 for the final four hulls in the program of record of 64. This includes 58 FRCs to be homeported domestically and six FRCs to replace the 110-foot patrol boats currently supporting Patrol Forces Southwest Asia.

Waterways Commerce Cutter (WCC) – Minimal funding is needed to support initial program management to recapitalize the current 57-year-old fleet of inland tenders plying our rivers.

THE NAVY LEAGUE OF THE UNITED STATES RECOMMENDS:

- Investing in Coast Guard workforce readiness, including recruiting, retention, training, health care, child and family support, and personal and professional development.
- At least 5% annual increases in O&S funding to offset required increases for military pay and benefits, follow-on costs for operating new assets, and readiness issues associated with the sustained erosion of purchasing power over the past 10 years.
- At least \$300 million in annual funding for shore infrastructure unfunded priorities to decrease the \$2 billion recapitalization backlog and directly enhance operational readiness.
- A \$100 million down payment for operationally critical IT, communications and cyber investments.
- Strong continued support for major recapitalization efforts, including:
 - Offshore Patrol Cutters (OPCs) program-of-record (25).
 - Polar Security Cutters (PSCs) program-of-record (three).
 - Waterways Commerce Cutter (WCC) program-of-record to replace the Inland Rivers fleet.
 - HC-130J aircraft program-of-record (22) to replace the antiquated HC-130H.

3. Execute engagement with domestic and internation– **al partners.** In a world of neither peace nor declared war, enduring international competition requires strong alliances and partnerships.

Domestically, the Coast Guard continues to work closely with stakeholders within DHS, the intelligence community, DoD and the maritime industry, coordinating and collaborating when possible. This includes close support to the geographic combatant commanders, including: U.S. Northern, Southern, Indo-Pacific, European and African Commands.

Internationally, the Coast Guard maintains a lead role in various maritime regimes and activities:

The Coast Guard is the lead agency in the critically strategic Arctic region. Within the U.S.'s 1 million square miles of Arctic territorial seas are 90 billion barrels of undiscovered oil reserves, an estimated 30% of the world's undiscovered natural gas and \$1 trillion worth of rare earth minerals such as zinc, nickel and lead. As noted in the DoD's 2019 Arctic Strategy, we need a stable region, "where U.S. national interests are safeguarded, the U.S. homeland is protected and nations work cooperatively. ..." The long-standing and highly effective North Pacific Coast Guard Forum and the recently created Arctic Coast Guard Forum are promoting continued dialogue, while two cutters deploy to the Eastern Arctic for joint exercises with the Canadians, Danish and French.

In Oceania. Island nations are essentially a "power projection superhighway" through the Pacific, yet often lack the capability or capacity to police their waters and protect their sovereignty. This makes them vulnerable to fish poaching, drug and human trafficking, piracy and terrorist activity. China, in particular, uses coercion and implied military threats to advance an aggressive strategic agenda. In recent years, multiple NSCs have deployed to support DoD's Indo-Pacific Command combatant commander in the South China Sea conducting defense and security operations with the Navy's 7th Fleet.

Illegal, Unreported and Unregulated (IUU) Fishing. IUU fishing has replaced piracy as the leading global maritime threat, impacting food resources, economic security and the sovereignty of many coastal nations. In September 2020, the Coast Guard released the IUU Fishing Strategic Outlook, a call to action to amplify awareness of the IUU fishing threat to national security and synchronize efforts among like-mind-ed partners to prevent this illicit behavior in our maritime domain. Fish is an essential protein source for over 40% of the world's population.

COVID-19

COVID-19 has accelerated the service's transition to a modernized ready-learning system. The Coast Guard is in the process of shifting its training programs to provide a combination of virtual training, in-person training and blended training (a combination of virtual and in-person training). A fairly new concept under development within the Coast Guard is distributed training, tailored to the individual. For example, if a member is already boat crew qualified, then perhaps they could join the classroom training for coxswain at week six rather than at the beginning of the course. Adopting an agile training model adds additional flexibility by allowing course content to be changed within months.



U.S.-FLAG MERCHANT MARINE

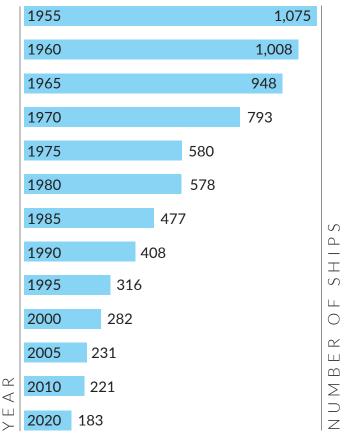
The National Security Directive on Sealift, NDS 29, states, "Sealift is essential both to executing this country's defense strategy and to maintaining a wartime economy. ... The United States' national sealift objective is to ensure that sufficient military and civil maritime resources will be available to meet defense deployments and essential economic requirements in support of our national security strategy. ... The U.S.-owned commercial ocean carrier industry, to the extent it is capable, will be relied upon to provide sealift in peace, crisis and war. This capability will be augmented during crisis and war by reserve fleets comprised of ships with national defense features that are not available in sufficient numbers or types in the active U.S.owned commercial industry."

There are now serious challenges to meeting these objectives. The nation is no longer able to deploy and sustain forces in protracted wartime operations since the 183 large oceangoing U.S.-flag ships operating in foreign and domestic trades are about 50 ships short of being able to provide the pool of skilled U.S.-citizen merchant mariners to crew each commercial and government-owned reserve sealift vessel during protracted wartime operations. Additionally, the readiness of the Navy's 15-ship surge sealift fleet and the Maritime Administration's 46-ship Ready Reserve Force (RRF) have declined dramatically. In a recent largescale activation exercise, of the organic Surge Fleet (RRF plus Military Sealift Command (MSC)) just 39 of 61 ships were ready for tasking, and the fleet recapitalization program remains underfunded. Action needs to be taken now to rebuild our sealift capabilities to support the new National Defense Strategy that focuses on peer competitors, China and Russia. A new strategy should be developed to provide a roadmap for cost effective modernization of sealift capabilities. This should focus primarily on U.S.-flag commercial ships in domestic and foreign trade fleets (per NSD 28), and secondarily on government-owned, U.S.-built assets in reserve fleets while meeting national security needs at moderate risk.

The domestic component of the U.S.-flag fleet is governed by the Jones Act, which requires vessels in domestic waterborne trade be owned by U.S. citizens, built in the United States, to be U.S.-flagged and crewed by U.S. mariners. This fleet stabilized at about 100 ships in recent years due to recent recapitalization of ships in the Hawaii and Puerto Rico trades and new tankers to transport shale oil. This is the majority (97 of 183 as of Nov. 15, 2020) of oceangoing ships under the U.S. flag. Without the Jones Act, the Coast Guard and Customs and Border Protection would face the costly new burden of ensuring foreign mariners are properly vetted at hundreds of inland waterway locations to preclude homeland security incidents. The Jones Act keeps American shipping companies, shipyards, mariners and thousands of people working.

The number of non–Jones Act U.S. vessels in international trade has now stabilized at about 86 ships in recent years

after a gradual decline in government-impelled cargo due to reduced military operations in Iraq and Afghanistan, reduction in the U.S. global military presence, legislation that reduced cargo preference requirements for food aid, and challenges related to uniform implementation of cargo preference across federal activities. The Maritime Security Program (MSP) fleet of 60 follow-on surge and sealift sustainment vessels makes up 70% of the total U.S.-flag commercial fleet in foreign trade. This fleet is given cost-offsetting stipends to operate under the U.S.-flag, and the program is authorized through 2035. The remaining roughly 26 other ships are supported only by preference cargoes or long term MSC charter arrangements. It would cost approximately \$13 billion in taxpayer funds to replicate vessel capacity alone without the MSP. Additionally, most RRF vessels now average more than 45 years old. Without substantial increases to



Total U.S. Flag Ships by Year

* Dates as of January 1; Vessels of 10,000 DWT or greater, includes Great Lakes carriers. Source: U.S. Maritime Administration. future shipbuilding budgets, the Navy will not have enough funds to recapitalize these ships during the next decade when they reach the end of their expected service lives. While some of these ships can have their lives extended five or 10 years, and some can be replaced by used vessels, the Navy has not allocated sufficient funds to acquire the mix of foreign-built used vessels and new U.S.-built vessels to do so in accordance with current law.

The Jones Act

- **\$154B** in total economic output
- **\$16B** in tax revenue
- **\$41B** in annual wages
- **\$72B** added to the value of economic output
- Creates 650,000 jobs

Even if the reserve fleet's age and readiness issues are fixed, we still cannot operate all the ships for extended periods because the commercial U.S.-flag oceangoing fleet is too small to provide the requisite crews in wartime. A work-ing group comprising members from U.S. Transportation Command, the Office of the Secretary of Defense, the Coast Guard, Navy and MARAD, assessed that we have a shortfall of 1,800 mariners to crew all U.S.-flag commercial and gov-ernment reserve sealift vessels during a full mobilization for a sustained period of more than six months.

This situation calls for a new maritime strategy that generates a future sealift capability to support the new National Defense Strategy focused on peer competition with China and Russia. A National Maritime Transportation Strategy is also needed to recommend legislation, regulatory and policy changes with associated funding priorities to reverse the decline in the U.S. Merchant Marine. The U.S.-flag fleet operating in international trade, and the wider U.S. maritime industry, from shipbuilding to port infrastructure, needs support. The current sealift requirement is based on post-Cold War scenarios, such as major ground force movements to Iraq in an uncontested environment. Now sealift will have to support distributed maritime operations in the Pacific and reinforcement of Europe with ground forces in an environment contested from ports of embarkation (POE) to ports of debarkation — that likely will mean attrition of ships. Unfortunately, at the time of publication, the long-de-

layed updated Mobility Capabilities and Requirements Study (MCRS) has not specified what future sealift capabilities are needed with respect to type (Roll-on/Roll-off, tanker, container, etc.), capacity (square feet/barrels/20-foot equivalent units), readiness (days before ready to load on berth at POE) and unique features (consolidated cargo capability of tankers with oilers, self-sustaining container handling, etc.). Consequently, we can only suggest options for generating the needed sealift capabilities, with the future fleet primarily depending on active commercial U.S.-flag ships with national defense features being the foundational principle. Specialized reserve fleet ships with no commercial viability should be used only when necessary.

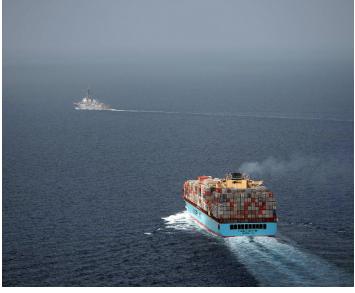
Options could include the following:

1. Expand the domestic "Jones Act" fleet with coastwise services of dual-use vessels (commercial ships with military utility-installed national defense features). These commercial ships would alleviate congestion, road wear and pollution along the I-5/I-95/I-10 corridors in peacetime by carrying domestic 53-foot tractor trailers/boxes along these American Marine Highways (AMHs), while also being quickly available (less than five days) to support a major deployment of military equipment through participation in the Voluntary Intermodal Sealift Agreement program. This program, in which all MSP vessels and at least 50% of the Jones Act fleet participate, fulfills the intent of the national sealift policy that commercial ships have priority in meeting sealift requirements. The Title XI Federal Ship Financing Program can partially support recapitalization of Jones Act tonnage, and new capacity to meet the AMH shipping needs.

2. Expand the Maritime Security Program to meet less time sensitive sealift needs and fund an expanded "Tanker Security Program" to address the massive tanker shortfall to support Navy and Air Force operations in a major Pacific War.

3. Create new cargo preference programs such as the Energizing American Shipbuilding Act that would generate additional U.S.-flag and U.S.-built ships, help maintain the shipbuilding industrial base and provide crews for reserve fleet ships. The law would require a percentage of liquefied natural gas and crude oil exports to travel on U.S.-built, U.S.-flag ships. This would help stem the decline of U.S. shipping in foreign trade, boost mariner employment and provide additional work for U.S. shipyards. Similarly, a program for automobile exports should be supported to increase the number of militarily useful ships under U.S. flag.

4. Construction of new sealift ships to meet only those



The guided missile destroyer USS Chung-Hoon, left, escorts a merchant ship in the Gulf of Aden, March 1, 2019, during Lucky Mariner, an annual exercise aimed at protecting the free flow of commerce.

sealift requirements that are so specialized they cannot be met by commercially available U.S.-flag ships

5. Acquisition of foreign hulls to recapitalize RRF Roll-on/ Roll-off ships only if it can be proven that actively sailing commercial ships cannot satisfy requirements without major risk to deployment execution at substantially lower cost than dual-use AMH vessels.

Beyond the availability of sealift shipping, the training of U.S. mariners is a critical issue. Though the number of ships has decreased, current mariner demographics and the demands of the offshore oil and inland waterway industries mean there is robust demand for new mariners. While the U.S. Merchant Marine Academy, six state maritime academies and industry training schools continue to produce graduates, fewer afloat training billets and aging training ships making it increasingly difficult to meet licensing and training requirements. Junior mariners need the sailing time to meet the International Maritime Organization's Standards for Training, Certification and Watchkeeping that went into effect on Jan. 1, 2017. The academies need five new training vessels through the National Security Multi-Mission Vessel (NSMV) program, the first delivered by 2022, to prepare graduates for the licensed maritime community. Four of the ships have already been authorized, and one more will be eventually required to fully meet training requirements.



THE NAVY LEAGUE OF THE UNITED STATES RECOMMENDS:

- Promptly releasing a National Maritime Transportation Strategy.
- Maintaining and defending the Jones Act: diminishing the law would weaken national and economic security by diminishing the seafaring and shipbuilding industrial bases.
- Robust support of the Maritime Security Program. Congress should continue appropriating at least the funds authorized (starting at \$314M million in FY2021) through 2035 to keep these 60 ships under the U.S. flag.
- Full funding of at least a 10 ship Tanker Security Program and two ship Cable Security Program.
- Full funding for RRF and MSC's reduced operating service fleets life extensions (approximately \$50 million per year for the RRF).
 We must ensure these fleets match current combatant commander readiness and capacity requirements until requirements are changed by the updated MCRS.
- Strong U.S. cargo-preference laws. We support restoring the requirement for 75% of Food for Peace cargoes be carried on U.S.-flag ships to increase the number of U.S.-flag ships and the mariners needed to operate them, as well as the Energizing American Shipbuilding Act for the carriage of domestic sources of LNG and crude oil.
- Building dual-use vessels. The Navy and MARAD should work rapidly on recapitalizing the RRF by operationalizing the dual-use vessel concept on AMH or propose another viable alternative. Legislative and policy changes should be enacted by fiscal 2022.
- Full authorized funding of the U.S. Merchant Marine Academy and six state maritime academies to meet the operational, maintenance and capital improvements requirements, including for the Student Incentive Program.
- Funding the authorized Maritime Centers of Excellence, including graduate studies, to ensure the next generation of mariners are properly trained and educated.
- Full funding of the NSMV: Recapitalizing trainings ships for the state maritime academies.
- Passing the Energizing American Shipbuilding Act.

- Promptly completing and releasing the congressionally mandated Sealift Recapitalization Study based on an updated MCRS.
- Adjusting budgetary and legislative measures that preclude capital and operations-related changes in the application of U.S. tax laws. This is to counter Internal Revenue Service advice that land components of intermodal transport activities do not qualify as "qualified shipping activities" under the tonnage tax law and that MSP payments are subject to regular corporate rates of taxation, which could seriously impact the cost to operate vessels under the U.S. flag, jeopardizing their economic viability.
- Repealing current Internal Revenue Code language. This is so Capital Construction Fund deposits and earnings are treated the same way for purposes of the corporate alternative minimum tax as they are under the regular corporate income tax, helping to expand U.S. shipping by making the financing of U.S. ship construction less expensive.
- Ensuring a strong strategic sealift officer component in the U.S. Navy Reserve. This ensures critical skills and experience are retained to support Navy and sealift transportation and to provide a backup pool of licensed mariners.
- Implementation of a robust military-to-mariner program. This facilitates the transition of former Army, Navy and Coast Guard Sailors/Mariners to certificated/licensed merchant mariner positions to help address projected shortfalls.
- Use of National Defense Features. Navy funding of such features on both U.S.- and foreign-built vessels is needed to enhance their military utility in support of contingency operations.
- Consolidation of MARAD program authorizations in the National Defense Authorization Act and appropriations in the Defense Appropriation Bill. This would ensure MARAD's national security related programs are properly funded including Title XI, MSP, research and development, AMH, etc. The current arrangement results in a fragmented program execution and insufficient resources. Such a consolidation should also consider the cost savings and readiness benefits of transferring the MSC Surge Sealift ships to MARAD.



MARINE TRANSPORTATION SYSTEM

The U.S. Marine Transportation System (MTS) consists of waterways, ports and their intermodal connections, vessels and vehicles. The more than 41,000 American-built, American-crewed vessels operating in domestic maritime transportation contribute more than \$150 billion per year to the U.S. economy. These vessels move more than one billion tons of cargo annually and create over 650,000 jobs. Additionally, annual taxes generated by the domestic fleet top \$16 billion, and any increased revenue should be invested in reducing the billions of dollars in backlogged maintenance to upgrade/replace much of the obsolete and unreliable river er lock-and-dam infrastructure. The system can carry huge additional amounts of freight and petroleum products at a fraction of the cost of other transport modes.

The U.S. Army Corps of Engineers' dredging and new construction program funds projects such as a second Poesized lock on the Great Lakes, which will prevent a shutdown of the Great Lakes trade and economy if the current single lock fails. Other programs fund the U.S. Coast Guard upgrades to aids to navigation in river and harbor channels that connect U.S. ports to the world. The Harbor Maintenance Trust Fund (HMTF), resourced from the Harbor Maintenance Tax (fees of about \$1.7 billion a year), was intended to pay for the construction and maintenance of harbor and navigation channels and aids when it was developed in 1986. The Water Resources Reform and Development Act (WRRDA) of 2014 set targets for increasing expenditures to 100% of funds received in the HMTF by fiscal year 2025 and while recent appropriations are meeting targets, even more funding will be needed to reduce billions of dollars in project backlogs, including urgent investments to accommodate the larger ships using the expanded Panama Canal.

As one of the world's trade leaders, the United States requires a technologically advanced, secure, efficient and environmentally sound MTS. Our economic prosperity is dependent on international trade, of which more than 99% of overseas trade, by weight (excluding Canada and Mexico), moves by water. Roughly \$2 trillion of trade flows through U.S. ports. Trade flowing through the nation's ports and waterways is expected to increase substantially by 2030, creating greater congestion on overburdened land, port, water, passenger and freight delivery systems. Only a truly seamless, integrated, multimodal transportation system with an expanded AMH system as part of the National Freight Strategic Plan and associated National Maritime Transportation Strategy will meet the nation's growing needs.



THE NAVY LEAGUE OF THE UNITED STATES RECOMMENDS:

- Incorporating marine highway corridors, connectors and state freight systems as part of the National Freight Strategic Plan to improve infrastructure and developing AMH vessels to expand the use of waterways for freight and passengers.
- MARAD's "green" programs, with resources to promote sustainability throughout the MTS, including research and technology in areas such as ballast water, port and vessel emissions, alternate fuels and energy management.
- Funding Title XI: At least \$30 million is needed now, followed by about \$30 million in annual appropriations to keep up with the potential demand.
- A Harbor Maintenance Tax exemption for waterborne cargo shipped between U.S. ports. Taxes should only be paid when imports first land in the United States to eliminate a disincentive for increased domestic waterborne transport.
- Full funding for the U.S. Army Corps of Engineers' dredging and new construction projects at the amount called for in the 2014 WRRDA.
- Use of the Inland Waterway Trust Fund to repair/replace aging infrastructure on the inland waterway system.
- Increased investment in maritime research, and development on par with other modes of transportation.
- Priority access to terminals, vessel berths and staging areas at the 17 commercial strategic ports for military cargo that support the short-notice military surge deployments under the National Port Readiness Network. Funding for a MARAD program for contingency contracts may be needed to ensure strategic seaports can guarantee access to staging areas, equipment, and facilities to support major force deployments.
- Efforts to develop a national capacity for the MTS to recover from major disruptions to ensure the continuity of key maritime activities. This should include the maintenance of a robust U.S. salvage vessel and oil spill recovery capability to ensure expeditious clearing of vital channels and harbors.
- Increased share of grants for funding intermodal and freight-related maritime projects from provisions in the Infrastructure for Rebuilding America and Better Utilizing Investments to Leverage Development Transportation Discretionary Grants programs. These grants, and the credit assistance provided through the Department of Transportation's Transportation Infrastructure Finance and Innovation Act and Railroad Rehabilitation Improvement Financing programs, can help improve the movement of freight through ports and reduce congestion.

CONCLUSION

The events that have occurred since the publication of the 2019-2020 Maritime Policy Statement have shown a clear need to reorient our focus toward the Pacific and to reorient the Defense Department budget towards our sea services that will serve as the tip of the spear in these new maritime threat environments. The rise of communist China represents the greatest threat America has faced since the end of the Cold War, as well as the greatest threat to international stability and to rule of law in the world's oceans. Our sea services, and our international partners and allies, must have the focus, resolve, and resources necessary to meet this challenge.

The 2018 National Defense Strategy demands increased collaboration between all service branches and flexibility and experimentation to speed technological advances. Achieving these goals will require a whole of government approach, as well as clear communication with the private sector and defense industrial base. Sea service leaders are calling for divesting from legacy assets to focus investment on the high-end fight and Congress must be a partner in oversight and funding, not stand in the way.

When we work together as a country, Americans have proven over and over we can meet any challenge. But a highly polarized and unstable domestic political environment presents a significant obstacle that the American people and their political representatives must overcome. While congressional Democrats and Republicans should be applauded for helping to improve sea service readiness and strength, partisan political fights have had a significant impact. The 35-day shutdown in 2019 cost the Coast Guard months of training and maintenance, devastating morale, and harming recruitment and retention. Additionally, at the time of this document's publication, the government was still operating on a continuing resolution instead of full-year funding, delaying new acquisitions designed to produce the future naval force needed to thwart adversary revisionist agendas.

While Congress has recently provided stable funding to the services, the COVID-19 pandemic portends that some tough years lie ahead for the DoD budget. Thanks partially to pressure from the mandatory Pentagon audit, sea service leaders have recognized this reality and combed through their budgets to find dollars they can reassign to prepare for the future fight. But decisionmakers must understand that if tough choices need to be made in regards to defense budgets, the sea services must receive the lion's share due to their forward posture and unrivaled role in confronting great power competitors in the Pacific and Arctic threat environments. The Navy League is prepared to lead this fight through education and advocacy, and we hope that you will join us.

2021 2022 **AT A GLANCE**

The United States is a maritime nation — we need to invest in our Sea Services to deter conflict, ensure open seas for commerce and reverse the damage to readiness from years of overuse and underfunding. We must make the right investments for a return to great power competition posited in the "National Defense Strategy" and "National Security Strategy" and begin strengthening our forces. Working toward the following priorities in the 117th Congress will be our primary role in this mission.

www.navyleague.org/programs/legislative-affairs

TOP 3 USN Titi **PRIORITIES** Columbia-class SSBN Columbia-Class - America's No. 1 security priority U.S. NAVY 2 Maintain readiness and lethality across the Fleet **B** Increase Navy's budget to fund an aggressive shipbuilding plan TOP 3 USMC S **PRIORITIES** CORP **U** Light Amphibious Warship (LAW) **U.S. MARINE 2** Long Range **Precision Fires** (Tomahawk and **Ground-Based Anti-Ship Missiles** (GBASM) B Resilient C4 and **ISR** Architecture **Light Amphibious Warship**



TOP 3 USCG PRIORITIES

- Maximizing readiness: 5% annual increase in USCG Operations and Support Budget
- Offshore patrol cutter
- Polar security cutter

Polar Security Cutter

The Jones Act

\$154B in total economic output

- **\$16B** in tax revenue
- **\$41B** in annual wages
- **\$72B** added to the value of economic output

Creates 650,000 jobs



CARGO PREFERENCE

Maintain Merchant Mariner jobs through: Government cargo on U.S.-flag ships

- Energizing American Shipbuilding Act:
 - Cargo preference for oil/LNG shipments
- Minimum of 10 ships
- At least 6 million per ship
- Addresses critical tanker shortage

All priorities should be incorporated into a National Maritime Transportation Strategy.

TOP 3 USMM PRIORITIES

- Jones Act
- **2** Cargo Preference
- Tanker Security Program



The Navy League of the United States is a nonprofit organization dedicated to educating our citizens about the importance of sea power to U.S. national security and to supporting the men and women of the U.S. Navy, Marine Corps, Coast Guard, and U.S.-flag Merchant Marine and their families.

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