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SEA BASED STRATEGIC DETERRENCE

DIRECTOR'S INTENT

2022

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EXECUTIVE SUMMARY

As outlined in the Secretary of the Navy's 2021 Strategic Guidance and the Chief of Naval Operations NAVPLAN 2021, the United States of America and the U.S. Navy face a challenge of historical proportions. Our Navy has operated forward for over two centuries to protect commerce and to take any necessary fights far away from our home shores. Since World War II, the U.S. has led an international rules-based order that prevented major power conflict and allowed economic growth and prosperity around the world. This rules-based order is now threatened by the strategic breakout of the People's Republic of China and the regional threats and non-conventional activities emanating from both Russia and China. Both are rapidly advancing their military capabilities and thus empowering a bolder, less cooperative geopolitical posture by these non-democratic regimes. The potential for both China and Russia to coerce our allies and partners now exists. While the U.S. is investing heavily in new weapons system capabilities to counter China and Russia, the SSBN force will complement the Air Force legs of the Nuclear Triad to provide the military capabilities to deter a strategic attack against our homeland and the escalation of Strategic Competition into Strategic Conflict through large-scale war.

SSP, in close collaboration with our long-term industry partners, will oversee the weapons system programs to execute Sea Based Strategic Deterrence (SBSD) operations in support of the Navy's full spectrum deterrence mission through the year 2084. Sea Based Strategic Deterrence 2084 (SBSD 2084) is executed today, and through the 2030s, by the Ohio-class SSBN with the be Trident II D5/ D5 Life Extension Strategic Weapons System (SWS) that, upon order, will deliver the W76/W88 family of warheads to their targets. SBSD 2084 also encompasses all of the technical and programmatic excellence, people, and infrastructure required to achieve the 2084 milestone.

The modernization of weapon systems to support SBSD 2084 execution in a dynamic and unpredictable strategic environment includes the Columbia-class SSBN along with Trident II D5LE2, the W93/Mk7 warhead with reentry body assembly, and Shipboard Modernization that together will bring adaptability, flexibility, survivability, and resiliency to SBSD 2084.

The introduction of Conventional Prompt Strike, an intermediate range, non-nuclear hypersonic strike capability to the ZUMWALT Class DDG in the mid-2020s and the VIRGINIA Class Block V SSN in the late-2020s will add a new dimension to SBSD 2084 by providing a strategic conventional strike capability to fill critical gaps in the full spectrum of deterrence. Accounting for 70% of the nation's deployable nuclear warheads and providing the nation a sea based non-nuclear hypersonic strike capability, SBSD 2084 is the foundation of our national defense.

"In today's threat environment, strategic deterrence is foundational to our national defense. Every Operational Plan (OPLAN) across the Department begins with the assumption that strategic deterrence will hold. A safe, secure, and effective nuclear force remains the most credible combination of capabilities to deter strategic attack and execute our national strategy."

Admiral Charles A. Richard
 U.S. Strategic Command

MISSION PRIORITIES AND KEY ENABLERS

The Mission Priorities of SSP are to:

- **Sustain** the D5/D5LE SWS and ensure Nuclear Weapons Surety on the Ohio-class SSBN and in supporting shore facilities through 2042 while providing Naval Nuclear Weapons Program Technical Authority for NW systems and Regulatory Oversight of the Navy Nuclear Deterrence Mission (NNDM). SSP will re-host and sustain the D5LE SWS on the first-of-class Columbia and UK Dreadnought-class SSBNs.
- **Develop** the Trident II D5LE2 SWS, advanced weapon capabilities in the Trident II D5LE2 missile, and the Mk7 reentry body subsystem for use on the Columbia-class. Pending Congressional review, the Trident II D5LE2 SWS (minus warheads) will also support the UK Dreadnought-class. Simultaneously, SSP will develop and deliver the U.S. Navy's non-nuclear Conventional Prompt Strike Hypersonic Missile capability to fill a critical deterrence gap in our full spectrum of deterrence.
- **Safeguard** the special relationship between the U.S. and United Kingdom (UK) through the Polaris Sales Agreement (PSA) and Mutual Defense Agreement (MDA), benefitting both nations and supporting the UK's Continuous At Sea Deterrence (CASD).

Key Enablers to Achieve SSP's Mission Priorities are:

- **People**
- **Industry**
- **Infrastructure**

The following highlights my strategic approach and intent in the coming years to meet the current and future challenges through fulfillment of the great responsibilities SSP executes on behalf of the citizens of this great nation. I look forward to collaborating with you to achieve excellence and SBSD 2084.

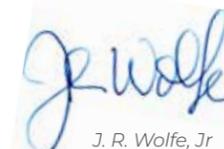

 J. R. Wolfe, Jr

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STRATEGIC ENVIRONMENT | THE CHALLENGE

Challenge Area: Detering Strategic Conflict by Outpacing Determined Strategic Competitors

From 1945 to 1990, the U.S. stood vis-à-vis the powerful and determined Soviet Union in a bipolar world built around a U.S.-led international rules-based order. While the American and Soviet governing policies and worldviews were diametrically opposed, they succeeded in balancing each geopolitically through multiple and various stages of evolutionary strategic deterrence. The determination of both governments to protect their national interests through a credible nuclear deterrent enhanced international strategic stability, avoided Strategic Conflict, and allowed the world to grow and prosper together. After the fall of the Soviet Union, the U.S. greatly reduced investments in defense, especially in strategic nuclear forces, as many believed the era of the nuclear threat had come to an end. As a result, approximately two decades passed without investment to modernize the U.S. strategic arsenal.

Today we see a revitalization of the Russian presence on the global stage, backed by heavy investments into their strategic nuclear arsenal as well as asymmetric conventional capabilities. More concerning, the world has observed the booming economic and military growth of the People's Republic of China, putting it on a path to achieve her 100-year strategic objectives to be the world's dominant economic and military superpower and, at a minimum, the regional hegemon of East Asia and the Western Pacific. Finally, North Korea and Iran represent regional threats with building nuclear and long-range missile capabilities that could drive global international instability and potential strategic power conflict. The U.S. faces these growing threats in a multi-polar world simultaneously with the persistent threat of terrorism, especially

through access to and use of Weapons of Mass Destruction.

These geopolitical threats form the backdrop against which the U.S. must develop strategies and capabilities to maintain international stability through deterrence of Strategic Conflict. Central to this task is successful nuclear modernization, augmented by development of new non-nuclear advanced capabilities. Outpacing our very determined strategic competitors is fundamental to deterring their aggressive tendencies and desires to alter international norms. The Department of Defense, the Navy, and SSP must work closely with Presidential administrations and Congressional leadership to design a strategy that consistently invests in future capabilities that will outpace and deter any potential adversary. This will lower the risk of Strategic Conflict and allow all Americans to continue to live in a free and independent nation.

Challenge Area: Shift from Culture of Sustainment to Culture of Sustainment & Development

Since deployment of the Trident II D5 SLBM in 1990, much of SSP's mission focused on sustaining a capability while combatting technological obsolescence. As the national interest in nuclear disarmament increased and fiscal pressures burgeoned, the strategic mission suffered a loss of broad political support. However, the 2014 Nuclear Enterprise Review and 2018 Nuclear Posture Review (NPR) revived national attention to the critical mission SSP performs every day. The NPR stated, "The need for flexibility to tailor U.S. capabilities and strategies to meet future requirements and unanticipated developments runs contrary to a rigid, continuing policy of 'no new nuclear capabilities.'"



STRATEGIC ENVIRONMENT | THE CHALLENGE CONTINUED

The 2018 NPR directed two key efforts SSP led for the Navy:

Modify a small number of existing SLBM warheads to provide a low-yield option.
Develop a cost-effective, credible, and effective Sea-Launched Ballistic Missile (SLBM) that can be deployed throughout the service life of the COLUMBIA SSBN.

SSP completed the first effort in collaboration with the National Nuclear Security Administration and deployed the low-yield option ahead of schedule and under budget. The Trident II D5LE2 team is building toward a 2025 System Requirements Review (SRR) to lay the groundwork for the following decade of design, development, testing, production, and deployment of the SLBM that will be deployed in 2039 on COLUMBIA for SBS2084.

Separate from our Nuclear Mission, but just as distinct, SSP leads the Navy's intermediate-range hypersonic missile development in the new Conventional Prompt Strike (CPS) program. In conjunction with the Army, SSP leads the program to deploy intermediate-range non-nuclear hypersonic strike capability to the Army in 2023 and the Navy in 2025, a fast paced and challenging goal, but one the nation must achieve. All these new development efforts, complemented by developing robust weapon and platform security capabilities to mitigate against emerging threats, require creativity, technical and programmatic excellence, a sense of urgency, and calculated risk-taking. Strategic Systems Programs (SSP) will **SUSTAIN** SBS2084 today while **DEVELOPING** SBS2084.

Challenge Area: Recruiting, Developing, and Retaining a Premier SBS2084 Workforce

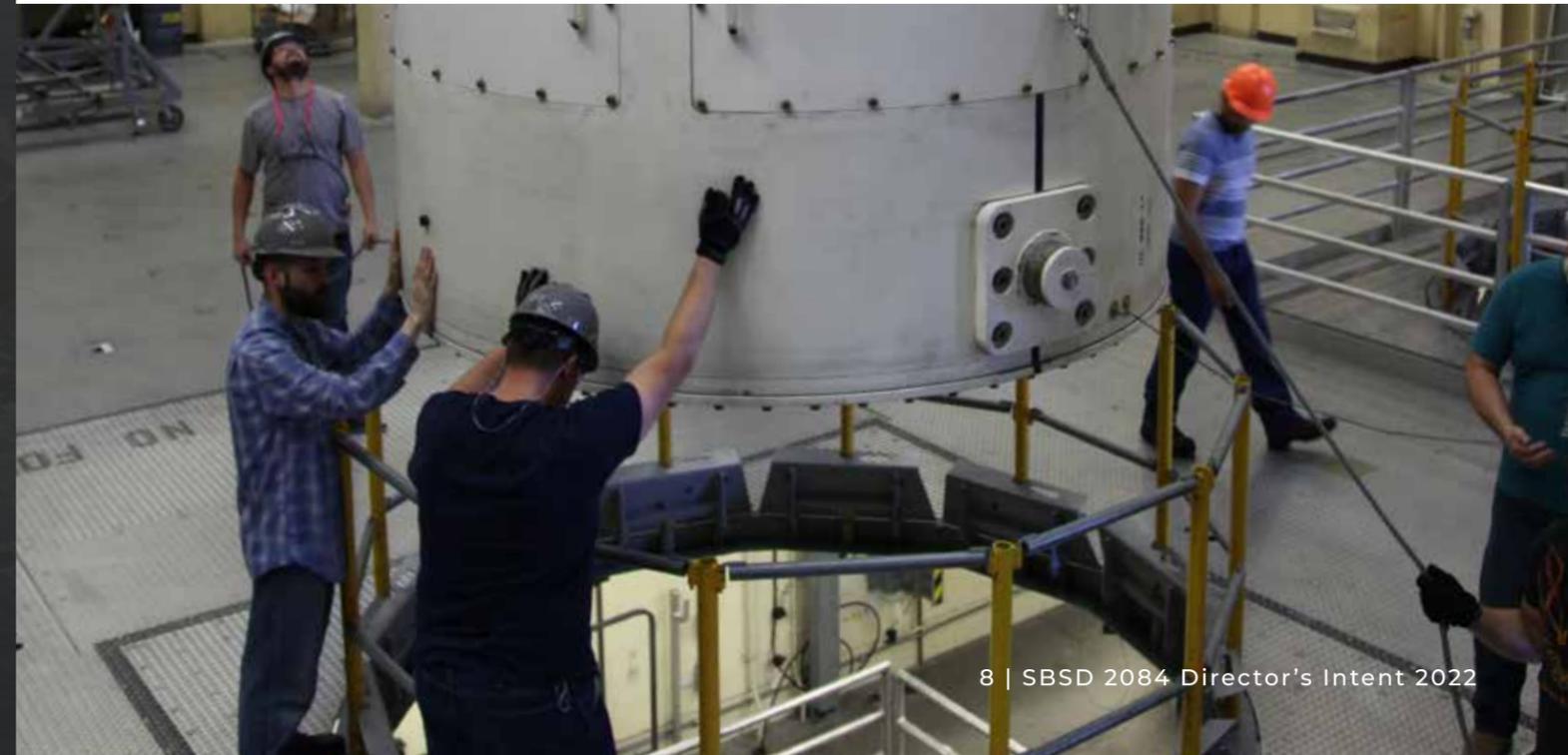
The command's top enabling priority is recruiting and maintaining a sufficiently sized, educated, and trained workforce with the right mix of skills and associated experience to meet SSP's current and future demands. The technological rigor required to execute a nuclear weapons program with associated long-range delivery systems is a level unto its own, not comparable to other weapons programs and thus requiring extra investment, national level attention, and oversight. The workforce to achieve this mission is a national treasure and a crown jewel in the nation's National Security Strategy. As the program is increasingly removed from D5 SWS development, and as many D5 and D5LE production lines have closed or are modified to reduce costs, SSP must ensure that program requirements and processes are well-understood and documented. Additionally, technical and professional opportunities must exist to cultivate and retain team members with the mix of skills that are transferable across various aspects of the program. The command must also prioritize the dissemination of institutional knowledge and identify the knowledge and capability gaps. Future activities demand a workforce that is steeped in technical abilities and optimized for efficiency, one that is diverse and adaptable to execute all aspects of the mission. SSP will nurture a **PREMIER SBS2084 WORKFORCE** to execute the nation's premier weapons programs.

STRATEGIC ENVIRONMENT | THE CHALLENGE CONTINUED

Challenge Area: Recapitalizing Aged Infrastructure and Building SBS2084 Infrastructure

Today's strategic nuclear triad benefits from previous generations that invested heavily in nuclear support infrastructure. That infrastructure promoted both safety and longevity of the weapon systems as well as the high levels of security required for weapons of such import. Over seven decades of use, some of this infrastructure has aged and much of it has been extended beyond its designed service life. This infrastructure can be leveraged in SBS2084 with the proper investment of resources to revitalize it and build in more capacity. However, restoring the infrastructure of the '50s, '60s, '70s, and '80s alone is not enough to meet the dynamic and sometimes unpredictable demands of the future.

In addition to revitalizing legacy infrastructure for use in SBS2084, the Nuclear Enterprise, and SSP particular, must wisely prioritize the investment of finite resources in new and expanded infrastructure to promote the safety, security, efficacy, and credibility of the SBS2084. These investments will be made in weapon design and development capacity, transportation and storage infrastructure, as well as in technical operations and nuclear weapons security facilities. SSP will coordinate and lead enterprise efforts through the Navy Nuclear Deterrence Mission Infrastructure Group (NNDMIG) to prioritize and efficiently sequence infrastructure investments to build **SBS2084 Infrastructure**.



STRATEGIC ENVIRONMENT | THE CHALLENGE CONTINUED

Challenge Area: Revitalizing the Industrial Base to Realize SBS2084 Industry

The U.S. has a significant gap in industrial capability to both modernize and develop new strategic weapons systems. U.S. nuclear weapons development essentially ended as part of the "Peace Dividend" following the end of the Cold War with the Soviet Union. National investment in the strategic weapons industry dropped significantly through the 1990s and 2000s, which resulted in a dramatic reduction in industrial base capacity to support development and sustainment of SWS. A large portion of the industrial base shifted to support necessary conventional weapons system development through Global War on Terror. To offset the national investments in these conventional priorities, national security leadership made hard decisions to shut down or cut back production lines of critical technologies and components that delivered the accuracy, reliability, survivability, and lethality of the nation's high-end nuclear triad systems.

Now we must face the challenge of reestablishing and recapitalizing both the industrial infrastructure and, more importantly, the industrial workforce to maintain sustained excellence. The Navy and SSP must achieve this in an environment where fiscal constraints and more restrictive acquisition policies stand as barriers to overcome on a tight timeline to required capability delivery. The original nuclear triad of the '80s is aging out and must be replaced on time. The delays in modernization in the early 2000s have provided no margin to deliver capability across all three legs of the Triad. Therefore, SSP must be competent and efficient stewards of the resources allocated to SBS2084 by national security decision makers to realize the needed return on every dollar invested into building industrial base capacity and the requisite human capital to realize **SBS2084 Industry**.

"FROM THE START OF THIS PROGRAM, THE SPECIAL PARTNERSHIP AND CLOSE COLLABORATION BETWEEN GOVERNMENT AND INDUSTRY HAS PLAYED A CRITICAL ROLE IN THE SUSTAINED SUCCESS OF THE FLEET BALLISTIC MISSILE PROGRAM, A PROGRAM THAT TRULY SETS THE WORLD STANDARD FOR WEAPON SYSTEM PERFORMANCE, SAFETY, AND RELIABILITY. NOW MORE THAN EVER, WE AS A GOVERNMENT AND INDUSTRY TEAM MUST BE GOOD STEWARDS OF EVERY DOLLAR THE AMERICAN PEOPLE INVEST IN US TO PROVIDE SEA BASED STRATEGIC DETERRENCE."

VADM J.R. WOLFE, JR
DIRECTOR, STRATEGIC SYSTEMS PROGRAMS

SSP MISSION STATEMENT

Be the nation's premier provider of cost effective, safe, and secure sea based strategic deterrent solutions and grow the intellectual capital to deliver SBS2084.

SSP VISION

Deter strategic attack by providing credible and affordable nuclear and non-nuclear strategic solutions to the warfighter to underwrite the security of our nation and our allies through 2084.

SSP CULTURE

We are highly qualified and committed military, civilian, and industry professionals working together with relentless **dedication** towards sea based strategic deterrence. We earned our credibility through decades of technical **excellence** and overcoming challenges as a team. Our success is rooted in our people. We thrive through **collaboration**. We are SSP. One mission. One family.



Providing Credible and Affordable Strategic Solutions to the Warfighter

Providing: Life-cycle support encompassing concept, technology, design, development, production, operational support and retirement.

Credible: Our products provide a persistent warfighting capability, poised for prompt response, which will deliver the desired effects safely, securely, and reliably.

Affordable: Cost-effective solutions that balance life cycle cost and rapid capability delivery.

Strategic: Supportive of national policy - nuclear deterrence, application of conventional force, and timely, agile action.

Solutions: SSP uses its institutional strengths to execute concepts, plans, and programs; develop, field, and support weapon systems; and advise on matters related to SSP's areas of responsibility.

Warfighter: U.S. Sailors and Marines, U.S. Coast Guard personnel, Task Force Commanders, Commander of U.S. Strategic Command, and UK Chief Strategic Systems Executive.

SSP GUIDING PRINCIPLES



Authority | The power or right to give orders and make decisions. Ensure delegation of authority is clear and to the right level.

Accountability | The fact or condition of being required or expected to justify actions or decisions. Hold your subordinates, peers, and supervisors to account for execution of their authorities.

Responsibility | The duty to act independently and make decisions, within your scope of authority, that support SSP's mission and objectives. Take the initiative and lead by example.

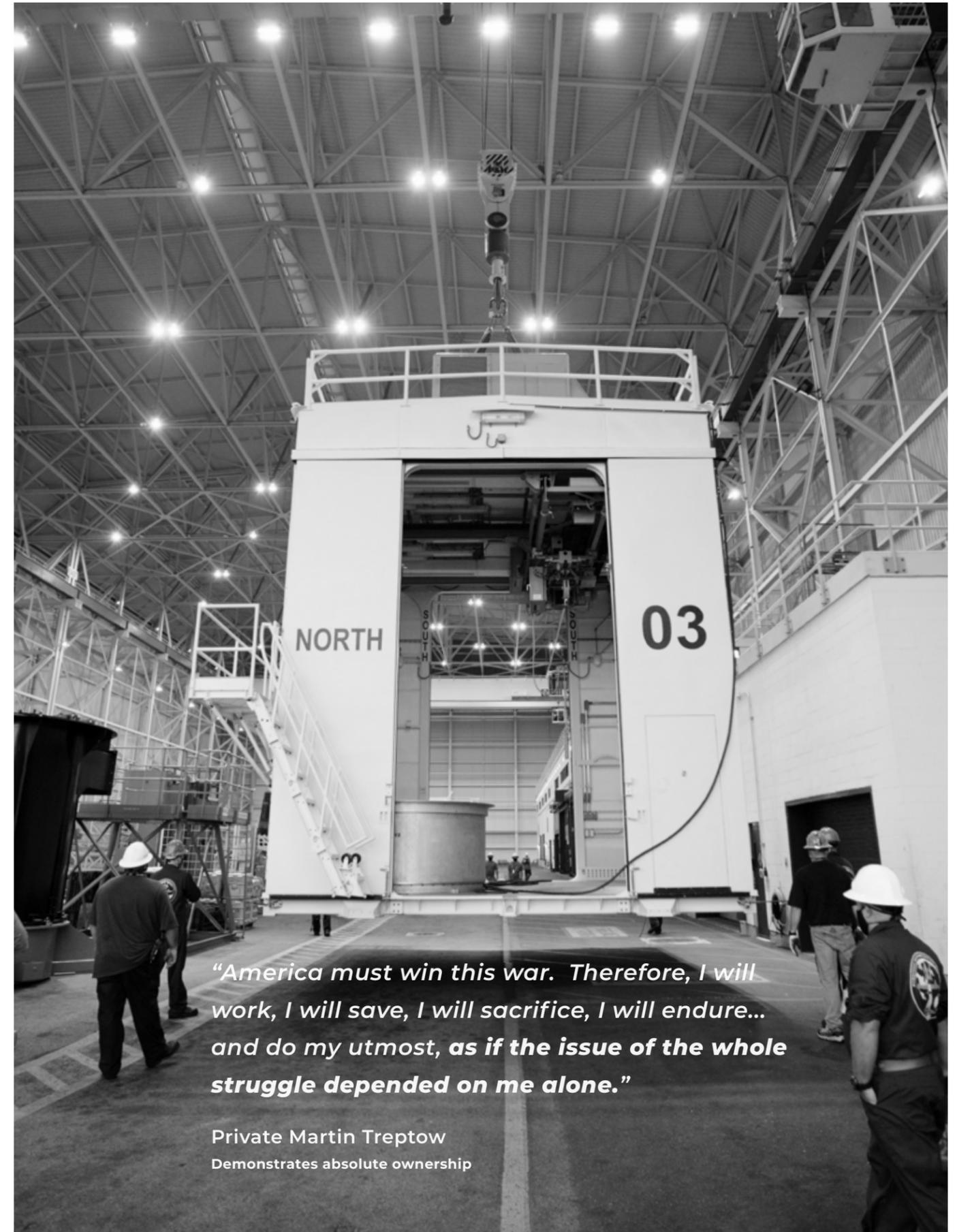
Ownership | The act, state, or right of possessing something. Know your roles and responsibilities with associated authorities, then own them and stand to account.

Authority, Accountability and **Responsibility** empower every SSP team member to succeed through **Ownership**. Only when these guiding principles complement each other, can each member of the team understand their role and advance the mission.



“We were given complete free rein to generate the type of organization to do this job, and we were given complete authority and responsibility.”

William “Red” Raborn
First Director of the Program





DIRECTOR'S MISSION PRIORITIES

Sustain the SWS on the Ohio-class SSBN through 2042

The Ohio-class SSBN began a new phase of Sea Based Strategic Deterrence when it started relieving the 41 for Freedom SSBNs in the 1980s, initially employing the Trident I C4 Submarine Launched Ballistic Missile and leveraging the Nuclear Weapons and missile production infrastructure of the original Fleet Ballistic Missile Program. The U.S. sought to increase the range, accuracy, reliability, and lethality of its SLBM Missile program. In 1988 the USS Tennessee ushered in a new age of deterrence with the advanced Trident II D5 SWS. Not only was the new SWS the most advanced of its kind, but so was its support facility - the newly built Kings Bay Naval Submarine Base was specifically designed to support this new weapons system. Over the following decade, as new Ohio-class SSBNs were brought online (SSBN 735 through SSBN 743) with the D5 missile system, the early Ohio-class SSBNs were also converted from a C4 system to align with the rest of the D5 fleet. Originally composed of 18 Ohio-class SSBNs, the SSBN fleet settled on a 14-ship class carrying the Trident II D5 missile system executing SBSB, while the first four Ohio-class SSBNs were converted to conventional guided missile and special operations forces submarines (SSGN 726 through SSGN 729). The 14 ship Ohio-class SSBN fleet remains the backbone of U.S. strategic deterrence, carrying approximately 70% of the accountable deployed strategic nuclear warheads allowed by international treaty in the form of the W76/W88 families of nuclear warheads.

Originally designed for a 30 years of service life, the Ohio-class submarines were called upon to extend this service to 42 years, supporting a delay in investment in the next generation of SSBNs. To account for this extension in service life, SSP

embarked on a life extension program for the D5 missiles to update critical but aging missile electronics systems. SSP introduced the Trident II D5 Life Extension (D5LE) program to the fleet in 2017 and will continue to convert D5 missiles to D5LE through approximately 2025, when they are pulled off of the SSBNs during normal maintenance.

The last Ohio-class SSBN, USS Louisiana (SSBN-743), currently executing her mid-life Engineered Refueling Overhaul (ERO) will support SBSB 2084 until she is scheduled for retirement in 2042. SSP must ensure the "no-fail" SBSB mission is supported on the Ohio-class through 2042, providing a reliable Trident II D5/D5LE weapons systems with W76/W88 warheads until this final ship of the class is decommissioned. In parallel, SSP's program efforts and collaboration with the UK through the Polaris Sales Agreement must support the UK's Continuous At Sea Deterrence through Vanguard-class life and the transition to a Dreadnought-class SSBN fleet.

To meet these critical program responsibilities, SSP will execute Naval Nuclear Weapons Program Technical Authority for nuclear weapon systems and Regulatory Oversight of the NNDM. Through programmatic excellence in shipboard sustainment and modernization programs across the SWS subsystems and in nuclear weapon surety, and through diligent oversight of the logistical supply chains, SSP not only will maintain a credible and reliable weapons system, but will also continue unlocking new capabilities the warfighter can leverage to enhance strategic deterrence and act decisively should deterrence fail.

DIRECTOR'S MISSION PRIORITIES CONTINUED

Develop the 2084 COLUMBIA/UK DREADNOUGHT SWS and US Navy CPS

SWS

The Ohio-class and Vanguard-class SSBNs continue to provide a superior return on investment to their nations through deterrence of major power conflict, both nations have concluded it is time to make a generational investment into their SBSN to deter potential future transitions from Strategic Competition to Strategic Conflict. The U.S. Congress has already approved funding for Hulls 1 and 2 of the Columbia-class SSBN (SSBN 826 and SSBN 827). Planned for a minimum of a 12-ship Columbia-class SSBN fleet, this highly advanced and ultra-quiet submarine is designed with a life of ship reactor core. This avoids a loss of operational availability due to a mid-life core refueling as was the case in previous SSBN classes, including OHIO. The Department of Defense (DOD) and Navy were able to capitalize on the demonstrated accuracy and reliability of the Trident II D5 Weapons System to reduce the number of missile tubes on each submarine from 24 to 16, saving critical defense dollars to be invested in other areas of the DOD. The UK is simultaneously developing their four ship UK Dreadnought-class SSBN to replace the Vanguard-class submarines as they approach end of life. Both nations built on previous decades of partnership under the Polaris Sales Agreement and the Mutual Defense Agreement to design and develop a Common Missile Compartment (CMC) that will support the Trident II D5/D5LE/D5LE2 weapons system while reducing costs and logistical overhead through commonality.

SSP, in close collaboration with Program Executive Office Strategic (PEO-SSBN) and their UK counterparts, is overseeing the execution of the Common Missile Compartment (CMC) construction and associated installation into their respective Columbia-class and Dreadnought-class submarines. This effort forms the foundation to provide the shipboard systems necessary to support the safety, security, and protection of the D5 missiles and their readiness to launch on order. Throughout the 2020s, SSP will lead the efforts to build the next generation of flight systems that will provide both the missile and reentry systems necessary to demonstrate a highly capable, reliable, flexible, agile, resilient, survivable, and lethal nuclear weapon system that continues to provide SBSN 2084, promoting world stability and deterrence of Strategic Conflict.

The recently introduced Trident II D5LE weapon system will provide the foundation for U.S. SBSN and UK CASD flight systems through the 2040s, with the final D5LE missile scheduled to be retired in 2049. Recognizing the gradual reduction in D5LE inventory through test flights and routine aging of critical safety components, SSP must provide the nation with a modified flight system, designated the Trident II D5LE2 missile. The D5LE2 missile will be designed to leverage the current stockpile warheads and reentry bodies of the W76/W88 and Mk4/Mk5 families while also incorporating the new W93/Mk7 warhead and



DIRECTOR'S MISSION PRIORITIES CONTINUED

reentry body assembly. This will reduce stockpile risks and provide broadened targeting options to U.S. Strategic Command.

The first COLUMBIA will execute her Demonstrated Shakedown and Operations (DASO) for weapons system certification in 2028 using the D5LE system and embark on the first Columbia-class alert patrol in FY31. Columbia-class Hulls 1-8 will leverage the proven Trident II D5LE system, allowing SSP to introduce the new D5LE2 weapon system on a Columbia-class platform that will have been proven for a decade at the point of D5LE2 introduction on Hull 9. Through the 2040s, SSP will then help oversee the commissioning of the final Columbia-class SSBNs with the CMC and D5LE2 system, while backfitting Hulls 1-8 during routine maintenance periods executed through 2049.

Investment in research and development of new technologies for D5LE2 is essential to achieve this transition while meeting the requirements of the Columbia-class program. Investment will need to continue throughout the 2020s to inform the milestones of System Requirements Review in 2025, Preliminary Design Review in 2028, and the Critical Design Review in 2032. Low-Rate Initial Production (LRIP) will commence in 2034 to enable both a buildup of the production industrial base as well as to provide test bodies to execute a series of land-based pad testing from Cape Canaveral culminating in an at-sea flight testing from an SSBN in 2036. This gradual buildup of production capability, simultaneously executed with D5LE2 flight testing, will support the inventory requirements of full boat loadouts starting in 2039 without having to invest in excess production capacity. This will avoid the waste of resources in the long term.

The Reentry Systems team at SSP will complement the Missile Branch's efforts through the 2020s and 2030s to build more capability and resilience into the Navy's stockpile of nuclear weapons. While maintaining surveillance and oversight of the W76/W88 families of warheads, SSP will lead efforts in conjunction with the National Nuclear Security Administration within the Department of Energy under the interagency Nuclear Weapons Life Cycle process to design, develop, and produce the W93/Mk7 warhead and reentry system as well as the Next Nuclear Warhead (NNW) to life extend or replace the W88-0/Mk5 ALT 370 system.

Ultimately, all of these efforts are intended to meet the dynamic and uncertain demands of evolving future threats through 2084. SSP will leverage the existing margin with D5LE to support current and future warheads (W76/W88/W93) until 2039. At that time, SSP will introduce D5LE2 which will utilize state of the art materials and avionics architectures to unlock additional capabilities required to support the payloads of the future.





CPS

While the Nuclear Triad continues to provide the most effective deterrent against Strategic Conflict, the nation recognizes the need for other strategic deterrent capabilities to address gaps in the full spectrum of deterrence. Both China and Russia are rapidly developing robust hypersonic weapon capabilities and U.S. national leadership is committed to pacing this threat by developing American non-nuclear hypersonic capability. The Department of Defense determined the best approach to deliver a hypersonic weapons capability that would provide multiple threat vectors against any potential enemy was a joint program between the Departments of Army and Navy. The Navy selected SSP to oversee this fast-paced mid-tier acquisition program, designated Conventional Prompt Strike (CPS), based on decades of delivering premier underwater launched nuclear delivery systems.

SSP, in close collaboration with the Army, is overseeing the execution of the CPS program to deliver fielded Army hypersonic weapon system capability, followed by surfaced launched CPS capability on ZUMWALT (DDG-1000) along with expanded Army capability. Subsequently an underwater launched hypersonic weapon capability will be delivered to the Submarine Force on the Virginia-class. To achieve this critical strategic priority, SSP must work closely with the broader Navy team and industry partners to build new supporting infrastructure and expand the industrial base to achieve production and sustainment capacities as well as cost points that will deliver a long-term, highly capable non-nuclear hypersonic strategic weapon system to the warfighter. The CPS Program will design, build, and sustain an evolving multi-service hypersonic capability at the speed of relevance for the warfighter by aligning national resources, strengthening partnerships, and fostering an agility-centered culture.

DIRECTOR'S MISSION PRIORITIES CONTINUED

Safeguard the U.S. and UK relationship through the PSA and MDA

Fundamental to U.S. strategic and extended deterrence policies is the special relationship between the U.S. and the UK through the Polaris Sales Agreement (PSA) and the Mutual Defense Agreement (MDA). The PSA provides the legal mechanism through which the two countries' governments cooperate on weapon systems capabilities while reducing combined defense costs and protecting the sovereign independent responsibilities of each state for their own nuclear materials and explosive packages.

The CMC represents the newest example of this partnership, designing, developing, and producing common shipboard infrastructure which improves the ease of comingling the D5 missile inventory and sets the stage to improve maintenance system consistency across the two fleets. SSP will support PEO SSBN throughout the 2020s as they oversee U.S. industry delivery of CMC components to both Navy's for installation into their new SSBNs.

The UK continues to work closely with the United States on shipboard systems improvements for both the Columbia and Dreadnought-classes. SSP intends, pending Congressional review, to carry out the sale of the Trident II D5LE2 SWS to the UK. The SWS would be back fitted on the Dreadnought-class once approved for fleet introduction. The development of the Mk7 reentry system to support the U.S. W93 warhead program is also critical to the development of a next generation nuclear warhead and reentry system for the UK. While the UK is solely responsible for development of their sovereign nuclear package for their next generation warhead, they are critically dependent upon U.S. development of the reentry system under the PSA and MDA.

SSP will continue to nurture and safeguard this special and foundational relationship with the UK under the PSA and MDA to sustain the SBSD and CASD of today while modernizing and building flexibility, adaptability, and resiliency into SBSD 2084 and the UK's future Continuous At Sea Deterrence.



DIRECTOR'S KEY ENABLERS

“We must realize that no arsenal or no weapon in the arsenals of the world is so formidable as the will and moral courage of free men and women. It is a weapon our adversaries in today's world do not have, it is a weapon that we as Americans do have...as for the enemies of freedom, those who are potential adversaries, they will be reminded that PEACE IS THE HIGHEST ASPIRATION OF THE AMERICAN PEOPLE, we will negotiate for it, sacrifice for it, we will not surrender for it, now or ever.”

President Ronald Reagan



People

SBSD 2084 represents a pillar of U.S. foreign policy and the National Security Strategy for the remainder of the 21st century. The U.S. National Security Strategy and associated policy documents task the Navy through Naval Sea Systems Command and SSP to deliver an SLBM capability to the Nuclear Triad. The Secretary of the Navy and Chief of Naval Operations task the Director, SSP:

1. to oversee cradle to grave management of the SWS and associated supporting systems
2. to provide the warfighter a highly capable, reliable, resilient, flexible, survivable, and lethal warfighting option
3. to present a credible deterrent to the adversaries of the U.S. and her allies.

However, this world-class weapon system does not exist or operate without the key enabler of the people. The military, government, and industry professionals represent the catalyst for the realization of this SWS. People design, develop, produce, sustain, protect, operate, and decommission every aspect of this program.

SSP will be the premier employer for dedicated professionals who want to support the SBSD 2084 mission. SSP will strive to create a work environment and culture that fosters individual and team dedication, broad collaboration, and excellence across the enterprise. This will be accomplished through a concerted effort to build the competence, character, and relationships across our government and industry workforce.

DIRECTOR'S KEY ENABLERS CONTINUED

Industry

Submariners and Nuclear Weapons experts will maintain, operate, design, develop, produce, and protect the SBSD nuclear weapons and associated systems. Government civilians will lead and oversee efforts to manage the SBSD systems cradle to grave. However, industry represents the critical piece of the puzzle that combines the intellectual firepower with the production capacity of the nation to design, develop, produce and test the weapons and supporting subsystems that Navy Sailors take to sea on alert patrol and highly classified missions. SBSD 2084 is inextricably linked with industry's ability to help the Navy realize it.

SSP will maintain authority and oversight of long term, sustained efforts by industry partners to deliver SBSD 2084 to the nation. The longstanding model of government-industry partnership will find new ways to maximize return on investment of valuable taxpayer dollars to yield the capability our nation's future depends upon. Industry will balance corporate interests with patriotic commitments to provide the warfighter what is necessary to preserve U.S. security.

Infrastructure

Submarine Launched Ballistic Missiles, the warheads they carry, hypersonic weapons, and the people who operate the weapon systems on behalf of the American people are the result of a massive effort across the nation culminating in a deployable system operated by Sailors on the waterfront. A sprawling infrastructure across the U.S. supports the cradle to grave care and management of the Navy Nuclear Weapons Program, and the developing CPS. This infrastructure provides the space, tools, technologies, testing resources, safety environments, and security systems to design, develop, produce, maintain, test, protect, operate, and decommission all aspects of the SBSD.

SSP will work closely with other Echelon 1 and 2 decision makers and resource sponsors as well as with industry partners to deliver an efficient, resilient, and reliable infrastructure network across the enterprise, to include Field Activities, supporting contractors, and logistics chains. The Navy Nuclear Deterrence Mission Infrastructure Group (NNDMIG) will act as the primary deliberative body to inform decision makers in the prioritization of NNDM infrastructure investments.



DIRECTOR'S LINES OF EFFORT

There are five key Director's Lines of Effort to promote SBSB 2084:

1. Naval Nuclear Weapons Program/Strategic Systems Program 2084 Organizational Design (LOE 1)
2. Premier SBSB 2084 Workforce (LOE 2)
3. Industry and Infrastructure 2084 (LOE 3)
4. Protect the Program 2084 (LOE 4)
5. Warfighter 2084 (LOE 5)

Naval Nuclear Weapons Program/Strategic Systems Program 2084 Organizational Design (LOE 1)

Based on a comprehensive review of Department of Defense Nuclear Weapons Roles and Responsibilities approximately a decade ago, SSP's historical roles and responsibilities as well as authorities have evolved and continue to evolve. Effective August 2019, the Chief of Naval Operations (CNO) elevated DIRSSP to assume Echelon 1 responsibilities as Director, Naval Nuclear Weapons Program (CNO N00NW), the Navy's Technical Authority for Navy Nuclear Weapon Systems and Support Systems as well as the Regulator for the entire NNDM.

The expansion of both responsibility and authority requires a shift in cultural mindset as well as organizational re-design to ensure execution of the Director, Naval Nuclear Weapons Program (NNWP) duties and responsibilities. Delineation of Echelon II DIRSSP roles and responsibilities, separate and distinct from while complementary to Echelon I Director, NNWP responsibilities, is necessary to ensure clarity and alignment across staffs at both the Echelon I and Echelon II levels, both internal to SSP and external with sister commands and agencies.

LOE 1 will deliver the NNWP/SSP organizational design and culture that fosters clarity of roles, responsibilities, and authorities that yield a premier **Naval Nuclear Weapons Program/Strategic Systems Program 2084**.

Define Roles/Responsibilities of DIRSSP and Director, NNWP (OBJ 1-1)

Define roles and responsibilities clarifying the multi-hatted and echelon nature of SSP

Foster an Echelon I 3-Star Command Cultural Mindset (OBJ 1-2)

Build on the historically strong and unique SSP culture to set the Navy's standard for the premier NNWP

Design SSP Organizational Structure to Support SBSB 2084 (OBJ 1-3)

Rethink and re-design, where appropriate, the organizational structure of SSP to support SBSB 2084

Utilize Emergency Preparedness to Bolster Organizational Performance and Resilience (OBJ 1-4)

Rapidly grow and exercise enterprise emergency preparedness for "worst case" scenarios to improve the foundational corporate knowledge and decision making of the organization on a day to day basis while fostering relationships of trust with interagency partners as well as local and state officials who may have to respond together with SSP during a crisis scenario

DIRECTOR'S LINES OF EFFORT CONTINUED

Premier SBSB 2084 Workforce (LOE 2)

SSP will be the premier employer for dedicated professionals desiring to serve their nation in support of SBSB 2084. The SSP team will strive for perfection in the creation of a work environment and culture fostering individual and team dedication, broad collaboration, and excellence across the enterprise. This will be accomplished through a concerted effort to build the competence, character, and relationships of our workforce in the government and across industry.

The leaders of SSP will select, develop, mentor, retain, and advance the talent, leveraging the SSP Human Capital Operating Plan (HCOP), which will yield the Premier SBSB 2084 Workforce.

LOE 2 will deliver a proud, efficient, and high performing **Premier SBSB 2084 Workforce** team composed of dedicated individuals collaborating together to set the Navy standard for technical and programmatic excellence.

Provide the Tools to Empower our People (OBJ 2-1)

Deliver modern and capable tools that improve the ability of our people to execute their mission while empowering them to think critically and innovatively regarding their support of the overall mission

Promote Technical and Programmatic Excellence, Leadership Development, and a Learning Culture (OBJ 2-2)

Establish SSP Academy for a comprehensive curricula for computer based and in person training, self-paced education, and effective professional development to promote technical and programmatic knowledge, and the "why" of SSP through a shared corporate understanding of the mission and weapon systems design to achieve the mission. Reinvigorate leadership development programs. Promote a learning culture and organization that ensures every goal, project, duty, or assignment is an opportunity to improve, innovate, or develop our program and our workforce.

Realize an EDO/LDO Career Path Fostering Professional Development and Selectivity in Critical Leadership Positions (OBJ 2-3)

Define the critical skill sets, develop career paths, and work closely with Navy Personnel to provide superior Naval leadership to both the operational and acquisition/programmatic communities

Realize Career Tracks for SSP Critical NNDM Specialties to Develop Premier SBSB 2084 Workforce (OBJ 2-4)

Leverage the Human Capital Operating Plan (HCOP) to identify all Critical NNDM Specialties and Subject Matter Expertise needed to establish clearly defined development milestones correlating with opportunities within the enterprise to balance expertise with broader understanding and experiences, enhancing diversity in middle and senior level leadership

Deliver a Knowledge Management System for SBSB 2084 (OBJ 2-5)

Fundamental to building and sustaining the Premier SBSB 2084 Workforce is the access to knowledge and the free exchange thereof. SSP will deliver a KM system that organizes technical, programmatic and policy documents fostering clarity and team alignment to support SBSB 2084

Build the Submarine SWS Military Community 2084 (OBJ 2-6)

Support and influence the Personnel and Submarine Community's efforts to recruit, train, educate, professionally develop, and retain the SWS military personnel to support robust and resilient execution of SBSB 2084

DIRECTOR'S LINES OF EFFORT CONTINUED

Industry and Infrastructure 2084 (LOE 3)

Prioritize Investment in NNDM Infrastructure Sustainment and Development (OBJ 3-1)

Lead Navy efforts through the Navy Nuclear Deterrence Mission Infrastructure Group (NNDMIG) to help allocate resources and leverage other funding streams to prioritized NNDM infrastructure projects

Build Shared Understanding of Aging/Out of Commission/Reduced Status Infrastructure at all Field Activities (OBJ 3-2)

Bring attention through transparency to infrastructure challenges at the Field Activities which are hindering NNDM enterprise operations or reducing NNDM mission resiliency

Achieve a More Agile and Responsive Relationship with Industry without Increased Costs (OBJ 3-3)

While leveraging the longstanding relationships with industry, SSP will find ways to free resources and partner with industry to address the challenges of the future in an agile and responsive manner

Improve Efficiency of Contracting with Industry Partners (OBJ 3-4)

Refine contracting processes and management and deploy enhanced contracting systems to enable efficient and effective contracting for a best value while strengthening the partnership with industry

Provide Visibility and Team Alignment on Strategic Investments into SWS, NWS and CPS Infrastructure (OBJ 3-5)

Develop tools that bring visibility and transparency to leadership strategic discussions on military construction and programmatic investment into infrastructure



DIRECTOR'S LINES OF EFFORT CONTINUED

Protect the Program 2084 (LOE 4)

Establish a Secure Development Environment (OBJ 4-1)

Achieve a hardware and software development environment secure against modern and future threats through the "Go-Dark 30" plan to deliver this critical component of program protection incrementally using policy and technology on-ramps through campaign completion in 2030

Deliver Technical Solutions to Enhance SWS Cybersecurity (OBJ 4-2)

While executing the intent of the Risk Management Framework through a tiered and prioritized approach, SSP will redirect resources and complement branch investments to deliver technical solutions that enhance cybersecurity and resiliency

Adapt Nuclear Weapons Surety (NWS) Design for Evolving Threats (OBJ 4-3)

While protecting the tremendous gains of the past decade in NWS, SSP will rethink NWS in the face of modern and future threats to address gaps in safety and security presenting new vulnerabilities to the Navy's Nuclear Weapons

Define, Develop, and Realize a Resilient Program Framework (OBJ 4-4)

Shape SSP 2084 to be a resilient program that responds to changes in the environment with agility and innovation while simultaneously protecting program secrets and systems that deliver SBSD 2084

DIRECTOR'S LINES OF EFFORT CONTINUED

Warfighter 2084 (LOE 5)

Unlock Reserve Capacity in the Weapon and Support Systems (OBJ 5-1)

Work closely with STRATCOM and the warfighter to direct efforts and resources to leverage reserve capacity in today's system to provide more options to the warfighter today and to inform weapon system designs of the future

Deliver Columbia-class Hull 1 on time with Fully Ready SWS (OBJ 5-2)

Work closely with NAVSEA and industry to ensure an on-time transition to the Columbia-class SSBN

Complete Transition to D5LE, W88-0/Mk 5 ALT 370 (OBJ 5-3)

Execute existing programs of record to finish conversion of the missile inventory to D5 Life Extension, supporting OHIO to end of life and COLUMBIA through Hull 8, and to maintain reliability, accuracy and safety of the Navy's Nuclear Weapons stockpile

Complete SSIs through INC 15 (OBJ 5-4)

Finish upgrades of all Ohio-class SSBNs through SSI Inc 15, providing the baseline for COLUMBIA and for all future weapon system improvements through the Shipboard Modernization Program

Complete Transition to Shipboard Modernization Program (OBJ 5-5)

Finalize the design of and supporting processes to SSP's new spiral approach Shipboard Modernization Program that will form the basis of all future weapon system upgrades on both OHIO and COLUMBIA

Deliver Trident II D5LE2 (OBJ 5-6)

Design, develop, test, produce and deliver the next generation Submarine Launched Ballistic Missile Trident II D5LE2 to support strategic load out of COLUMBIA Hull 9 in 2039 with sufficient inventory to complete the load out of all COLUMBIA's by 2049

Deliver W93/Mk7 and Next Nuclear Warhead (NNW) (OBJ 5-7)

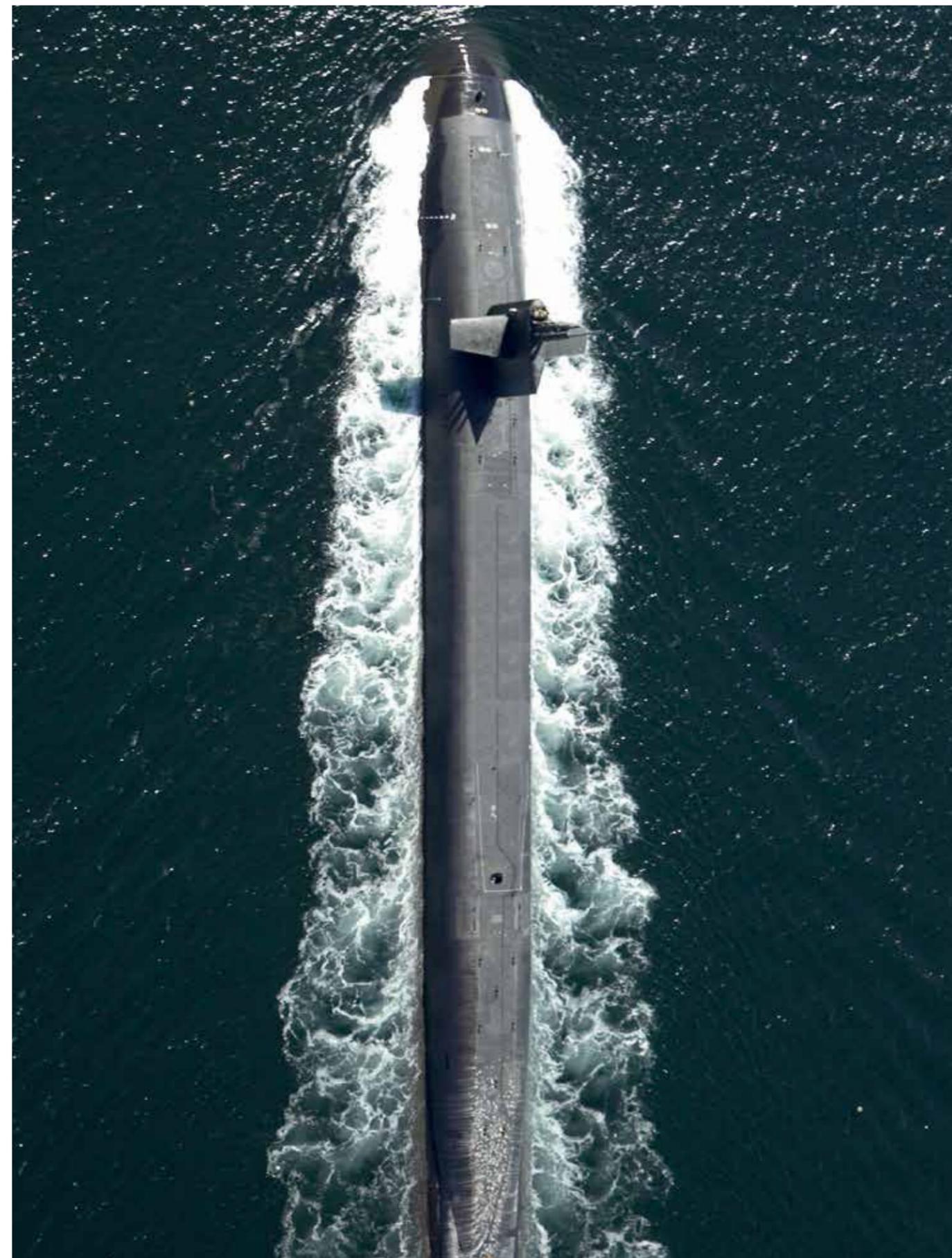
Work closely with the NNSA and supporting National Laboratories to reduce risk within the nation's Nuclear Weapons stockpile through the design, development, production and delivery of W93/Mk7 and the NNW to extend or replace the W88-0/Mk5 ALT 370

Deliver Conventional Prompt Strike (OBJ 5-8)

Coordinate with the Army to deliver an intermediate range non-nuclear hypersonic weapon capability to the Army by 2023, to the Surface Navy by 2025, and to the Submarine Force by 2028

Instill Warrior's Pride in the Sailors, Marines, and Coast Guardsmen of SBS 2084 (OBJ 5-9)

Collaborate with Submarine Force and Marine Corps leadership to build esprit de corps and instill a Warrior's Pride in the men and women who quietly and sacrificially serve their fellow citizenry while delivering SBS 2084 day in day out, month after month, year after year, decade upon decade



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