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THE SENATE ARMED SERVICES COMMITTEE
STRATEGIC FORCES SUBCOMMITTEE

STATEMENT OF

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Introduction

Chairman Nelson, Ranking Member Sessions, distinguished Members of the subcommittee, thank you for this opportunity to discuss Navy's strategic programs. It is an honor to testify before you this morning representing the Navy's Strategic Systems Programs (SSP).

SSP's mission is to design, develop, produce, support and ensure the safety of our Navy's sea-based strategic deterrent, the Trident II (D5) Strategic Weapon System (SWS). The Trident II (D5) Submarine Launched Ballistic Missile (SLBM) represents the nation's most survivable strategic deterrent capability. The men and women of SSP and our industry partners remain dedicated to supporting the mission of our Sailors on strategic deterrent patrol and our Marines and Sailors who are standing the watch, ensuring the security of the weapons we are entrusted with by this nation.

The Navy provides the most survivable leg of the US nuclear triad with our ballistic missile submarines (SSBNs) and the Trident II (D5) SWS. A number of factors have contributed to an increased reliance on the sea-based leg of the triad. The 2010 Nuclear Posture Review reinforced the importance of the SSBNs and the SLBMs they carry. Under the New START Treaty, SLBMs will comprise a majority of the nation's operationally deployed nuclear warheads, thus increasing the nation's reliance on the sea-based leg.

Ensuring the sustainment of the sea-based strategic deterrent capability is a vital, national requirement today and into the foreseeable future. Our budget request provides

the required funding in FY 2013 for the Trident II (D5) SWS. To sustain this capability, I am focusing on four priorities: Nuclear Weapons Surety; the Trident II (D5) SWS Life Extension Program; the OHIO Replacement Program; and the Solid Rocket Motor (SRM) Industrial Base. Today, I would like to discuss my four priorities and why these priorities are keys to the sustainment of the Navy's sea-based strategic deterrent and its future viability.

Nuclear Weapons Surety

The first priority I would like to address, and arguably the most important priority, is the safety and security of the Navy's nuclear weapons. Navy leadership has clearly delegated and defined SSP's role as the program manager and technical authority for the Navy's nuclear weapons and nuclear weapons security.

At its most basic level, this priority is the physical security of one of our nation's most valuable assets. Our Marines and Navy Masters at Arms provide an effective and integrated elite security force at our two Strategic Weapons Facilities in Kings Bay, Georgia and Bangor, Washington. US Coast Guard Maritime Force Protection Units have been commissioned at both facilities to protect our submarines as they transit to and from their dive points. These Coast Guardsmen and the vessels they man provide a security umbrella for our OHIO Class submarines. Together, the Navy, Marine Corps and Coast Guard team form the foundation of our Nuclear Weapons Security Program.

SSP's efforts to sustain the safety and improve the security of these national assets continue at all levels of the organization. My command maintains a culture of self-

assessment in order to sustain safety and security. We continue to focus on the custody and accountability of the nuclear assets that have been entrusted to the Navy. SSP's number one priority is to maintain a safe, secure and effective strategic deterrent.

D5 Life Extension Program

The next priority I would like to discuss is SSP's life extension efforts to ensure a future, effective and reliable sea-based deterrent. We are executing the Trident II (D5) Life Extension Program in cooperation with the UK, under the auspices of the Polaris Sales Agreement. I am pleased to report that our longstanding partnership with the UK remains strong.

The Trident II (D5) SWS continues to demonstrate itself as a credible deterrent and exceeds the operational requirements established for the system almost thirty years ago. Our allies and any potential rivals are assured the US strategic deterrent is ready, credible, and effective. However, we must remain vigilant of age-related issues to ensure a continued high level of reliability.

The Trident II (D5) SWS has been deployed on our OHIO Class ballistic missile submarines for over twenty years, and is planned for a service life of 50 years. This is well beyond its original design life of 25 years and more than double the historical service life of any previous sea-based deterrent system. As a result, significant efforts will be required to sustain a credible and viable SLBM force from now until the end of the current OHIO Class SSBN in the 2040s as well as the end of the service life of the OHIO Replacement SSBN in 2080s.

The Navy is proactively taking steps to address aging and technology obsolescence. SSP is extending the life of the Trident II (D5) SWS to match the OHIO Class submarine service life and to serve as the initial baseline mission payload for the OHIO Replacement submarine platform. This is being accomplished through an update to all the Trident II (D5) SWS subsystems: launcher, navigation, fire control, guidance, missile and reentry. Our flight hardware - missile and guidance - life extension efforts are designed to meet the same form, fit and function of the original system, in order to keep the deployed system as one homogeneous population and to control costs. We will also remain in continuous production of energetic components such as solid rocket motors. These efforts will provide the Navy with the missiles and guidance systems we need to meet operational requirements.

SSP recently achieved a significant programmatic milestone in our life extension program. The first end-to-end operational test of Trident II (D5) life-extension guidance system was successfully conducted in February from the USS TENNESSEE (SSBN 734). SSP embarked on a major overhaul of the guidance system over a decade ago to extend the life of the guidance system to match the hull-life of the OHIO Class SSBNs. This represented the most significant guidance engineering effort since the development of D5 over thirty years ago.

Another major step to ensure the continued sustainment of our SWS is our SSP Shipboard Integration efforts, which utilizes open architecture and commercial off-the-shelf hardware and software for shipboard systems. The first increment of this update is now being installed throughout the fleet and training facilities. To date, installation is complete on seven US SSBNs and all four UK SSBNs. This effort is a technical

obsolescence refresh of shipboard electronics hardware and software upgrades, which will provide greater maintainability of the SWS and ensure we continue to provide the highest nuclear weapons safety and security for our deployed SSBNs.

To sustain the Trident II (D5) SWS, SSP is extending the life of the W76 reentry system through a refurbishment program known as the W76-1. This program is being executed in partnership with the Department of Energy, National Nuclear Security Administration. The W76-1 refurbishment maintains the military capability of the original W76 for approximately an additional thirty years.

In addition to the W76-1, the Navy also is in the initial stages of refurbishing the W88 reentry system. The Navy is collaborating with the Air Force to reduce costs through shared technology. These programs will provide the Navy with the weapons we need to meet operational requirements throughout the OHIO service life and the planned follow-on platform.

OHIO Replacement Program

One of the highest Navy priorities is the OHIO Replacement Program. The continued assurance of our sea-based strategic deterrent requires a credible SWS as well as the development of the next class of ballistic missile submarine. The Navy team is taking aggressive steps to ensure the OHIO Replacement SSBN is designed, built and delivered on time with the right capabilities at an affordable cost.

The Navy team has the benefit of leveraging the success of the VIRGINIA Class build program and the opportunity to implement many of those lessons-learned to help

ensure we design the OHIO Replacement Program for affordability both in terms of acquisition and life cycle maintenance. Maintaining this capability is critical to the continued success of our sea-based strategic deterrent now and into the future.

The OHIO Replacement Program will replace the existing OHIO Class submarines. To lower development costs and leverage the proven reliability of the Trident II (D5) SWS, the OHIO Replacement SSBN will enter service with the Trident II (D5) SWS and D5 life-extended missiles onboard. These D5 life extended missiles will be shared with the existing OHIO Class submarine until the current OHIO Class retires. Maintaining one SWS during the transition to the OHIO Class Replacement is beneficial from a cost, performance, and risk reduction standpoint.

A critical component of the OHIO Replacement Program is the development of a common missile compartment that will support Trident II (D5) deployment on both the OHIO Class Replacement and the successor to the UK VANGUARD Class. The US and the UK have maintained a shared commitment to nuclear deterrence through the Polaris Sales Agreement since April 1963. The US will continue to maintain its strong strategic relationship with the UK for our respective follow-on platforms, based upon the Polaris Sales Agreement. As the Director of SSP, I am the US Project Officer for this agreement. Our programs are tightly coupled both programmatically and technically to ensure we are providing the most cost effective, technically capable nuclear strategic deterrent for both nations.

Consistent with the defense strategic guidance, the Navy is delaying the OHIO Replacement Program by two years. While the overall program is being delayed by two

years, we are maintaining the original program of record for the design of the common missile compartment and SWS deliverables in order to meet our obligations to the UK. The US and UK are working jointly to prioritize risk and develop a mitigation plan under the auspices of the Polaris Sales Agreement.

Our continued stewardship of the Trident II (D5) SWS is necessary to ensure a credible and reliable SWS is deployed today on our OHIO Class submarines, as well as in the future on the OHIO Replacement SSBN. This is of particular importance as the reliance on the sea-based leg of the Triad increases as New START Treaty reductions are implemented. The OHIO Replacement will be a strategic, national asset whose endurance and stealth will enable the Navy to provide continuous, uninterrupted strategic deterrence into the 2080s.

Solid Rocket Motor (SRM) Industrial Base

The fourth priority I would like to discuss is the importance of the defense and aerospace industrial base. In particular, the decline in demand for the SRM industry has placed a heavy burden on Navy resources. The Navy is maintaining a continuous production capability at a minimum sustaining rate of twelve rocket motor sets per year through the Future Years Defense Plan. However, we previously have faced significant cost challenges as both NASA and Air Force demands have declined.

Over the past few years the Navy has worked with our industry partners to reduce overhead costs and minimize cost increases to the Department. Despite many efforts to address this issue, the industrial base remains volatile. Potential future unit cost increases

due to further decline in SRM industrial base demand could impact the D5 Life Extension Program. We will continue to cautiously monitor the industrial base.

The OSD-led Interagency Task Force developed a *Solid Rocket Motor Industrial Base Sustainment and Implementation Plan*. One of the conclusions of the report is that "The Department must preserve the scientific, engineering and design skills and production capabilities necessary to support both large- and small-SRMs." SSP will continue to work with our industry partners, DoD, NASA, Air Force and Congress to sustain the Solid Rocket Motor industrial base and find ways to maintain successful partnerships to ensure this vital national capability is maintained.

Conclusion

SSP will continue to maintain a safe, secure and effective strategic deterrent capability and focus on the custody and accountability of the nuclear assets entrusted to the Navy. Our budget request provides the necessary funds to sustain this capability in FY 2013. However, we must continue to be vigilant of unforeseen age-related issues to ensure the high reliability required of our SWS. SSP must maintain the engineering support and critical skills of our industry and government team to address any future issues with the current system as well as prepare for the future of the program.

Our nation's sea-based deterrent has been a critical component of our national security since the 1950s and will continue to assure our allies and deter our rivals well into the future. I am privileged to represent this unique organization as we work to serve the best interests of our great Nation.