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THE HOUSE ARMED SERVICES COMMITTEE
SUBCOMMITTEE ON READINESS

STATEMENT OF

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ACTING

BEFORE THE

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SUBCOMMITTEE ON READINESS

ON

DEPOT MODERNIZATION AND OPTIMIZATION

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Chairman Garamendi, Ranking Member Lamborn, and distinguished members of the Subcommittee, I am pleased to appear before you today to discuss the Department of the Navy's ongoing depot modernization and optimization efforts. A modernized and ready organic industrial base generates Fleet readiness and strengthens our national security. The Department appreciates the strong support this committee has shown for our infrastructure optimization efforts, and is committed to maintaining transparency throughout the planning and execution of the Navy's infrastructure optimization investments.

In his recently released Strategic Guidance, Secretary Del Toro highlighted the importance of the Department's Organic Industrial Base to the Fleet, stating that "we will invest in sustainment, critical readiness infrastructure, and the industrial workforce, while adopting the best practices of private industry to increase overall efficiency." The Department is committed to this vision, taking an enterprise-wide approach to infrastructure optimization, maintenance and modernization at our depots, arsenals, shipyards, and logistics complexes. These comprehensive reviews are assessing facilities, processes, and industrial equipment to inform investment priorities and drive efficiencies. Together these efforts will position the Navy to sustain next generation weapon systems, execute projected maintenance workload, and enable surge capacity.

NAVAL SHIPYARDS

The Navy's four public shipyards – Norfolk, Portsmouth, Puget Sound, and Pearl Harbor – are pillars of our national defense. The average age of the naval shipyard facilities and related infrastructure is 61 years while the average dry dock age is approaching 100 years. These facilities, equipment and their workforce have served the Fleet for generations and we could not afford to build them from scratch today. Much of this infrastructure is dated compared with the commercial sector. With 39 percent of shipyard equipment beyond its service life, as just one example, we need to accelerate investment in upgrades and improvements that increase productivity and efficiency.

In response to the 2018 National Defense Authorization Act, the Navy submitted a report to Congress laying out the initial tenets of a Shipyard Infrastructure Optimization Plan (SIOP) to recapitalize the four public shipyards, utilizing a three-phased approach to modernize and optimize capital equipment, facilities, and dry dock infrastructure. Since that time, the Navy has developed a prioritized list of projects, timelines associated with the capital equipment

reinvestment plan, and the military construction (MILCON) and facilities, sustainment, restoration, and modernization investment plan. SIOP also improves industrial processes through expanding capacity and replacing failing infrastructure in an optimized configuration to more rapidly and efficiently execute maintenance availabilities.

SIOP is a once in a century effort and essential to supporting the future needs of the Navy's nuclear-powered submarine and aircraft carrier force. In order to ensure a disciplined, synchronized execution of an effort of this complexity, while maintaining uninterrupted support to the Fleet, the Navy is treating SIOP like a major acquisition program. To that end, a Program Office was established with both construction and acquisition personnel from the Naval Sea Systems Command and the Naval Facilities Engineering Command. The Navy is in the process of appointing a Program Executive Officer to provide executive leadership of this effort, who will be in place by December 1, 2021.

On September 30, the Department of the Navy formally submitted a plan to this committee outlining the next five years of SIOP efforts. The Department is aggressively implementing lessons learned from recently awarded projects for upcoming efforts to include acquisition, design, cost estimation, organizational, and process changes. The Department has also re-assessed construction and procurement timelines to effectively implement SIOP activities, while executing ongoing and planned submarine and aircraft carrier maintenance availabilities. The five-year SIOP plan reaffirms the Navy's commitment to addressing the critical infrastructure needs of our Nation's four public shipyards. Scope, cost, and schedule associated with the long-term roadmap are preliminary until engineering studies, Area Development Plans (ADP), and project plans and designs are complete.

SIOP focuses on three lines of effort. The first line of effort is the construction and recapitalization of dry docks. Dry dock recapitalization projects must be completed to accommodate the size and systems of future forces platforms such as the USS Gerald R Ford Class aircraft carriers and Virginia Class submarines. The first construction project for dry dock recapitalization was awarded this year for the construction of two new dry docks at Portsmouth Naval Shipyard's Dry Dock 1.

The second line of effort is the recapitalization and reconfiguration of infrastructure. This process relies on extensive master planning, informed by industrial modeling and simulation, for each shipyard to determine the optimum infrastructure configuration and process

workflow necessary to sustain ongoing ship maintenance. The Navy will complete the first phase of modeling and simulation this year, and is on track to complete the first shipyard ADP -- or master plan -- at Pearl Harbor Naval Shipyard in 2022. Integrating industrial modeling and simulation with infrastructure master planning is a revolutionary advancement in how the Navy is maximizing its investment to maximize shipyard productivity and efficiency.

The Navy is committed to integrating environmental considerations, including climate resiliency, throughout the modernization process. As a part of ADP development, the Navy is conducting flood plain/sea level rise studies at each shipyard. These studies will ensure ADPs incorporate sea level rise mitigation in all future development. The Navy currently has one project specifically dedicated to mitigating sea level rise, a Fiscal Year (FY) 2020 MILCON project, Dry Dock Flood Protection Improvements. This project is driven completely by sea level rise and increasing storm surge at Norfolk Naval Shipyard, and builds flood protection walls around the submarine maintenance dry docks and the adjacent lowest portions of the shipyard.

The third line of effort is recapitalizing industrial plant equipment at shipyards used to repair and maintain our submarines and aircraft carriers. The 2018 SIOP report to Congress identified 39 percent of shipyard equipment was beyond its effective service life. The goal of the SIOP capital equipment program is to replace failed and outdated equipment to enable maintenance of critical components, improve efficiency, reduce costs, and to meet future capabilities to achieve fleet readiness. This includes vital pieces of equipment such as industrial plant equipment, portal cranes, reactor servicing equipment, and collateral equipment.

The Navy's funding of \$830 million for SIOP within its FY 2022 budget submission further demonstrates its commitment to the program. FY 2022 funding will primarily focus on the design, construction and modernization of the Navy's dry docks to meet the needs of the Fleet, as well as completion of the first ADP. Also, in FY 2022, the Navy is planning to commence Engineered Overhauls for USS HARTFORD (SSN 768) and USS BOISE (SSN 764) at private shipyards. Execution of these availabilities by our private industry partners will continue the development of private shipyard submarine repair capability and, in conjunction with the SIOP, augment our Nation's overall submarine ship repair capacity.

FLEET READINESS CENTERS

Under the auspices of Commander, Fleet Readiness Center (COMFRC), the Department is developing a similar investment strategy in support of the naval aviation enterprise. This Infrastructure Master Plan will identify strategic investments that provide the Navy's organic aviation depots the capability and capacity to sustain and modernize naval aviation's aircraft, engines, components, and support equipment through MILCON, recapitalization, and procurement of new technologies within the Fleet Readiness Centers (FRC). Infrastructure associated with MILCON will be informed by similar planning methods and lessons learned from the SIOP effort.

As detailed in the April 2019 report to Congress, the FRC effort is being implemented over three phases. Phase 1, a fast-tracked effort led by COMFRC, initiated a rapid baseline assessment of the most critical production and manufacturing facilities and equipment at the three industrial depots. From this review, initial infrastructure requirements were identified to include facility upgrades, capital investment in machinery and equipment, and MILCON requirements. The Navy has made significant strides in achieving an 80 percent mission capable rate for F-18 aircraft mainly through process improvements. Further investments will be key to maintaining those gains, and will be critical for repair of our newer aircraft, such as the E-2D, H-53K, and F-35, which will require specialized paint, composite repair, advance propulsion repair, and enhanced security.

Phase 2 of the plan, as discussed in the July 2020 report to Congress, is currently underway, further progressing optimization planning for our three industrial depots at Cherry Point, Jacksonville and North Island through comprehensive assessments of facilities, processes, and industrial equipment and infrastructure lifecycle analysis. To date, Phase 2 has produced updated metrics for condition and configuration of the industrial facilities that will be the foundation for future strategic investment decisions in the enterprise master plan. Work is ongoing to simulate and model equipment usage in production shops, validating equipment requirements necessary for optimization and generating solutions for modernized shop and enhanced facility layouts and design. Phase 2 will incorporate identified investments into individual depots and an integrated enterprise master plan.

Phase 3 encompasses the execution and implementation of current and future identified investments for procurement of advanced industrial equipment technology, renovation and

modernization of facilities, and military construction. Initial equipment and facility investments relied upon the rapid assessment from Phase 1. Moving forward, Phase 3 will proactively manage and execute the enterprise master plan for strategic investments developed under Phase 2.

The Navy is committed to ensuring that these industrial facilities and equipment are properly positioned and optimized to maintain our legacy aircraft, as well as our next generation aircraft and weapon systems.

MARINE CORPS ORGANIC INDUSTRIAL BASE

The Marine Corps Organic Industrial Base (MCOIB) encompasses the industrial capabilities managed by Marine Corps Logistics Command to generate materiel readiness and sustainment for the enterprise. The MCOIB operates at three Marine Corps logistics installations: Marine Corps Logistics Base (MCLB) Albany, MCLB Barstow, and Marine Corps Support Facility Blount Island.

In response to the FY 2018 National Defense Authorization Act, the Marine Corps provided an Organic Industrial Base (OIB) 2045 Facilities modernization plan and a report on the readiness of the Marine Corps OIB. This report outlined effective, efficient, and economical maintenance, storage, and pre-positioning facility infrastructure solutions. It also included a three-phased investment strategy for the MCOIB in near, mid, and long-term tiers to provide flexibility for managing facility investment priorities.

The Marine Corps' strategy to improve OIB facilities is planned over a 25-year horizon, at an initial estimated cost of \$1.9 billion. The Marine Corps recognizes resource limitations and an uncertain global operating environment. Implementing a plan that prioritizes OIB facility investments within the context of an intended 25-year end state is feasible, executable, and provides the flexibility that will be required in the coming decades. Phased implementation of OIB facilities modernization and recapitalization will allow the Marine Corps to adjust the speed of implementation to balance OIB facilities needs with Force modernization investments.

The Marine Corps has successfully completed three of its 11 major short-term projects providing state of the art combat vehicle storage and repair facilities, totaling \$50 million. Two additional projects have been funded. The first, a \$26 million project consolidating and modernizing welding and body repair capabilities broke ground in June 2021 and is expected to

be completed mid-2022. The second project, a \$5 million administrative headquarters building supporting command and control of enterprise inventory storage, is funded to start in FY 2022.

As detailed in recent congressional reports, the Marine Corps is adapting the 2045 OIB Facilities Plan to accommodate Force Design changes. As the full implications of Force Design become more clear, the Marine Corps expects to update and align the plan in consonance with the Commandant's priorities. Initial analysis of future OIB requirements has commenced and will inform both the future posture of the OIB and attendant funding.

CONCLUSION

On behalf of all of our Navy and Marine Corps, I thank you for the opportunity to discuss the Department's infrastructure optimization efforts. The Navy and Marine Corps are working to optimize the Fleet and force for the future operating environment and its emerging threats, and we stand ready and determined to answer the Nation's call.