062416 Air Force Association, Reserve Officers Association and National Defense Industrial Association Capitol Hill Forum Prepared Remarks by Admiral Terry Benedict, Director of the Navy's Strategic Systems Program, on "The Navy's Contribution to Nuclear Deterrence." (For additional information on NDIA/AFA/ROA seminars contact Peter Huessy at phuessy@afa.org).

Ladies and gentlemen, it is a pleasure to once again – six years for me now – to join you this morning. I would like to thank Peter for his stalwart dedication to promoting the importance of strategic deterrence and hosting this series. His continuing efforts ensure that our decision makers – from the Pentagon to the Hill and to the White House – are fully informed of all issues related to strategic deterrence and why, as a nation, we must maintain a safe, reliable, and effective national deterrence.

Our mission at Strategic Systems Programs or SSP for short is to design, develop, produce, support, and ensure the safety of our Navy's sea-based strategic deterrent – the Trident II D5 Strategic Weapons System that is deployed on our Ohio-class ballistic missile submarines. Together, the submarine and the strategic weapon system form one leg of our nation's nuclear Triad. The men and women of SSP and our industry partners that support our mission are the very best. They remain dedicated to supporting the mission of our Sailors on strategic deterrent patrol. Likewise, our Marines, Sailors, and Coast Guardsmen, ever vigilant, stand the watch and ensure the security of the weapons so vital to our national security.

Each leg of our Triad is important and serves a critical role in our strategic deterrent strategy. Air Force ICBMs and bombers provide first-strike reliability and flexibility. However, it is the Navy that provides the most survivable leg and assured second-strike capability with our ballistic missile submarines armed with the Trident II

strategic weapon system. Not only that, but submarine launched ballistic missiles comprise the significant majority of the nation's operationally deployed nuclear warheads under the New Start Treaty.

Ensuring sustainment of the sea-based strategic deterrent capability is a vital national requirement today and into the foreseeable future. As the Director of SSP, I am committed to sustaining that capability and some of my top priorities are:

- Trident II (D5) SWS Life Extension
- OHIO Replacement Program
- The Navy Nuclear Weapons Regulatory responsibility, and
- Collaboration with the Air Force.

Before I discuss these priorities though, I'd first like to recognize the notable accomplishment of our United Kingdom partners. HMS Vengence completed her mid-life refueling and overhaul earlier this year and will soon receive her strategic onload at Kings Bay. Earlier this week, Vengence successfully launched a TRIDENT II missile and completed certification of her crew in Demonstration and Shakedown Operation – 11 or DASO 11. For more than 52 years now, the U.S. and the UK have maintained a shared commitment to nuclear deterrence through the Polaris Sales Agreement, which formally arranged for our missile system to be provided to the UK as part of its independent deterrent capability. We are tightly coupled both programmatically and technically to ensure we are providing the most cost effective, technically capable nuclear strategic deterrent for both nations. We will continue to maintain this strong strategic relationship to ensure a credible and reliable strategic weapon system is deployed today on our Ohio-class submarines, the UK Vanguard-class, as well as in the future on

respective follow-on platforms.

The Trident II was originally planned for a service life of only 25 years. However, it will serve throughout the remaining life of the Ohio and Vanguard-classes and as the initial load out on Ohio replacement and Successor submarines. This is obviously well beyond its original design life and more than double the historical service life of any previous sea-based strategic deterrent system. Life extension of the Trident II D5 is therefore essential to ensure the system remains the effective and reliable sea-based deterrent that is has been since the early 90's and continues the success of its predecessors for more than 60 years now.

This brings me to my first priority – life extension. We are proactively taking the steps to address aging and technology obsolescence. This is being accomplished through an update to all the strategic weapons subsystems: launcher, navigation, fire control, guidance, missile, and reentry. Our flight hardware - missile and guidance subsystems - life extension efforts are designed to meet the same form, fit, and function of the original system. This keeps the deployed system as one homogeneous population, controls costs, and assures the demonstrated performance of the system.

Last November, USS Kentucky successfully conducted a Demonstration and Shakedown Operation (DASO 26) by launching two missiles – the first of which was visually spectacular! These missiles successfully integrated the D5 Life Extension Flight Controls Electronics Assembly and Interlocks Suite with the life-extended Guidance System. The D5 LE missiles will begin initial fleet introduction in just a few short months.

Although most may only think of the missile itself, Trident II also includes a

complex array of shipboard systems. We are also extending the life of these shipboard systems through the use of open architecture design and commercial off-the-shelf hardware and software to extend service life, enable more efficient and affordable future maintenance and ensure we continue to provide the highest level of nuclear weapons safety and security while meeting STRATCOM requirements. The first increment of this update was completed in April 2014 and installation of subsequent increments began last summer.

Under the provisions of New START, the Navy will provide about 70 percent of the deployed warheads. SSP is extending the life of the W76 reentry system. In partnership with the Department of Energy, National Nuclear Security Administration (NNSA), this refurbishment will maintain the military capability of the original W76 for another 30 years. We are also continuing work to also refurbish the aging electronics in the W88 reentry system. We are collaborating with the Air Force to reduce costs through shared subsystems. Additionally, the Nuclear Weapons Council directed the replacement of the conventional high explosive that will support deployment of the W88 for an additional 25 years.

Our life extension efforts will support not only our Ohio-class submarines in service today, but will also initially support our follow-on submarine. This brings me to my second topic and the Navy's highest priority acquisition program, the Ohio-replacement program. We are taking the necessary steps to ensure the Ohio-replacement is designed, built, delivered, and tested on time with the right capabilities at an affordable cost.

To lower development costs, mitigate risk and to leverage the proven reliability of

the current weapon system, Ohio-replacement, as well as the UK's Vanguard-successor, will enter service equipped with the Trident II weapon system.

Development of the Common Missile Compartment is a critical component of the Ohio-replacement program as it will support Trident II deployment on the U.S., as well as the UK platforms. The Common Missile Compartment or CMC is just that – a common section of the U.S. and UK submarines that will house the D5 missile. This is truly unique, as both nations will have the capability to build the CMC in their respective shipyards. The joint CMC effort is shifting from design to construction, supporting production in both U.S. and UK build yards, and construction of the first missile tubes began in 2015.

To manage and mitigate technical risk to both the U.S. and UK programs, SSP is leading the development of SWS Ashore integration test site at Cape Canaveral, Florida. The State of Florida and Space Florida, helped jump start this project by providing support for the early stages of the facility's development. Just last week, we conducted a ceremony recognizing their contributions and their formal completion of support. SWS ashore will provide a single land-based facility for testing the weapon system. The Navy has completed installation of the Submarine decks in Test Bay #1 and installation of Ohio-class SWSS subsystems and supporting ship's equipment is ongoing. Additionally, a simulated submarine superstructure installed over Test Bay #1 will be used for Missile Service Unit First Article Testing will take place later this year, marking the first use of SWS Ashore test facility.

Launch performance is a critical factor as we transition the weapon system to the next class of SSBNs. To mitigate the risk in the restart of launch system production, SSP

constructed a surface launch test facility at the Naval Air Station, China Lake, California. This facility will use refurbished Trident II test shapes starting in fiscal 2017 that will prove that the launcher industrial base can replicate the original performance standards of the Ohio-class launch system. Construction is nearly complete, and launcher hardware and test instrumentation is in the process of being integrated. We will begin testing in January 2017.

My third priority relates to my organization's centralized regulatory role. As a request of the Nuclear Enterprise Review, I have assumed regulatory responsibility for nuclear force readiness. As DIRSSP, I have accountability, responsibility and authority to serve as the single Navy flag officer to monitor performance and conduct end-to-end assessment of the Navy's Nuclear Deterrence Mission elements.

While this is a fairly new role for my organization, we have made significant progress this past year from developing a data repository and analytical tools to expand our focus areas to ensure a more holistic review of the readiness of our forces during biennial assessments.

Finally, I'd like to discuss what we have going on with Navy/Air Force Commonality. I see many familiar faces today, and as many of you know, I have discussed this topic in this forum in previous years and General Rand and I have testified to Congress on the need for commonality.

As I mentioned earlier in my remarks, the Navy is well under way extending the life of our strategic weapon system. In the near-term, the Air Force will move forward with the Ground Based Strategic Deterrent program to replace the Minuteman, and in the longer-term, Navy will begin to think about what follows the D5 strategic weapon

system. With the budgetary pressures we face today, it is only prudent to assess areas where we should seek intelligent commonality to reduce both cost and risk as both services modernize the ballistic missile legs of the triad.

Last August both the Navy and Air Force were directed by Navy and Air Force RDAs, as well as STRATCOM, to conduct a detailed assessment of the potential for commonality. The direction was to determine whether substantially increasing the commonality could improve affordability while ensuring a safe, secure, effective, and credible nuclear deterrent. A joint assessment team was stood up, comprised of senior Navy and Air Force technical and programmatic experts as well as key external stakeholders. The team assessed potential benefits, risks, and cost implications, while considering requirements and CONOPS, system flexibility and adaptability, acquisition strategy, and lifecycle costs.

The team concluded that sub-system and component level commonality have the potential to reduce both cost and risk to Air Force and Navy future missile programs by leveraging the substantial resources already invested.

Going forward, the Air Force and Navy need to build on the success of this team and start incorporating the results into our respective acquisition strategies, particularly for GBSD in the near-term.

Furthermore, both the House and the Senate have included language in their respective NDAAs for fiscal 2017 on commonality and have directed the Department to report on how we are now incorporating commonality. Bottom line is there appears to be consensus within the Department and on the Hill that seeking opportunities for commonality makes sense.

Despite our consensus, challenges remain. We have different cultures and both have long histories of success working largely independently. That being said, we face a very different fiscal environment today and must look for ways to do more with less while still ensuring a safe, reliable and effective deterrent. In order to best capitalize on our investments, we need to build commonality in as early as possible. Now is the time to pursue intelligent commonality.

Having said that, I do have concerns for where the overall commonality effort is going. I have recommended the Air Force take advantage of Navy program products and processes that were recently developed as part of our D5 Life Extension Program. Acquisition decisions will make or break the effective implementation of commonality.

I have recommended some form of criteria for commonality be included in the source selection evaluation of RFP responses for the GBSD TMRR.

In conclusion our nation's sea-based strategic weapon system remains a critical component of the triad that provides for our national security through strategic deterrence, and the Navy and SSP continues to support it just as we have for more than 60 years. We are on track with both our role in ORP and with the D5 life extension program, but again, that is only one piece of the puzzle. We must continue to work closely with the Air Force and other partners on collaborative efforts as we face major program decisions and challenges of modernizing our systems.

I am privileged to represent this unique organization as we serve to protect our great Nation. Thank you … I will now be happy to take any questions.