NOT FOR PUBLICATION UNTIL RELEASED BY
THE HOUSE ARMED SERVICES COMMITTEE
SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES

JOINT STATEMENT OF

DR. BRETT A. SEIDLE
ACTING, ASSISTANT SECRETARY OF THE NAVY
(RESEARCH, DEVELOPMENT AND ACQUISITION)
PERFORMING THE DUTIES OF UNDER SECRETARY OF THE NAVY

AND

VICE ADMIRAL JAMES PITTS
DEPUTY CHIEF OF NAVAL OPERATIONS
WARFIGHTING REQUIREMENTS AND CAPABILITIES (OPNAV N9)

AND

LIEUTENANT GENERAL ERIC AUSTIN
DEPUTY COMMANDANT, COMBAT DEVELOPMENT AND INTEGRATION
COMMANDING GENERAL, MARINE CORPS COMBAT DEVELOPMENT COMMAND

BEFORE THE
SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES OF THE
HOUSE ARMED SERVICES COMMITTEE

ON

DEPARTMENT OF THE NAVY UPDATE ON NAVY PROGRAMS AND CAPABILITIES

JUNE 04, 2025

NOT FOR PUBLICATION UNTIL RELEASED BY
THE HOUSE ARMED SERVICES COMMITTEE
SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES

Introductions and Welcome

Chairman Kelly, Ranking Member Courtney, and distinguished members of the Subcommittee, thank you for the opportunity to appear before you today to address the status of the Navy's and Marine Corps' capabilities. Building and maintaining a world-class and globally deployable Navy and Marine Corps as a first line of defense for the United States is a continuous effort. We are actively working to achieve Secretary Phelan's strategic goals of strengthening shipbuilding and the maritime industrial base. Our team is fostering an adaptive, accountable, and innovative warfighter culture by promoting the health, welfare, and training of our people, building and maintaining resilient supply chains, engaging in flexible acquisition practices as current authorities allow, employing sound economic deterrence principles, and training and retaining a robust and knowledgeable workforce. Pursuit of these goals will ensure we remain the most lethal force in the world. We look forward to working with this subcommittee and Congress to achieve these goals. As we commemorate the 250th birthdays of our Navy and Marine Corps this year, we also look ahead to the future of maritime warfighting dominance.

The presence of the Navy and Marine Corps team around the world reassures international allies and partners, deters potential adversaries, and responds to those who threaten the lives of our Sailors, Marines, and civilian merchant mariners engaged in lawful operations and international commercial activities. A strong, resilient, and effective industrial base, composed of shipyards, depots, original equipment manufacturers (OEMs), suppliers, ship designers, and associated supply chains, is essential to accomplishing and sustaining operational readiness.

Growing and modernizing vital production and repair facilities is a national security imperative. We, alongside our industry partners, must invest in our industrial base with a collective goal to accelerate the production, throughput, and sustainment of the ships and submarines we require. We, alongside our industry partners, must continue to hold ourselves accountable, and we will.

The security of our country and preservation of our national interests remains reliant on a superior naval force, strategically postured to deter conflict and, if necessary, fight and win America's wars. Global events have continued to pressurize the need for rapid change, and the Department of the Navy (DON) has taken note. We are aggressively seeking and implementing new and improved ways to operate, integrate, and sustain our forces and maintain a solid industrial base. The Navy and Marine

Corps team must continue to provide unmatched operational capability to best support the geographic Combatant Commanders in countering constantly evolving geopolitical challenges and threats.

Ensuring timely, on-budget delivery of aircraft, ships, and munitions is critical to maintaining our national security and maritime dominance. The DON appreciates the continued support of Congress and this Committee for the Department's acquisition, sustainment, research, and development programs that allow us to continue to build and operate a lethal, capable, integrated, and forward-postured Navy and Marine Corps.

State of Conventional Surface Shipbuilding

U.S. shipbuilders continue to produce the highest quality, safest, and most advanced warships on the globe. At a time when outstanding performance against adversaries is needed in defending freedom of navigation from the Red Sea to the Western Pacific, the U.S. Navy continues to provide unmatched capability. However, the U.S. shipbuilding industry is challenged to produce the quantity of ships at the rate required to effect lasting, sustainable growth in the battle force inventory. On balance, cost and schedule performance remain challenged; deliveries are approximately one to three years late, and costs continue to rise faster than overall inflation. These challenges are prevalent across the nuclear and conventional shipbuilding communities with both Navy and Industry sharing responsibility. Identified challenges include atrophy of our manufacturing industrial base, pre-COVID contracts, workforce shortages related to macroeconomic and demographic trends, diminished workforce proficiency, supply chain disruptions, iterative technical requirement updates, design immaturity, and inconsistent industry investment across the shipbuilding industrial base.

Similar pressures affect the Tier 2 and 3 shipyards, providing an opportunity for the Navy to more consistently level load workload where additional capacity remains. The Navy must continue to provide a reliable demand signal to the industrial base to broaden interest, strengthen commitment, and encourage investment at all levels.

The U.S. share of global shipbuilding – commercial and military – and the number of naval vessels delivered per year are not meeting the desired targets. The current industrial base is optimized for the efficient peacetime production of ships and munitions. Historic underinvestment and industry consolidation following the end of the Cold War have reduced competition and capacity at the Tier 1 shipyards and their suppliers, leading to workforce constrained build schedules that do not meet Navy

targets. The remaining prime shipbuilders and subcontractors face shortages of available skilled workers in both the trades (welders, pipefitters, electricians, etc.) and design/engineering workforce, leading to schedule disruptions, delayed delivery of critical components, and associated cost and schedule challenges. In addition, the current relative wage rate for shipbuilders is behind historical averages.

In the 1980s, approximately 38% of the workforce was engaged in manufacturing activity. Today, that number is closer to 12%. It is also true that, historically, manufacturing sector workers earned approximately 3-4 times the minimum wage, irrespective of geography. Today, shipyard workers' wages are only marginally above inflation-adjusted living wages, which leads to significant competition with local service sectors and adjacent labor pools. The Navy encourages the shipyards to make continued and increased investments in their workforce, alongside efforts to improve the quality of service for their shipbuilders, which is critical to increasing hiring, reducing attrition, and developing the workforce. The Navy has recently funded initiatives aimed at increasing wages, improving transportation and parking options, addressing housing and childcare shortages, and providing retention bonuses to address these challenges at some of our major prime shipbuilders.

The Navy faces its own challenges as well. Burdensome acquisition processes and contracts that were established prior to the COVID-19 pandemic contribute to the current situation. We are committed to improving our acquisition, oversight, cost estimation and budgeting processes, holding ourselves accountable, implementing innovative contracting strategies, and continuing to develop the acquisition workforce.

Our Navy's strategic role is foundational to the protection of global trade routes, the defense of allies, and the deterrence of adversarial actions. Ensuring that the U.S. Navy remains the world's preeminent naval force is critical to advancing American interests for decades to come.

We look forward to working with Congress to ensure that the necessary resources and support, as requested in the FY26 Budget, are provided to meet these ambitious goals. Together, we will ensure that the United States remains the world's foremost maritime power and continues to lead in the defense of freedom and security across the globe. The Navy acknowledges that additional opportunities remain and is working with the Administration to identify and evaluate them.

Path Forward

With the help of Congress, the U.S. Navy is a key participant in the Administration's whole-of-government effort to enhance the national shipbuilding industry. In addition to investments in the nuclear shipbuilding industrial base and surface combatant industrial base, the Navy is in the middle of a generational increase in demand for shipbuilding.

On April 9, 2025, President Trump signed the "Restoring America's Maritime Dominance" executive order (EO). The EO aims to revitalize the U.S. maritime industry, addressing weaknesses in the commercial shipbuilding capacity and workforce that have compromised national security. One focus area of the EO is revitalizing our domestic shipbuilding capacity. For too long, we have relied on foreign sources for certain components and materials critical to our fleet. By investing in shipyards, modernizing infrastructure, and re-skilling the workforce, we will ensure that the United States has the capacity to build and maintain the most advanced naval vessels in the world. This effort will not only support national security but will also create high-quality jobs, strengthen the economy, and restore American leadership in maritime innovation.

With 92 ships on contract and 56 hulls under construction, the Navy assesses industry has sufficient backlog to continue materiel investments and labor force hiring, retention, and improvement initiatives. The Navy is assisting with capital expenditure projects at each of the Tier 1 shipyards, workforce development initiatives, and investing in growing the labor pool for critical trades. The Navy is also pursuing strategic outsourcing efforts to smartly shift some workload to smaller shipyards and key suppliers to enable long-term sustainable growth in capacity at the prime shipbuilders delivering our battle force ships, including the innovative partnership with private equity and industry to create the United Submarine Alliance Fund and the subsequent purchase of the Alabama Shipyard.

In September 2024, the Navy established the Maritime Industrial Base (MIB) Program Office to lead enterprise efforts to restore America's shipbuilding capacity and to ensure the Navy can build and sustain the fleet required to support the national defense priorities and strategies. This strategic reorganization integrates the Submarine Industrial Base and Surface Combatant Industrial Base programs into a cohesive entity focused on the overall health of the maritime enterprise. The transition to the MIB Program represents a comprehensive approach to revitalizing America's shipbuilding and ship sustainment ecosystems, enabling the Navy to holistically address challenges and opportunities

and respond to a comprehensive Navy demand signal, while also opening the aperture on efforts and investments to meet future defense demands more efficiently.

The U.S. maritime industrial base is the critical enabler of the Navy's ability to deliver and maintain combat capability necessary to execute its missions around the world. The industrial base consists of public and private naval shipyards, private industry partners, highly skilled workforces, OEMs, complex supply chains, and organic resources. Since 2018, Congress has appropriated approximately $9 billion for submarine industrial base efforts as well as $1.2 billion for the large surface combatant and frigate industrial base. The Navy's strategy to improve the health of our maritime industrial base is focused on six key lines of effort: growing capability and capacity in the supply chain, modernizing shipbuilder infrastructure, expanding capacity of key suppliers to take on work traditionally executed by shipbuilders, developing the critical maritime manufacturing workforce, operationalizing advanced manufacturing technology, and increasing government oversight.

The Navy has implemented a data-driven and data-informed process to ensure our investments and initiatives are targeting the primary needle-movers and enablers of shipbuilding and ship sustainment schedules. As part of this process, we assess and track impacts of Navy investment at multiple levels. At the individual project level, the Navy implements discrete, measurable return on investment metrics for each project with a mandated feedback loop to measure progress. At the aggregate level, we assess multiple individual projects with shared objectives; and at the portfolio level, we assess projects and aggregate-level impacts relative to production schedule drivers. The Navy's data-based assessment and decision-making process for industrial base investment enables a standard approach to assessing impact and identifying challenges and opportunities, improving coordination, and integrating perspectives among a range of stakeholders. Collectively, these efforts support flexible decision making to meet a dynamic supply chain environment.

The Navy is seeing early indications that investments appropriated to date are helping to stabilize targeted sectors of the industrial base that provide critical materials for in-service ships as well as new construction programs. Since fiscal year (FY) 2018, we have launched more than 725 supplier development projects with more than 300 suppliers across 33 states to add capability, capacity, and resiliency to the supply chain, including developing alternate suppliers for critical components. The Navy has invested more than $1 billion since FY18 to improve the performance of companies that

supply sequence-critical material for new construction programs – material that must be delivered on time to maintain production schedules. The Navy's six regional Talent Pipeline Programs have placed more than 6,400 trades workers in the maritime sector and, through our partnership with the Southeastern New England Defense Industry Alliance, more than 6,750 workers have been trained and placed in the shipbuilding industrial base.

The Accelerated Training in Defense Manufacturing training program in Danville, VA has trained more than 775 students in key maritime trades, and in January 2025, opened the National Training Center, which will scale the program to 1,000 graduates per year by 2025. The Additive Manufacturing (AM) Center of Excellence (CoE) in Danville, VA made significant progress in maturing and operationalizing AM printing more than 270 parts and leading efforts to scale AM by producing production-ready Technical Data Packages, responding to emergent material needs, centralizing non-recurring engineering, and qualifying AM suppliers to enable parts production at scale. The AM CoE is already helping get our ships back to sea, with more than 15 examples where the AM CoE has printed parts for ships and submarines in response to emergent needs, saving over 900 days of delay relative to traditional procurement paths.

Recent Shipbuilding Accomplishments

The Columbia Class Ballistic Missile Submarine (SSBN) is the Navy's number one acquisition priority. Columbia, with the TRIDENT D5 Life Extension 2 (D5LE2), will ensure the effectiveness and availability of the Nation's Sea Based Strategic Deterrent (SBSD) through the 2080s. The lead ship of the class started full construction in FY21. Based on shipbuilder performance and the complexity of first-of-class construction and testing of this new submarine, delivery is projected to be 12-18 months late to contact delivery date. The Navy is driving both General Dynamics Electric Boat and Huntington Ingalls Newport News Shipbuilding to identify opportunities to recover critical path schedule, improve overall performance, and deliver as rapidly as possible. Due to the significance of the SBSD mission, the Navy is holistically managing SSBN inventory across the portfolio using targeted Ohio-Class SSBN service life extensions to mitigate possible Columbia delays. The second ship of the class, the future USS-Wisconsin, commenced full construction in October 2023 and learning is being demonstrated through reduced spans for early construction activities. As reflected in the FY26 Budget, continued funding for advance procurement, advance construction, and continuous

production for the class is critical to reducing construction schedule risk, enabling cost savings, and meeting U.S. Strategic Command (USSTRATCOM)) requirements throughout the Ohio to Columbia transition. The DON appreciates Congress' continued support of these and the Columbia class as a national priority.

As of February 2025, the Navy has taken delivery of 24 Virginia Class submarines with 14 additional under contract. New Jersey (SSN 796) delivered in April 2024 and Iowa (SSN 797) delivered in December 2024. The second ship of the Block V contract will introduce the Virginia Payload Module, which helps mitigate the loss of undersea strike capability with the retirement of guided missile submarines. All Block V ships will incorporate acoustic superiority improvements.

Virginia Class construction performance remains challenged to meet the required two per year delivery cadence and is currently at approximately 1.1 ships per year. With Congressional approval, the Navy intends to award the next Virginia multi-year procurement (MYP) contract, Block VI, in calendar year 2025, which will include nine ships. Given the challenges in meeting the required construction rates, the FY25 budget request included funding for one Virginia SSN, which provided an opportunity for the shipbuilders to balance production for VCS Block VI construction and serial Columbia production beginning in FY26 and allows for maturation of industrial base investments in manufacturing, outfitting, and assembly & test. The FY25 budget also included advance procurement (AP) and economic order quantity (EOQ) funding in support of Block VI ships. AP and EOQ allows for critical sub-tier vendors to be kept on cadence and support the procurement of long lead materials and components that are critical to the program. Cost to complete funding for Block IV and V boats are also included in this budget as well as funding for continued development of capabilities and technologies for future blocks. Congress provided an additional $5.7 billion of FY25 supplemental funding to fully finance cost increases in the two FY24 boats and the single FY25 boat, as well as to provide wage increases and fund shipyard productivity enhancements for our two submarine shipbuilders. This is reflected in the April 30, 2025, contract award.

Flight III Arleigh Burke Class (DDG 51) Destroyers will provide enhanced Integrated Air and Missile Defense with the AN/SPY-6(V)1 (SPY-6) radar and Aegis Baseline 10 combat system. These combat system enhancements meet the growing ballistic missile threat by improving radar sensitivity and enabling longer range detection of more numerous and increasingly complex threats. The Flight III program demonstrated design maturity through its successful completion of phase 1 developmental

testing and the SPY-6 radar program is in serial production to support delivery for Flight III and DDG Modernization 2.0 ships. August 2024 marked the successful completion of initial shipboard Developmental Testing on the first DDG 51 Flight III ship, USS Jack H Lucas (DDG 125), which was delivered in June 2023.

The Navy is extending a number of DDG 51s beyond their 35-year Expected Service Life, which will provide additional years of ship service life through the mid-2030s. Over the last 15 years, the Navy has made significant investments in DDG 51 Class Maintenance and Modernization, allowing them to continue providing credible capacity to the Fleet thanks to combat system upgrades and compliance with lifecycle maintenance plans.

The Zumwalt Class (DDG 1000) guided missile destroyers are multi-mission surface combatants designed to provide long-range, offensive surface strike capabilities. The DON is developing a hypersonic weapon system that will enable precise and timely strike capability against deep inland targets in contested environments. In collaboration with the Army, the Department is leveraging a common All Up Round missile design and test opportunities to field a conventional hypersonic weapon system. Zumwalt Class DDGs will be the first Navy platform to field hypersonic capability in the late-2020s, followed by Block V Virginia Class SSNs starting in the early 2030s. The development and demonstration of hypersonic strike weapon systems supports the U.S. ability to deter, and if necessary, defeat potential adversaries.

The DDG 1000 program continues to accomplish first-time integration of unique combat systems elements, complete Post Delivery Test and Trials, demonstrate operational performance and start the installation of the first Conventional Prompt Strike hypersonic weapon system on a maritime platform.

The Constellation Class Frigate (FFG 62) is an essential program in pursuit of a larger and more lethal Joint Force in response to the urgent China threat. The FFG 62 acquisition strategy is informed by previous shipbuilding programs and takes advantage of proven systems that increase commonality across platforms and decreases developmental risk, including the three-phased-array SPY-6(V)3 radar, Vertical Launch System missile launchers, and Aegis combat system software. The first six ships are under contract with the future-USS Constellation under construction. The Navy acknowledges significant schedule delays for the lead ship due to a number of factors. The Navy and

shipbuilders continue to surge resources in this area to complete design reviews and ensure achievement of required capability.

After overcoming significant challenges in design and production, the Littoral Combat Ship (LCS) Class continues to mature, and the Navy continues to invest in making the ships more lethal and survivable to elevate their value in the future fight. The Navy will continue to invest in systems like the Naval Strike Missile (NSM) and Lethality and Survivability (L&S) upgrades. L&S upgrades address system obsolescence, enhance cyber security protection to LCS computing environments, provide weapons system performance enhancements, and add survivability systems.

The Navy reached a significant milestone in modernizing mine countermeasure (MCM) capability, as the MCM Mission Package (MP) declared initial operational capability (IOC) in March 2023. The Navy has since embarked four LCS MCM MPs onto Independence Variant LCSs, starting in April 2024. Two LCS with MCM MPs deployed to the Fifth Fleet Area of Operations in March, and a third LCS will deploy soon. MCM MPs complemented by Expeditionary MCM Companies, remain on track to fully replace the aging Avenger-Class MCM and MH-53E Airborne MCM fleet by the end of FY27.

Our Navy and Marine Corps integrate resources across disparate domains and elements of national power to deter adversaries and campaign forward. Procuring our amphibious warfare ships affordably and efficiently is essential. On September 24, 2024, the Navy awarded amphibious Multi-Ship Procurement (MSP) contracts for three Flight II San Antonio Class (LPD) and one Flight I America Class (LHA). The amphibious ship MSP demonstrates the Navy's commitment to maintaining not less than 31 amphibious warfare ships and exercising prudence with taxpayer funds. This multi-billion-dollar award reflects Navy's dedication to build and sustain our maritime dominance and allows for critical investment and sustainment of our shipbuilding industrial base, helping to ensure stability and jobs for the next decade.

The former CNO and CMC signed a joint memorandum directing a comprehensive plan to address amphibious warship readiness, and are committed to closing gaps in Amphibious Ready Group-Marine Expeditionary Unit (ARG/MEU) forward presence while ensuring sufficient ready amphibious warships to support Marine Corps training.

Medium Landing Ship (LSM) will be a medium sized (200-400'), beachable landing ship designed to provide distributed shore-to-shore maneuver, mobility, and sustainment for the Stand-In

Force (SiF), such as Marine Littoral Regiments (MLR), in a contested environment. The FY25 National Defense Authorization Act (NDAA) authorized the Navy to pursue a Non-developmental Vessel (NDV) to support USMC littoral mobility requirements. On 1 April 2025, the Assistant Secretary of the Navy for Research, Development and Acquisition (ASN(RDA)) directed the LSM Program Office to procure one ship from Bollinger Shipyards, built to the design of the Israeli variant of the U.S. Army's Logistics Support Vessel (ILSV), as that NDV, designated as LSM Block 1. ASN(RDA) also directed the program to procure data rights for both the ILSV design and the DAMEN LST-100 design, to support potential scaling of follow-on procurements across multiple shipyards.

Multiple threat-based wargames, scenarios, and force structure reviews have identified shore-to-shore littoral maneuver as the critical capability necessary to enable naval expeditionary forces to conduct distributed maritime operations (DMO) in an archipelagic environment. The ultimate solution must be an affordable and seaworthy platform, that is beachable, and able to cover intra-theater distances, delivering a credible force to enhance maritime domain awareness, and contribute to sea denial operations. The LSM is intended to provide direct support surface maneuver to SiFs and the MLRs executing missions on behalf of the naval campaign.

Complex requirements in the LSM capabilities development document challenge government and industry to design and produce affordable material solutions. Delivering a timely, affordable, littoral maneuver solution requires alignment of capabilities, resources, acquisition, and legislation. The Navy and Marine Corps are working to leverage existing commercial and military capabilities that require minimal modification and can provide sustainment and littoral mobility. The short-term strategy is to procure a non-developmental vessel as LSM Block I in order to put a littoral maneuver capability into the hands of the operating forces while refining LSM Block Next requirements to achieve the best value.

The LSM programmatic timeline does not adequately provide for naval expeditionary forces currently operating in the Indo-Pacific, conducting campaigning activities and deterrence. A Littoral Maneuver Bridging Strategy was developed using Expeditionary Fast Transports (a pier-to-pier capability), commercially chartered vessels, experimental vessels, and landing craft. This system of vessels will provide the operational mobility and tactical maneuver until LSM is delivered in appreciable numbers.

The Landing Craft Utility (LCU) 1700 program is currently producing the replacement for the LCU-1610 class which continues to operate at an average age of 53 years. The continued procurement of LCU-1700s will ensure the Navy retains a reliable, fuel-efficient, heavy-lift displacement landing craft with independent operational capability to sustain operations from the sea. The LCU-1700 Program of Record is 32 craft, replacing the LCU-1610 on a one-for-one basis. Austal USA was awarded a contract in September 2023 for the three LCU-1710 class with options for nine additional craft. Start of construction began in April 2024, and five craft are currently on contract under various stages of construction and pre-production.

Ship to Shore Connector (SSC or LCAC 100-class) is a one-for-one replacement for the legacy LCACs and ensures the U.S. Navy and Marine Corps remain capable of amphibious operations well into the 21st century. LCAC 100 Class craft will conduct the same missions as legacy LCAC but with greater range and cargo capacity. Textron has been awarded a total of 33 SSCs to date, of which 12 have been delivered (11 fleet assets and one Test and Training Craft). SSC Program of Record is 73 craft (72 Fleet assets and one test and training craft).

In addition to large, manned battle force ships, the Navy continues to identify and pursue opportunities for manned-unmanned teaming to increase overall lethality of the joint force. The DON continues to invest and mature the enabling and core technologies needed to deliver unmanned surface and undersea capabilities. These capabilities, along with the platforms to support them are foundational to creating the hybrid fleet of the future. Manned-unmanned teaming will increase capacity, standoff, reach, and enable maneuver and DMO while reducing risk to our Sailors and Marines. Unmanned Surface Vehicles (USV) will expand information operations and missile magazine depth. The Navy continues to work with our industry partners on maturing reliable Hull, Mechanical and Electrical capability; advancing the required networks and radios; developing a common core USV Combat System and vessel control software; improving sensory perception and autonomy; and prototyping platform and USV payloads. In FY24, the Navy successfully completed six 720-hour propulsion configuration tests in accordance with the FY21 NDAA language. These successful tests will allow certification of multiple propulsion configurations for use on future USVs. Our fleet of five USV prototypes provides valuable fleet training opportunities as we continue to develop Tactics, Techniques, and Procedures. These prototypes are helping us to mature technology in support of future USV procurement.

Munitions

Recent engagements in the Red Sea underscore our challenges and efforts to stockpile munitions. In a 15-month period, Navy ships have engaged in combat operations against Houthi rebels, expending more air defense missiles than in the previous 30 years combined. Current operations and expenditures highlight the need for industrial expansion. Multi-Year Procurement Authority has helped generate demand signals to support industry co-investment in the industrial base.

The Navy continues to invest in critical munitions, such as Tomahawk, Standard Missile (SM), Long Range Anti-Ship Missile (LRASM), Advanced Anti-Radiation Guided Missile-Extended Range (AARGM-ER), AIM-9X, AIM-120, MK 48 Heavyweight Torpedo, NSM, and new kinetic massed attritables to accelerate production and improve lethality. The Navy is also looking at options to invest in a weapon system that can provide an air-launched, long range, low-cost multi-mission weapon system. The backbone of kinetic ship defense has been our SM series of interceptors. The SM-2, SM-6, and SM-3, while expensive compared to Houthi threats, have performed exceptionally well in this combat environment. In January 2024, the Navy adopted less expensive Sidewinders and Hellfire missiles, and air engagement layered defense tactics over the Red Sea.

Since the start of kinetic operations in the Red Sea, the Navy has rapidly tested and is fielding dedicated Counter-Unmanned Aircraft Systems (C-UAS) capabilities for our deployed ships. The first set of tests occurred in August 2024 and included 4x dedicated C-UAS systems: 3x missile systems (Longbow Hellfire, Coyote, and Roadrunner) tested onboard USS THE SULLIVANS and 1x gun system (Hyper Velocity projectiles fired out of the MK 45 5" gun) tested on USS JASON DUNHAM. A second set of tests occurred in April 2025 onboard the GERALD R FORD STRIKE GROUP. The results of these tests showed these systems can be effectively employed to defeat group 3 drones in a more cost-effective manner. All four of these systems are being evaluated further for technical and tactical maturity and the results of that analysis will determine what combination of these systems is deployed on the next carrier strike group headed for the Red Sea.

The lessons learned from the deployment of these systems will inform our long-term C-UAS strategy, the goal of which is to provide all ships with a dedicated C-UAS capability that consists of either low-cost missiles, gun solutions, or directed energy (High Powered Microwaves and High

Energy Lasers), and that integrates with our existing air defense capabilities. This will provide ships the ability to defeat group 1-3 drones in the most cost-effective manner, allowing ships to preserve their inventory of higher end missiles, such as SM-2, for use against more pressing threats, and enabling ships to remain on station for longer periods of time between reloads.

Aviation

The striking power of the carrier air wing (CVW) remains a cornerstone of the Navy's sea denial and sea control contribution to the joint force. Air wings provide Fires, Protection, Command and Control, Movement and Maneuver, and Sustainment from 11 highly mobile aircraft carriers. Aircraft and weapon modernization continue to keep the carrier strike group (CSG) relevant through the carrier's 50-year service life.

The mobility of the CSG and the expansive mission sets of the carrier air wing provide the Navy with a credible deterrent force that can expeditiously respond to crises and effectively project power in support of national objectives. CVW force structure modernization efforts support the National Defense Strategy by addressing long term competition with China and maintaining military advantage over Russia, while concurrently supporting the Joint Warfighting Concept by executing long range kill chains.

Today's CVW is transitioning to a mixture of 4th and 5th generation strike fighter aircraft that continue to incorporate advanced capabilities to support the national defense strategy objectives. The F-35C is replacing the early lot F/A-18E/Fs, E-2Ds are replacing the legacy E-2C, EA-18Gs are incorporating Next Generation Jammer-Mid-band (NGJ-MB), and the CMV-22B will complete replacement of legacy C-2As in support of strike group logistics.

In the immediate years, CVWs will pace our most significant threat with a mix of F-35C, F/A-18E/F Block III, EA-18G Block II, and introduction of the MQ-25 unmanned aircraft system (UAS). The MQ-25 will take over the aerial CVW organic refueling mission, extending strike range, enhancing maneuverability, and enabling strike fighters to focus on the high-end fight.

The Air Wing of the Future (AWOTF) will deliver an overmatch in lethality and survivability, and leverage Manned-Unmanned Teaming (MUM-T) with Collaborative Combat Aircraft in order to provide increased lethality and survivability to meet the future threat.

The E-2D Advanced Hawkeye is the Navy's premier all-weather, carrier-based airborne early warning and command and control aircraft, playing a crucial role in integrating the CSG and joint and combined forces in high-intensity combat operations. The aircraft has a proven track record of success in ongoing operations, and is in high demand from combatant commanders, supporting rapid decision making in dynamic and complex environments. To date, 65 out of the 82 funded aircraft have been delivered to the fleet. Seven E-2D squadrons have completed their transition to the new aircraft, with the eighth squadron currently undergoing transition and the ninth squadron slated to transition in 2027. Currently, the E-2D represents the only active production line for an airborne early warning platform, making it essential for meeting potential future U.S. Navy, joint force, and international partner requirements.

The V-22 tiltrotor capability provides unmatched combat range and airspeed and remains in high demand from combatant commanders for the essential transportation of personnel and equipment. The U.S. Marine Corps MV-22B provides worldwide, all weather assault support during expeditionary, joint, and combined operations. The Navy CMV-22B, recapitalizes the C-2A carrier onboard delivery mission providing long-range, time-critical logistics support essential to CSGs execution of DMO.

The V-22 program is transitioning from the end of production to platform sustainment with a focus on improving platform reliability while prioritizing the safety of aircrew and personnel. The MV-22 program is working to ensure relevancy through 2055 with efforts such as the V-22 Cockpit Technology Replacement and Renewed V-22 Aircraft Modernization Plan (ReVAMP). Completion of Tailored Nacelle Improvements, Marine Air-Ground Task Force (MAGTF) Agile Gateway Link and Flight Control System redesign are components of the baseline configuration for the ReVAMP study. The program continues progress towards production and deployment of Proprotor Gearbox improvements including triple-melt material processing for gears, the Osprey Drive System Safety and Health Information (ODSSHI) and Input Quill Assembly redesign. The ODSSHI system provides enhanced information to aircrew and maintenance personnel and the Input Quill Assembly redesign is intended to reduce incidence of hard clutch engagement events.

The VH-92A Presidential Helicopter replaces the legacy VH-3D and VH-60N as the primary Presidential vertical lift platform, providing worldwide safe, reliable, and secure executive transportation. The program has completed production and has transitioned into operations inside and

outside of the National Capital Region. The VH-92A continues to progress towards the replacement of both the VH-3D and VH-60N and is actively supporting White House Military Office assigned mission tasking.

The C-130 Hercules is the Navy's only organic intra-theater airlift for time-sensitive, oversized cargo, including F-35 engines, P-8A Poseidon TacMobile units, large munitions, and Naval Special Warfare boats. Recapitalization to the KC-130J fulfills the vital Navy Contested Logistics capability and provides significantly improved performance and reliability over the legacy C/KC-130T aircraft. For the Marine Corps, the KC-130J remains a critical enabler for forward deployed MAGTF success across all the Combatant Commands. Continuously deployed since 2005, VMGR detachments support Special Purpose MAGTF Crisis Response-Africa, operations in Europe, the Middle East and South America.

The P-8A is the DoD's premier airborne long-range, multi-mission jet capable of performing high return-on-investment cue-to-kill anti-submarine warfare, anti-surface warfare, third party targeting and armed intelligence, surveillance, reconnaissance, and targeting missions within a single sortie. The P-8A Increment 3 Block 2 (Inc 3 Blk 2) delivers planned spiral upgrades incorporating Engineering Change Proposals 6 and 7 and is on-track to achieve IOC in FY26. Inc 3 Blk 2 modifications represent a complex, depot-level retrofit and component obsolescence overhaul which adds multi-static acoustic coherent – enhanced capability, doubling acoustic search potential and higher-than-secret networking capability. The P-8A Inc 3 Blk 2 baseline utilizes flexible, application-based architecture and Future Airborne Capability Environment standards to enable more responsive, threat-pacing capability evolution.

The MQ-25 will increase the strike range, capability, and capacity of the CVW through organic mission and recovery tanking to the CSG. As the primary CVW mission and recovery tanker, the MQ-25 will provide ≥ 14,000 lbs. of fuel at 500 nm from the carrier. Further, it will relieve the current CVW tanker (F/A-18) from tanking duties, thus increasing available CVW strike fighter assets while preserving F/A-18 fatigue life expenditure. The program's Unmanned Carrier Aviation Mission Control System, featuring the Multi-Domain-5 Ground Control Station will also control all carrier-based UAS in the future CVW. MQ-25 is integral to the AWOTF and establishes the foundation for MUM-T and autonomous operations from the CVN.

MQ-4C Triton is a high-altitude, long-endurance UAS which flies mission orbits over geographically defined areas to provide persistent, real-time ISR in open-ocean and littoral environments. MQ-4C supports a wide range of missions, to include, persistent maritime ISR patrol, signals intelligence, and communications relay enabling a DON strategic shift from individual platforms to networked sensors and payloads that support a shared, integrated tactical picture for the Joint warfighter. MQ-4C multiple-intelligence Integrated Functional Capability-4 (IFC-4) UAS and P-8A Poseidon form the backbone of a family-of-systems solution which enabled the retirement of the legacy EP-3E Aries platform while building the foundation for the Navy's future fleet maritime intelligence, surveillance, reconnaissance, and targeting (MISR&T) architecture. Additional (classified) signal intelligence (SIGINT) upgrades (IFC-4 Increment 2) are in development that will exceed current EP-3E SIGINT capabilities by its full operational capability in FY28. The program has successfully established operational orbits in the U.S. Indo-Pacific Command , European Command and Central Command areas of responsibility, providing combatant and fleet commanders with timely and actionable intelligence products.

Recent Aviation Accomplishments

The Navy declared IOC for the NGJ-MB system in December 2024, bringing a quantum leap in capability over legacy systems with drastic increases in power, target flexibility and jamming technique for naval aviation operations worldwide. The NGJ-MB system will augment and then replace the legacy AN/ALQ-99 Tactical Jamming System (fielded 1971) in the mid-band frequency range for the EA-18G Growler, providing significantly improved radar and communication jamming performance as well as improved reliability and maintainability. IOC signals that the design, testing and production of this capability meet the logistical needs of the carrier air wings and EA-18G Growler squadrons. Additionally, the Next Generation Jammer Low-Band has emerged from over two years of litigation and is executing its Engineering and Manufacturing Development contract to develop and build four test pods for developmental testing in FY26.

The CH-53K replaces the CH-53E and provides expeditionary heavy-lift assault transport of armored vehicles, personnel, and equipment to support distributed operations deep inland from a sea-based center of operations. In FY24, the U.S. Marine Corps took delivery of seven CH-53K aircraft as the service continued preparation for its first operational deployment in FY27. In just the

first two years of its service, this exceptional aircraft has already been called upon to serve the joint force, conducting real-world missions and recovering critical joint assets. The program completed System Development and Demonstration flight testing in 2023 with component-level ground testing, analysis, and reporting expected to complete this year. In FY23, the CH-53K program was approved for full rate production and awarded two-year block buy contracts for the procurement of Lot 7-8 airframes and Lot 6-8 engines. In FY25, the DON was granted authority to enter into a multiyear procurement contract for airframes and engines, providing opportunity for cost savings and increased stability for the industrial base. The CH-53K's remarkable performance has led to continued requests for aircraft recovery and heavy lift support worldwide.

The Navy has established the E-130J program as a recapitalization of the Take Charge and Move Out (TACAMO) mission from the legacy E-6B Mercury aircraft. TACAMO provides a system of survivable, reliable and endurable airborne capabilities to maintain communication between the President, the Secretary of Defense, and USSTRATCOM and the triad of strategic weapon delivery systems as a part of the Nuclear Command, Control, and Communication enterprise. On 18 December 2024, the Navy awarded the Engineering and Manufacturing Development contract to begin E-130J development efforts by integrating mature mission systems onto a militarized C-130J-30 aircraft. The E-6B continues to undergo sustainment and modernization efforts concurrently with E-130J development. The E-6B will continue to support the Looking Glass mission set until a relief is fielded.

Marine Expeditionary Unit (MEU) Aviation Combat Element (ACE)

The MEU is the Marine Corps' crown jewel and the embodiment of the MAGTF, providing the Nation with a critical strategic capability for naval campaigning, crisis response, and contingency operations. Deployed on a 3-ship ARG, Marines and Sailors leverage the maritime domain as maneuver space to posture without the constraints and restraints of access, basing, and overflight. The self-sustained and flexible ARG/MEU can swiftly transition from steady-state competition and campaigning to crisis response or high-end warfighting without external augmentation, playing a vital role in integrated deterrence, global campaigning, and reinforcing American resolve.

As a lethal, forward-deployed, sea-based expeditionary force, the ARG/MEU operates across the spectrum of military operations with a tailorable and uniquely suited complement of aircraft. The

MEU's ACE inventory includes the F-35B, MV-22B, AH-1Z, UH-1Y, and CH-53E/K. The F-35B, uniquely designed for amphibious warfare ships and expeditionary airfields, provides significant value to the Joint Force. Its ability to operate from forward, distributed locations dramatically enhance the MEU's capacity to rapidly respond to crises, project power ashore, and achieve decisive advantage in contested environments. This translates to greater strategic agility, superior situational awareness, and increased maneuverability for commanders, ensuring mission success where and when it matters most.

The ARG/MEU team represents the Nation's most capable crisis response tools, persistently forward deployed and ready to provide Combatant Commanders with options across the spectrum of military operations. With its complement of capable aviation platforms, the MEU ACE embarked on modernized and ready amphibious warfare ships ensures seamless projection of power from the sea, air, and land, bolstering the ARG/MEU's organic operational mobility.

MARINE CORPS MODERNIZATION

The Marine Corps remains the Nation's forward-deployed, naval expeditionary force-in-readiness, postured to respond rapidly to crises, deter adversaries, and, when required, seize key maritime terrain in support of joint and naval operations. Our modernization efforts are firmly grounded in a threat-informed, concept-driven campaign of learning, to ensure we field a balanced, modernized force capable of operating effectively across the competition continuum and in highly contested environments. At the heart of our modernization efforts is Force Design, which is advancing a systems-of-systems approach that prioritizes integration across all warfighting functions. This approach enhances our ability to sense, make sense, and strike with precision at extended ranges in support of the fleet and Joint Force.

The Marine Corps continues to invest in the Family of Integrated Targeting Cells (FITC) and the tactical-national interfaces for initial track identification, monitoring, tracking, and dissemination to provide Maritime Domain Awareness (MDA) in contested environments. Currently deployed prototypes have demonstrated resilient networking and processing capabilities that integrate national, commercial, in-theatre, and tactical track feeds that enhance battlespace awareness and enable MDA at the tactical edge. These prototypes include the Maritime Targeting Cell – Expeditionary (MTC-X), the MTC-Mobile, Tactical Edge Node – Expeditionary (TEN-X), TacticalTEN – Man-Portable designed

to support highly mobile and dispersed units. Collectively, FITC uses a variety of sensors in numerous domains to create a comprehensive operational picture to drive real-time decision-making on behalf of the Stand-in Force. FITC capabilities are being pushed to the forward edge of the battlefield, enabling the Marine Corps, to ingest, process, and disseminate enhanced air and MDA to the Joint Force in a denied and degraded environment.

At the same time, we are modernizing our command-and-control systems to enhance the effectiveness of kill webs and joint kill chains. The Common Aviation Command and Control System (CAC2S) leverages a collaborative network of Marine Corps and Joint sensor inputs, facilitating faster track identification and targeting decisions. The Marine Corps continues to invest in CAC2S as the command-and-control interface for air surveillance radars and the Naval Cooperative Engagement Capability. This system, and its future enhancements, enable the Marine Corps to share air surveillance tracks and radar measurement information with Joint partners, supporting integrated air and missile defense, integrated fire control, and battle management. The Marine Corps expects to field five CAC2S Small Form Factor systems this year, achieving IOC. Over the next five years, the program will expand to 42 systems, significantly increasing the Marine Corps' capacity to process and disseminate information to the Joint Force rapidly.

With forces forward stationed and deployed across the globe, including in the first island chain, the Marine Corps is strategically positioned to confront adversaries. As the air and missile threat continues to evolve, the Marine Corps is investing in advanced Ground Based Air Defense and C-UAS capabilities.

The Marine Air Defense Integrated System, or MADIS, and its lighter variant, L-MADIS, provide expeditionary and mobile layered defense against unmanned aircraft systems, fixed-wing, and rotary-wing threats. MADIS provides an upgradeable expeditionary capability that utilizes organic sensors to detect and target aerial threats and increase force protection for ground forces, and critical assets. Integrated onto a pair of Joint Light Tactical Vehicles, MADIS can defend against fixed and rotary wing aircraft and group 1-5 UAS threats, with both non-kinetic electromagnetic attack and lethal fires. The program successfully delivered 13 systems to the 3rd MLR's Littoral Anti-Air Battalion in January 2025, reaching initial operational capability and increasing the survivability of operating forces in the Pacific. Another seven systems are planned to be fielded across the Marine Corps in

FY25, on the way to a target of 190 systems, dramatically increasing the Marine Corps' counter-air capability.

The L-MADIS is an MV-22/CH-53 internally transportable pair of Ultra-Light Tactical Vehicles capable of defeating fixed and rotary wing aircraft and group 1-5 UAS via electromagnetic attack and man-portable air defense systems. L-MADIS's small size and lightweight design are tailor-built for air and amphibious assault, to provide forward-postured forces with organic sensors, aviation command and control functions, and air defense capability in a littoral environment. The Marine Corps is on track to deliver fourteen systems to all three Marine Expeditionary Forces (MEFs) by the fourth quarter of FY25.

Information superiority on the battlefield is a key component of lethality. In an environment contested in every domain, forward Marine Corps forces equipped with expeditionary radars and the ability to disseminate intelligence rapidly are best positioned to provide critical battlespace awareness to the Joint and Coalition Forces. The Ground/Air Task Oriented Radar, or G/ATOR, has proven critical in these efforts. G/ATOR is a multi-role, ground-based, expeditionary three-dimensional radar system that provides air surveillance and detection of airborne manned and unmanned targets and cruise missiles. The Ground Weapons Locating variant detects and tracks rockets, artillery, and mortars. As an air sensing asset, the G/ATOR exercises its cueing capability to the appropriate air defense platforms. Furthermore, the G/ATOR increases maritime domain awareness to the Naval and Joint Force via CAC2S. The Marine Corps has fielded or received funding for 54 G/ATOR systems and intends to fund further radar upgrades. The Medium-Range Air Defense Radar (MRADR) will complement these systems, providing a persistent, high-quality, 360-degree field of view air picture with no detectable electromagnetic footprint. In FY24, the Marine Corps invested $9 million in rapid prototyping for the MRADR, yielding a capability on track for operational demonstration this year.

As the threat environment continues to be defined by increasing technological advancements, the Medium Range Intercept Capability (MRIC) provides a complementary warfighting advantage to our naval expeditionary SiFs operating inside an adversary's weapons engagement zone. MRIC defends forward-deployed forces and installations against threat cruise missiles, fixed and rotary wing aircraft, groups 3-5 UAS, and other aerial threats. This is accomplished by integrating fielded Marine Corps systems, including the CAC2S, G/ATOR, a derivative of the Iron Dome Battle Management Control console, and the SkyHunter missile and guidance uplink. In February 2024, industry partners

broke ground establishing a U.S.-based production facility in Camden, AR, which will ensure continued access to a supply of domestically produced interceptor missiles. The Marine Corps plans to field a firing battery to each MEF that can distribute four independently deployable firing platoons.

The Marine Corps is utilizing a Middle Tier Acquisition rapid prototyping approach to procure and certify an MRIC prototype that provides an initial capability by the end of FY25. The first complete battery will be fielded by FY26, followed by an additional battery in FY27 and FY28. The Marine Corps seeks to field three firing batteries with several hundred missiles for each battery.

The Marine Corps continues to modernize the fires portfolio to complement the lethal inventory of mortars, cannons, rockets and missiles. The Navy/Marine Expeditionary Ship Interdiction System program is delivering a lethal, highly mobile, ground-based, anti-ship capability to the Medium Range Missile Batteries in the MLRs and will expand to provide capability and capacity to artillery units supporting MEUs and other operational requirements. Infantry battalion tactical reach and lethality will be expanded as the Organic Precision Fires program begins delivering lethal loitering munitions that will be employed at echelons from the infantry squad to battalion, in mounted and dismounted launching configurations. These weapon systems, integrated with the sensors and command and control systems previously addressed represent a substantial lethality increase across the ground combat element.

The Marine Corps is also integrating and improving its ability to use first person-view drones capable of delivering lethal payloads. This year, the Marine Corps created the Marine Corps Attack Drone Team (MCADT) to rapidly accelerate, and scale armed first-person view (FPV) drone lessons learned from modern combat to ensure the Marine Corps is prepared to thrive when hunting down and destroying our Nation's adversaries. The MCADT will serve as the Service's subject matter experts on FPV drone employment and as the primary source of Marines representing the Marine Corps in inter-service, national, and international competitions.

The Marine Corps is aggressively modernizing to ensure its forward-deployed forces remain lethal and seamlessly integrated with naval and joint operations across the full spectrum of conflict. Through sustained investments in advanced fires, sensing, command and control, and force protection capabilities, the Marine Corps is strengthening its ability to operate within contested environments, support sea control, and contribute to the Joint Force kill chain. The Marine Corps' unique ability to rapidly deploy, maneuver, and sustain operations in austere, denied, and contested environments

empowers the Joint Force to project power against adversaries' most critical assets and deny them freedom of maneuver. These forward-postured naval expeditionary forces effectively deter our competitors, while remaining ready to respond to a range of crises, and reinforce the integrated maritime power of the Navy and Marine Corps team, and ensuring our Nation remains prepared to fight and win when called upon.

Conclusion

We are fielding new capabilities while maintaining and enhancing our industrial base, which is critical to sustaining the operational readiness and strategic posture of the Navy and Marine Corps. We will continue to experiment and learn from competing against our adversaries to further refine Force Design and solve the challenges in the industrial base. By investing in the industrial base, modernizing facilities, developing a skilled workforce, and holding ourselves accountable, we can ensure that the Navy and Marine Corps team remains capable and prepared to meet a variety of emerging challenges and threats. The DON is committed to improving acquisition processes, employing innovative contracting strategies, and continuing to support industry to accelerate production and maintain a resilient supply chain.

The Navy is a key participant in the Administration’s whole-of-government effort to enhance the national shipbuilding industry. Combined with generational investments in the industrial base, we are collaborating with Congress, industry, academia and training organizations, trade associations, and all levels of government in pursuit of improved cost and schedule performance. Together, we can build and sustain a lethal, capable, and forward-postured Navy and Marine Corps that will continue to safeguard our national security and maritime dominance. Our Nation and the world need the strength of our Navy, which is in my opinion the finest Navy ever assembled in the history of the world, and our intent is to do everything in our power to deliver on that promise.