The United States Navy continues to be at the front line of our nation’s efforts to deter aggression and protect our national security. Operating forward across the globe, we must be prepared for any contingency.

The fiscal challenges we face have become a way of life, as is keeping pace with the rapidly changing landscape across the globe. Our institutional ability to thrive in this environment relies heavily on being both agile and flexible enough to stay ahead of our adversaries. We must design and build our capabilities and capacity to balance the rapidly evolving technology of tomorrow, with the readiness and modernization needs of today.

Today’s battle space is becoming increasingly complicated. Our ability to secure the information and data we create and use every day, from our foundational systems to those that operate our ships, platforms and weapons, is absolutely critical. Increasing cyber threats necessitate significant cultural and organizational changes. Cybersecurity is an “All Hands on Deck” effort that has become our fourth Mission Priority in this second edition of the Strategic Business Plan.

The NAVSEA Strategic Business Plan now contains the following four Mission Priorities, each of which are supported by Focus Areas and Objectives.

The Mission Priorities are:
- “It’s All About the Ships”
- Workforce Excellence AND Judiciousness
- Culture of Affordability
- Cybersecurity

It is imperative all of us understand our roles in this plan, how our everyday work contributes to our future success, and how we work together towards achieving our vision. We must remember the success of the Navy starts and ends with the ships we service and produce.

The power of NAVSEA starts and ends with our people.
STRATEGIC FRAMEWORK

MISSION
We design, build, deliver and maintain ships and systems on time and on cost for the United States Navy.

VISION
We are the nation’s team accountable for the health of the Navy’s ships. We purposefully operate to ensure the U.S. Navy can protect and defend America. We must be supported by a modern, efficient industrial base. We must be a world-class employer of choice that inspires innovation. We must set the value-added standard for acquisition, engineering, business and maintenance.

Mission Priorities

Focus Areas
- IT’S ALL ABOUT THE SHIPS
  - Improving Ship Maintenance
  - Reinvigorate Shipboard Preventive Maintenance
  - Warfighting System Commonality
- WORKFORCE EXCELLENCE AND JUDICIOUSNESS
  - Accelerate Knowledge Transfer
  - Modern Learning/Knowledge Management
  - Exploit the “Knee in the Curve”
- CULTURE OF AFFORDABILITY
  - Challenge Every Requirement
  - Maximize Commonality Across Platforms
- CYBERSECURITY
  - Culture of Cybersecurity Awareness and Compliance
  - Integration of Cybersecurity in our Products
  - Certification, Assessment, and Authorization

People and Teamwork
- Innovation
- Contracting
- Metrics
- Vital Standards
  - Challenge Where Necessary
  - Defend Your Thinking
- Quality
  - Ethics & Integrity
  - Accountability & Compliance
- Innovation & Learning
  - Safety
  - Speed, Agility, Flexibility

Key Enablers
- Values
The Navy projects power through the ships we design and procure. Every day, we must care for the ships so they can operate forward and ultimately win the nation’s wars.

This Mission Priority has three Focus Areas:

- Improving Ship Maintenance
- Reinvigorate Shipboard Maintenance
- Warfighting System Commonality
“It’s All About the Ships”

Improving Ship Maintenance

NAVSEA must provide readiness to the Fleet for ships and Sailors to perform their warfighting mission (Warfighting First), anywhere in the world (Operate Forward), when needed (Be Ready). Public and private maintenance activities directly support readiness by maintaining and modernizing the Navy’s ships.

As the managing activity for the Navy’s maintenance needs, NAVSEA must challenge the status quo by listening to the workforce and removing barriers that are stopping or inhibiting the flow of work. We must consider creative, responsive and non-conventional approaches to our work, which provide predictable execution of maintenance availabilities.

**Focus Area Objectives:**

- Improve and streamline process compliance to reduce cycle times, increase the responsiveness of ship repair efforts and stabilize schedule performance.
- Improve work flow through an innovative and engaged workforce.
- Leverage the Navy Shipbuilding Research Program (NSRP) and technical capabilities of the Warfare Centers to insert new technologies into ship maintenance.
- Develop and refine Class Maintenance and Modernization Plans for all surface ships to maximize consistency in application of resources to meet expected outcomes and Fleet priorities.
- Develop, collect and analyze productivity results in order to optimize the warfighting capability, fleet operational availability and expected service life of the Navy’s ships.
- Revitalize the workforce by offering challenging work and appropriate training to create trade and technical excellence.
- Balance Naval Shipyard infrastructure needs with fiscal constraints to sustain the Fleet through the middle of this century and beyond.
Reinvigorate Shipboard Maintenance

Shipboard Preventive Maintenance is critical to ensure ships remain operational to and beyond their expected service life. Success hinges on the continual development of our Sailors into the very best operators and maintainers.

In port or underway, the challenge is to fully align requirements, policies, skills, tools, and execution to optimize Sailor maintenance work time. Doing so will improve technical expertise, equipment reliability, and provide capability and capacity for repairs at any time.

We must optimize Sailor maintenance work time and minimize administrative tasks to improve technical expertise while increasing their capacity. Doing so improves equipment reliability, helps achieve ship life expectancy, and provides capacity for repairs needed when deployed.

**Focus Area Objectives:**

- Analyze the Maintenance and Material Management process requirements (including logistics support) from Fleet and maintenance organizations.
- Align Planned Maintenance System policies and Fleet execution.
- Improve Maintenance Requirement Cards to reduce cumbersome procedural steps.
- Engage Sailors in the improvement of Planned Maintenance System Tools.
- Collect and analyze information to measure mutual performance, progress and results.
- Provide maintenance training opportunities to Sailors at maintenance activities.
- Review and validate that Engineering Operational Sequencing System (EOSS) procedures are in alignment with relevant Technical Manuals and fully vetted planned maintenance system maintenance requirement cards.
“It’s All About the Ships”

Warfighting System Commonality

Warfighting performance is threatened by the cost of developing and fielding capabilities. Fleet, acquisition, and lifecycle costs are increased by creating multiple configurations for similar capabilities across different ships. Also increased are the costs to operate and equip ships, and train crews.

NAVSEA is committed to achieving warfighting system commonality within and across families of ships. To drive a culture of improved affordability, integration, sustainment and performance, we must leverage common hardware, software, readiness, training, and maintenance solutions. A more flexible, common and open model can meet changing threats, reduce development risk, and limit ship lifecycle cost growth.

Common training and maintenance, as well as shared services, will benefit the Fleet. Additionally, Foreign Military Sales will benefit from enhanced coalition interoperability and lower unit costs for key weapon systems.

Focus Area Objectives:

• Promote common warfighting system design and integration solutions. Facilitate program decisions to achieve appropriate performance enhancements. Continue to exert downward pressure on the full lifecycle cost of ship development, procurement, building, operation and disposal.

• Align ship design engineers, ship building, and combat system program offices for the selection of warfighting system components. When evaluating warfighting solutions, Government Furnished Equipment programs of record must be considered first to limit development of unique equipment solutions. If the Contractor Furnished Equipment is better able to meet performance and lifecycle cost objectives only then should it be selected.

• Standardize hardware and software solutions with common components across combat systems to reduce cost and shipboard hardware footprint, provide common training and maintenance, and take advantage of a shared secure network environment.
NAVSEA personnel design, build, deliver and maintain the ships and systems of the greatest Navy in the world. We exemplify technical and business excellence in a variety of skill areas. We balance capability, risk and cost by being judicious about spending the money entrusted to our care.

Reductions in budgets require an increased focus on stewardship. Being judicious means treating the money as if it were our own.

This mission priority has three focus areas:

• **Accelerate Knowledge Transfer**
• **Modern Learning/Knowledge Management**
• **Exploit the “Knee in the Curve”**
Accelerate Knowledge Transfer

We must enable our workforce through improved policy, processes and tools. The very experienced and specialized workforce we have today must not be taken for granted. We must define and implement ways of preserving their knowledge. We must then seek innovative ways to accelerate the transfer of knowledge continuously and throughout the workforce now and in the future.

We will define and implement specific ways to create, capture, organize, access and share key pieces of information within and across Competency Domains. We will connect entry-, journey-, expert-, and executive-level employees who need similar knowledge, skills, abilities and behaviors to achieve successful job performance within the NAVSEA competency-enabled organization.

**Focus Area Objectives:**

- **Provide individual employees with experiences and/or learning opportunities to increase their expertise, through the transfer of two key types of knowledge:**
  - **Explicit** knowledge is visible, definable and objective and is typically found in documents, files, policies, procedures, etc.
  - **Tacit** knowledge can be formal or informal, is context-rich, subjective, and experiential and is resident in the organization’s culture.

- **Use the NAVSEA Competency Domain construct to encourage interaction and improve knowledge-sharing between employees at all experience levels.**

- **Make use of available federal programs such as Phased Retirement to enhance knowledge transfer of career expertise.**

- **Assess the effectiveness of actions in transferring knowledge through the use of the Enterprise Talent Management Dashboard.**
Modern Learning/ Knowledge Management

NAVSEA has one of the most diverse product and services sets in the world. We employ people with a wide variety of trade, technical, scientific, business and management skills. We must implement strategies and approaches that apply to and support the learning and development of our workforce – from on-boarding to retirement.

NAVSEA’s competency leaders and human resources organizations will recruit and retain the talent required to ensure mission success. This collaboration will ensure education, training and skills developed for the workforce match to work requirements.

Focus Area Objectives:

• Provide individual-focused learning and development opportunities within an overall career management framework supportive of NAVSEA’s mission priorities.

• Increase mentoring and coaching by experienced personnel (including Flag Officers, and Senior Executive Service members) leveraging the relationships of the Develop and Retain Integrated Business Operations Team.

• Leverage the Commander’s Executive Fellows Program (CEFP), Journey Level Leadership (JLL) and Next Generation leadership programs to promote and instill leadership competencies to ensure NAVSEA’s leadership focus on raising individual and organizational collective performance.

• Provide a variety of mechanisms for employees to share their knowledge and collaborate with others.

• Facilitate collaboration on programs, products, projects, or services.

• Recognize those who promote collaboration and share knowledge.

• Stand up one or more interactive, cross-organizational teams to build the structure and early content of a NAVSEA knowledge repository.

• Leverage existing apprentice programs and skill strengthening opportunities for workers.
Exploit the “Knee in the Curve”

Judiciousness requires we acknowledge constraints and exploit the “Knee in the Curve” of performance versus operational value versus cost. The “Knee in the Curve” is the point where the cost is no longer worth the expected performance benefit.

When determining best operational value, it is important to consider the severity and consequence of vulnerabilities and risks as well as the probability of their occurrence. Judicious application of this concept to NAVSEA efforts must be the constant underpinning of our analyses.

By adopting a comprehensive view of system performance and potential tradeoffs, rather than assessing each technical and business performance parameter in isolation, we will ensure NAVSEA continues to design, build, deliver, and maintain operationally relevant ships and systems within resource constraints.

Focus Area Objectives:

- Bring focus and attention to “Knee in the Curve” considerations by reaffirming and establishing NAVSEA leads at the system and mission levels.
- Employ “Knee in the Curve” principles when challenging requirements, specifically during Program of Record formulation, Business and Modernization planning, and In-Service maintenance.
- Improve relationships with OPNAV and the Fleet to ensure results and findings are included in their decision making processes.
- Influence the contents of NAVSEA, DoN and DoD policies and instructions to ensure “Knee in the Curve” considerations are part of the guidance on how decisions are made.
Warfighting performance is threatened by unsustainable and increasing costs. As we make decisions, we must consider the warfighter by challenging those requirements where costs can be saved by embracing the Culture of Affordability.

This mission priority has two focus areas:

- **Challenge Every Requirement**
- **Maximize Commonality Across Platforms**
Culture of Affordability

The goal of challenging every requirement is to establish a culture of affordability without compromising performance and safety. The process drives down costs and unnecessary variation throughout the life cycle (i.e., requirements determination, analysis of alternatives, design, construction, test, certification, operations, maintenance, modernization and disposal). It applies to all of our business areas and addresses requirements for contracting, compliance, oversight, and administrative support. The tactics include leveraging best practices, commonality and open systems architecture principles across our programs and throughout the Navy. We must be able to recognize the “Knee in the Curve”; the point at which return on investment is optimal and additional efforts can no longer provide sufficient benefits.

Focus Area Objectives:

- Identify margins above operational need and use a systems approach to quantify costs to be removed through a change process.
- Deliver affordability options through design decision memoranda.
- Adjudicate process, requirement and specification changes and translate those into cost savings through modifications to specifications, standards, and policies.
- Engage with stakeholders to shape future ship and system characteristics and requirements to reduce cost.
- Design efficiencies into our business systems by constantly using our abilities to do whatever we do better every day. Seek out better business and compliance systems/processes and methods to solve problems and meet our collective mission.
Maximize Commonality Across Platforms

By implementing cross platform commonality, we can reduce the number of unique components and systems in inventory. Commonality can also increase the ability to incorporate and update new capabilities when considered as part of the lifecycle strategy. Through use of prescreened architectures, standard interfaces, specifications and parts lists, we will reduce program development time, risk, logistics footprint, testing, certification, maintenance, and training costs.

Focus Area Objectives:

- Expand commonality initiatives within NAVSEA, using our technical talent to maximize opportunities for cross platform commonality, and rapidly implement ongoing efforts.
- Review, revise, and/or develop policies and instructions requiring cross platform commonality where function is not compromised.
- Drive commonality into specifications and technical standards to reduce acquisition and lifecycle costs.
- Develop and implement common business practices and contract clauses to drive cross platform commonality.
Robust IT systems hosted in Cyberspace have generated unprecedented advances and improvements over the last two decades. Digital information created, stored and used every day represents the core of our nation’s security and defines success in tomorrow’s international conflicts. Cyber terrorists and adversaries challenge security systems with increased frequency and efficiency, directly threatening economic order. The United States Navy is increasingly dependent on cyberspace to communicate, store information and deliver essential services.

To maintain our competitive advantage, continued adaptation, deployment and leveraging of cyber-based solutions are necessary today and in the future. Information and tools used to design, procure, operate and maintain Navy ships on desks, in laboratories, at repair activities and in ships must be safeguarded. Cyberspace defenses protect, detect, characterize, counter, and mitigate unauthorized activity and vulnerabilities on NAVSEA information networks. They must equally support rapid innovation and the insertion of new IT based technologies and solutions to achieve even greater efficiencies and advantage.

The direction and means of the next threat is unknown. The best solution will have to be evolutionary and adaptive; blending technology, processes and responsive people to stay ahead of the threat.

We exist under a continuous state of cyber-attack. Our goal is to ensure both our shore networks and shipboard systems will withstand these attacks, or recover quickly when failures occur.

This Mission Priority has three focus areas:

• **Culture of Cybersecurity Awareness and Compliance**

• **Integration of Cybersecurity in our Products**

• **Certification, Assessment, and Authorization**
Culture of Cybersecurity Awareness and Compliance

People are the critical element of Cybersecurity; both as defenders and as threats. Meeting this challenge must start with understanding the need for Cybersecurity in all work performed by us and/or by our industry partners to develop and deliver the right mission capability for our ships and systems.

Focus Area Objectives:

• Foster a culture of cyber-awareness and compliance for all employees (Civilian, Military, and Contractor) throughout the NAVSEA enterprise.

• Understand the threat including our vulnerabilities and cyber-attack effects.

• Openly address communication and training challenges (e.g., security clearances and access to secure networks), to understand the impacts of Cybersecurity failures and implement preventive and corrective actions.

• Establish clear responsibility for Cybersecurity requirements for NAVSEA contractors. In addition, ensure contracted support provides properly qualified and certified personnel.

• Ensure the appropriate NAVSEA personnel receive the training for and attain the needed Cybersecurity and Information Assurance Certification. Further, ensure that personnel IT/security information access facilitates personal awareness of the consequences of their actions.

• Participate in developing and approving Cybersecurity specifications, standards and requirements through leadership in the IT/IA Technical Authority Board.
Processes for implementing Cybersecurity are needed to create consistency and to allow for rapid changes and adaptations as new threats and methods are identified. Applicable DoD and DoN requirements and instructions will form the foundation of the controls. The resultant system will continually assess, check, probe and adapt to threats.

**Focus Area Objectives:**

- Participate with OPNAV, SPAWAR, NAVAIR, FLTcyBERCOM – 10TH Fleet, UScyBERCOM, USSTRATCOM and the Fleet to develop and implement a “Cybersafe” program drawing from our own SUBSAFE program, the Department of Energy’s Reactor Safety program, NAVAIR’s Airworthiness program, and the Department of Homeland Security’s Counter Terrorism program. It will need to flow throughout the command as a fundamental cultural change to the way work and products are delivered.

- Identify internal and external threats (e.g., social engineering, phishing) and develop controls and countermeasures for both ashore and afloat environments to prevent, anticipate or mitigate the damage.

- Develop Cybersecurity “Defense in Depth” by setting boundaries, intrusion detection and prevention solutions using hardware and software Cybersecurity solutions at key points in our systems. The application of these boundaries and solutions must be imbedded in all program lifecycle products.

- Inject Cybersecurity software and hardware configuration, development, and delivery control specifications into both ship systems and critical shore systems to counter threats.

- Establish standard approved Cybersecurity contract language (for prime as well as sub-contractors) to require the contractor to meet Cybersecurity requirements. Design new contract vehicles that adapt to quickly-emerging cyber threats.
Certification, Assessment, and Authorization

Certification, Assessment and Authorization represent the right hand side of the Systems Engineering “V”. The National Institute of Standards as well as the Department of Defense have defined each of these terms and addressed their applicability to the specific needs of Information Systems and Control Systems. New Department of Defense guidance on both Risk Management and Cybersecurity require the Authorizing Officer to be qualified to make the technical tradeoffs between Mission and Cybersecurity capabilities.

NAVSEA has Technical Authority for its systems. Internal to NAVSEA, the Chief Engineer (SEA 05) will be responsible for compliance in the areas of Control Systems & Platform IT (Navigation, Machinery, Weapons Control Systems), while the Command Information Officer (SEA 00I) will be responsible for NAVSEA Shore Systems (Defense Business Systems and National Security Systems). This alignment ensures focused Cybersecurity/IA reviews by experts in their respective fields.

Focus Area Objectives:

- Define the organizational structure which will set clear accountability across the NAVSEA command to protect and respond to cyber threats to include increased system commonality and cybersecurity in machinery and weapons systems.
- Define a clear and expeditious path for trial, approval and implementation of new IT based technologies within the “CYBERSAFE” program.
- Implement the Department of Defense Risk Management Framework for Information and Control System requirements and Implement National Institute of Standards and Technology and Department of Defense Cybersecurity policy.
- Expand Inspector General Inspections to the Echelon IV and V levels and improve enforcement of Inspector General Findings to ensure Cybersecurity compliance and accountability.
- Establish a Cybersecurity “Emergency Response Team” to assist NAVSEA activities.
TYING IT ALL TOGETHER

This second edition of our NAVSEA Strategic Business Plan continues to chart our course for the next four years. The priorities and strategies stated in this plan are the drivers and help to guide the choices we make and the products we deliver. We must remain vigilant in our technical and fiscal responsibilities, ensuring every dollar we receive, and every action we take, enables the Navy to answer the nation’s call. Each of us holds a piece of the key to success; and through our collective skills, abilities, knowledge and teamwork, we will be successful.

Each year, we will compare our progress to the plan, and ensure the desired outcomes and overall direction remains true.

It will take perseverance and innovation to achieve these goals. We, as individuals within this command, hold the Navy’s success or failure in our hands. We must be engaged, take action, and create the change we need.
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