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THE HOUSE ARMED SERVICES COMMITTEE  
SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES

STATEMENT OF

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BEFORE THE

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

ON

SUBMARINE FORCE STRUCTURE LIMITATIONS AND EXPANSION OPTIONS

MARCH 20, 2018

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SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES

Chairman Wittman, Ranking Member Courtney, and distinguished members, thank you for the opportunity to appear before you today to address the submarine force structure limitations and expansion options. We would like to take this opportunity to thank the Congress for your support of the Bipartisan Budget Act of 2018. Enactment of this legislation will help provide the predictability and stability in funding that is critical to our success and will support our efforts to affordably procure ships, reduce risk across programs, and maintain a viable industrial base.

The U.S. Navy's submarine force is experiencing a significant growth in demand and must expand to support the 2018 National Defense Strategy. The maritime dimension of the National Defense Strategy is to increase American naval power by building the Navy the Nation Needs. To do so, we must deliver the Undersea Warfare component by ensuring the submarine force has the submarines and capabilities necessary in this rapidly changing, technology-driven world, where adversaries' challenges are felt in every operating domain.

Today's battle force consists of 14 OHIO Class ballistic missile submarines, four OHIO Class guided missile submarines, three SEAWOLF Class attack submarines, 33 LOS ANGELES Class attack submarines, and 15 VIRGINIA Class attack submarines, for a total of 51 attack submarines as of 1 March 2018. The Navy's Force Structure Assessment (FSA), released in December 2016, defined a requirement of 66 attack submarines and 12 ballistic missile submarines as part of the 355-ship Navy. The *Annual Long-Range Plan for Construction of Naval Vessels for Fiscal Year 2019* is the roadmap that will grow the fleet through steady, sustainable growth, including the sustainment of the industrial base, with select aggressive growth options, and service life extensions. In doing so, it charts a course to reach 66 attack submarines by Fiscal Year (FY) 2048, with the potential to achieve the requirement sooner with increased investment.

The COLUMBIA Class ballistic missile submarine program, the replacement for the OHIO Class, is the Navy's top shipbuilding priority. It is imperative that the lead COLUMBIA Class be on patrol in FY 2031 to meet the U.S. Strategic Command requirements. The program is executing detail design efforts in preparation for ordering long lead time material starting in Fiscal Year (FY) 2019. To ensure COLUMBIA remains on track for start of lead ship construction in October 2020, the program requires its full FY 2019 funding requirement on October 1, 2018, to place contracts to procure long lead time material. Cost, schedule, and

technical performance are being very tightly managed to ensure this critical, strategic capability will be delivered on time at an affordable price to meet national strategic deterrent requirements. The Navy's management attention is focused on four main areas: stable operational and technical requirements, high design maturity at construction start, detailed plans to ensure manufacturing readiness including robust prototyping efforts and aggressive cost reduction actions.

### **Requirements/ Tactical Submarine Evolution Plan**

Undersea forces provide the United States with unique military advantages essential to our international influence, our alliance partnerships, and our national security. These advantages include the ability to independently forward operate for long periods of time without logistics support, providing insight into adversary activities in contested environments, with the ability to immediately deliver offensive effects as part of an integrated force package or as a “lone wolf” operating under general commander’s guidance, degrading adversary capability, to enable all domain access, and by creating ambiguity and uncertainty in the minds of our adversaries. Underlying and enabling these capabilities is our most significant advantage, the best trained, most experienced submariners in the world; officer and crews capable of taking the fight to wherever it is needed, whenever it is needed, and for as long as it is needed. Combatant commanders leverage these advantages to achieve a spectrum of objectives, such as deterrence, intelligence collection, non-provocative force positioning and monitoring in support of diplomacy, immediate kinetic options if diplomacy fails, assured access, adversary disruption, cost-imposition, and shaping adversary strategic choices – all with a single, invisible, cross-domain platform.

The two fundamental warfighting imperatives that align our highest priority investments are Strategic Deterrence and Theater Undersea Warfare, both of which have clear applicability in peace and war.

For the Strategic Deterrence mission, our primary charge is to provide a survivable, effective sea-based strategic deterrent against the only existential threat to the United States – Strategic Attack. Ballistic Missile Submarines, coupled with the TRIDENT II D-5 Strategic Weapons System, represent the most survivable leg of the Nation’s strategic arsenal and provide the Nation’s most assured nuclear response capability. The Navy’s top warfighting investment priority is Strategic Deterrence which includes delivering 12 COLUMBIA Class

ballistic missile submarines on-time, sustaining OHIO Class ballistic missile submarines through their end of life, and sustaining the D5 Strategic Weapons Systems.

For Theater Undersea Warfare, our top investment priorities are sustaining an adaptable and agile force which includes delivering at least two VIRGINIA Class SSNs per year, investing in asymmetric advantages, and developing diverse payloads including torpedoes, missiles, and unmanned undersea vehicles. We execute efficient development and acquisition processes through our Tactical Submarine Evolution Plan (TSEP). The TSEP aligns futures analysis, adversary trends, platform-focused long-term science and technology efforts, research and development, conceptual work, detailed design, concept of operations development, requirements setting, and programmatic planning into a rational, explainable plan that seeks to ensure cost-efficient delivery of capability on a schedule that is connected to operational military needs.

The VIRGINIA Class Attack Submarine (SSN) program is continuing to deliver submarines within budget and with increased capability in each block. The Navy will build on past success by awarding a Block V Multiyear Procurement contract for 10 ships in FY 2019, continuing the two-per-year build rate from the FY 2018 budget request while also introducing the VIRGINIA Payload Module and Acoustic Superiority changes.

### **Authorities & Authorizations**

We appreciate the support Congress has provided to facilitate submarine construction. The enhanced authorities made available via the National Sea-Based Deterrence Fund for COLUMBIA have provided the opportunity to reduce risk to COLUMBIA construction and realize efficiencies. Most importantly, the authority for Advance Construction will allow us to reduce the risk for COLUMBIA lead ship construction timeline, and the authority for Continuous Production of missile tubes benefits both COLUMBIA and VIRGINIA Class programs with the coordinated procurement of large diameter tubes. Advance Construction has an ancillary benefit of enabling early exercise of shipbuilder and supplier manufacturing and material ordering, thereby strengthening select areas of the supplier industrial base. As an example, in FY 2018, the COLUMBIA Class Program initiated procurement of numerous long lead time components in support of the Lead Ship manufacturing and assembly plan. These component orders will not only de-risk the build schedule but will also allow critical suppliers

to begin their increase in material ordering and manufacturing capacity earlier than otherwise would be possible.

The COLUMBIA Class program is on track to start construction in October 2020 and deliver to pace the retirement of our current ballistic missile submarines with the first patrol scheduled for October 2030 (FY 2031). The Navy will continue to review additional opportunities to reduce cost, schedule, and performance risk to all our programs and we will continue to work closely with the congressional defense committees.

Although the FY 2018 National Defense Authorization Act (NDAA) authorized up to 13 SSNs in the VIRGINIA Block V Multiyear Procurement contract (covering FY 2019 through 2023), the Navy requests 10 SSNs over this period. The Navy's FY 2019 President's Budget is based on a balanced warfighting investment strategy across the six pillars of the Navy the Nation Needs – Readiness, Capacity, Capability, Manning, Networks and Operating Concepts.

### **Reaching 66 SSNs**

The *Annual Long-Range Plan for Construction of Naval Vessels for Fiscal Year 2019* is the roadmap to attain a 355-ship fleet, prioritizing three elements that the Navy is pursuing to grow the force: (1) Steady, sustainable growth and an establishment of minimum baseline acquisition profiles that grow the force at a stable, affordable rate; (2) Aggressive growth that more rapidly attains the same warfighting requirements as increased resources and industrial capacity permit; and (3) Service life extensions that account for the potential additional service life that can be gained through restoration and modernization based on capability improvement costs versus unit replacement criteria.

The Navy's 2016 FSA defined the requirement of 66 SSNs as part of the 355-ship Navy. The *Annual Long-Range Plan for Construction of Naval Vessels for Fiscal Year 2019* proposes to achieve this requirement by building two SSNs per year. This will result in the Force Structure increasing to 66 SSNs in FY 2048, with planned continued construction beyond FY 2048 of two per year to maintain that level. The Navy has evaluated options to extend the service lives of in-service ships, including LOS ANGELES Class SSNs. A complete summary of this review will be included in a report that will be submitted to Congress in June 2018 as directed by the FY 2018 NDAA. Service life extensions provide near-term opportunities to sustain inventory and achieve the Navy the Nation Needs requirements more rapidly, however, they are

relatively short-term solutions and must be carefully balanced with the steady long-term growth profiles to ensure overall higher numbers when the extended service lives expire. Based on the delivery profile and retirement plan laid out in the *Annual Long-Range Plan for Construction of Naval Vessels for Fiscal Year 2019*, the inventory of attack submarines will reach its lowest point, 42 SSNs in FY 2028.

To mitigate this shortfall the Navy has carefully monitored fuel consumption and material conditions of the LOS ANGELES Class SSNs to take advantage of any possible service life extensions. This analysis has identified five LOS ANGELES Class SSNs that could be refueled, extending their service lives by as much as 10 years, the first of which has been programmed in the FY 2019 President's Budget Future Years Defense Program.

### **Supplier/Industrial Base**

The ramp up of the nuclear shipbuilding industrial base represents one of the more significant challenges to building the Navy the Nation Needs and to support the concurrent production of the COLUMBIA Class, VIRGINIA Class, and FORD Class carriers. In addition to the prime nuclear shipbuilders, the capability and capacity of key vendors to provide quality material on-time is crucial for meeting submarine and carrier enterprise construction goals. The industrial base can support this challenge with improvements at the prime shipbuilders and suppliers in the areas of workload stability, facilities, and recruitment and retention of skilled resources.

To meet this challenge and ensure the readiness of the industrial base, the Navy and General Dynamics Electric Boat (GDEB) and Huntington Ingalls Industries Newport News Shipbuilding (HII-NNS) have established the Integrated Enterprise Plan (IEP). As part of the IEP, the shipbuilders have conducted an assessment of the material and supplier base and identified 329 suppliers as being the most critical to meeting COLUMBIA, VIRGINIA, and FORD Class requirements. Of these suppliers, 277 can meet current and future demand, however, 44 will be challenged to meet future requirements, and eight have been found to be challenged to meet even current demand. This indicates that approximately 15 percent of the critical suppliers supporting nuclear shipbuilding construction require improvement plans to meet future requirements.

The Navy and shipbuilders have jointly established action plans with each of the critical suppliers in need of improvement. In many cases, those plans require that the shipyards invest in new facilities and increase their workforce. The Navy will work closely with the shipbuilders and suppliers to reduce this risk.

### **Maintenance Industrial Base**

The Navy's four public shipyards accomplish the majority of the depot level maintenance required to ensure the Navy's submarines are available to meet the nation's needs. The current naval shipyard nuclear maintenance capacity is still recovering from years of workforce and workload imbalance. The public shipyards have taken significant steps to hire additional workers and improve training and workforce performance over the past five years, as witnessed by the reduced lost days on submarine availabilities in 2017. In addition, the Navy has competitively outsourced four submarine maintenance availabilities to the private shipbuilders (GDEB and HII-NNS) in the past three years. By the end of 2018, the public shipyards will have hired sufficient personnel to execute the currently planned work. The Navy will continue to factor in the health of the private sector nuclear submarine industrial base in evaluating future workload to provide the potential for smoothing workload peaks and valleys in the private yards and help to facilitate the recruitment and retention of the skilled workforce needed to support the concurrent production of submarines and aircraft carriers.

The naval shipyards have had no major recapitalization efforts since the early 20th century and the facilities and supported functions are not arranged or configured to best support nuclear submarine depot maintenance throughput. In response to the FY 2018 NDAA, the Secretary of the Navy provided a report to Congress on the Shipyard Infrastructure Optimization Plan in February 2018. The report provides the optimal placement of facilities and major equipment at each public shipyard, including a 20 year investment plan for infrastructure investments needed to improve shipyard performance. The plan focuses on dry dock recapitalization, facility layout and optimization, and capital equipment modernization.

The FY 2019 President's Budget requests a dry dock project at Portsmouth Naval Shipyard to support the VIRGINA Class. Projects like this begin to arrest the capacity deficit which may be further aggravated by unplanned emergent U.S. Navy Fleet repairs and

unanticipated national security contingencies. Your support of this project will help maintain major maintenance period (availabilities) schedules and mitigate dry dock obsolescence.

Most naval shipyard capital equipment infrastructure is well beyond effective service life, obsolete, unsupported by original equipment manufacturers, and at operational risk. Continued reliance on this aged equipment infrastructure increases submarine depot maintenance availability costs and places schedules at risk. Equipment investments, such as the FY 2019 President's Budget requested Ships Maintenance Facility in Portsmouth and the Drydock Waterfront Facility at Pearl Harbor, are needed to support new mission requirements, including LOS ANGELES Class refueling evolutions at Portsmouth Naval Shipyard, concurrent VIRGINIA Class availabilities at Portsmouth Naval Shipyard and Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility, and VIRGINIA Class introduction at Norfolk Naval Shipyard.

### **Conclusion**

We would like to thank the Committee for the opportunity to be here today to speak with you on the submarine force structure and our plan to help achieve the Navy the Nation Needs. The Navy's submarine force continues to operate forward, fully prepared to support the full range of military operations while managing steady, sustainable growth in the force that is flexible to increased resources and industrial capacity, and working to stabilize the new construction and maintenance industrial base - setting the foundation for growing the force towards its warfighting requirement.