



Space and Naval Warfare Systems Command

Strategic Vision

2018 – 2027

**Space and Naval Warfare
Systems Command**

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Rapidly Delivering Cyber Warfighting Capability From Seabed to Space

INFORMATION WARFARE

Seabed to Space

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C4ISR

SPAWAR Strategic Vision

2018 - 2027

INTRODUCTION

In 2015, we established the SPAWAR vision to Rapidly Deliver Cyber Warfighting Capability from Seabed to Space. This vision remains relevant today as our Navy and our nation are experiencing an unprecedented degree of competition in the maritime environment. This competition is highlighted in the ideological and military strategies of a growing number of countries and groups that challenge our core values and fundamental human rights. Some have made clear their intent to harm our nation and to increase their global influence. The Chief of Naval Operations (CNO) describes this increased global military competition in his treatise "The Future Navy." In this paper, he stresses that the pace of competition is increasing at an unprecedented rate. To ensure U.S. interests are protected around the world, the CNO offers two basic strategies:

"There is broad agreement that the current security environment is faster paced, more complex, and increasingly competitive. Time is an unforgiving characteristic of that environment – things are moving faster, including our competitors. More and more often you hear one word to describe the pace: exponential. In many ways, information technology is driving this. But the pace is quickening everywhere."

- Admiral John Richardson
Chief of Naval Operations
"The Future Navy"

"First, the nation needs a more powerful Navy, on the order of 350 ships, that includes a combination of manned and unmanned systems. Second, more platforms are necessary but not sufficient. The Navy must also incorporate new technologies and new operational concepts."

SPAWAR Vision:
Rapidly Deliver Cyber Warfighting Capability from Seabed to Space

SPAWAR has been at the center of incorporating advanced technologies that enable new operational concepts for decades. Out pacing our adversaries in the cyber, information warfare and space domains enable a competitive edge in all other warfighting domains. The proliferation of advanced technologies however, is making it harder and harder to stay ahead of the competition.

We must answer the call and outpace our adversaries in the delivery of innovative technologies and operational concepts at the ever-increasing speed of information. The advantage that information warfare brings to the fight, combined with the demand to continually increase the pace of technology delivery, is core to our Navy's ability to compete and win today and in the coming decades.



C. D. Becker

Rear Admiral Christian Becker,
Commander,
Space and Naval Warfare
Systems Command



Patrick Sullivan

Mr. Patrick Sullivan,
Executive Director,
Space and Naval Warfare
Systems Command

Guiding Principles

“A Design for Maintaining Maritime Superiority” provides the guidance and lines of effort necessary to achieve unity of purpose and success. We have aligned our focus to the Design document and ingrained the following guiding principles into our culture as a roadmap in our daily decision making:

Meet our commitments: To strengthen our naval power, we must focus on unsurpassed support to the fleet and our acquisition partners. We are a service organization; quality and responsiveness to those we serve showcase our value. Our reputation and relevance depend on our ability to say as we do and do as we say. From the execution of multimillion dollar shipboard installations to routine equipment sustainment, meeting our commitments engenders the trust of others and demonstrates our accountability to ourselves and each other.

Be the technical expert: The Navy is focused on achieving high velocity learning at every level. SPAWAR helps provide that learning. We display unmatched technical competence in all we do. We guard against atrophy; anything less than our best, less than excellence, is a threat to our national security. The capabilities we deliver allow America’s finest, deployed around the globe, to defend and preserve the ideals that define us as a nation. As the technical experts, our greatest challenge is often to make the complex simple. None of us are as smart as all of us; it’s our charge to integrate our skills and knowledge into the broader enterprise to deliver capabilities that are interoperable, tested and affordable.

Be trusted partners: While the Navy as a whole expands and strengthens our network of partners, SPAWAR also develops its relationships with supporting and supported organizations to include other agencies and services, and within academia and industry. We hold each other up, we hold each other accountable and we demonstrate ethics above reproach. We are bold and lean forward in our execution, transparent and clear about the risks we face, and timely and forthright in our communications from the deckplate to the fleet commanders. We are ever mindful of the impact of our actions on the broader organization’s mission, even beyond the boundaries of our own scope. Our decisions are based on the good of the whole. This demands vigilant leadership and a strong moral compass.

Develop our people and our organization: We must continue to strengthen our Navy and SPAWAR team. As the threats mount and technology evolves, so do the demands on our fleet and our workforce. We invest in our people and our organization to meet those demands. Our current fight requires all hands on deck. As leaders, we create an environment that promotes respect for each other, where all personnel – civilian, uniformed and industry partners – are valued contributors. Anything less is not acceptable. We are tasked with rapidly delivering information warfighting capability in all domains – this is a tall order on a good day. We monitor our constantly changing environment to predict how we should refine our organization and tactics to remain relevant and effective, and then act accordingly.

SPAWAR Mission:

We identify, develop, deliver and sustain information warfighting capabilities supporting naval, joint, coalition and other national missions.

Our SPAWAR vision is coupled with the mission we carry out day-to-day to identify, develop, deliver and sustain information warfare capabilities in support of naval, joint, coalition and other national missions. Both our vision and our mission are relevant to the entire SPAWAR enterprise, including SPAWAR Headquarters, our supported Program Executive Offices, the SPAWAR Systems Centers and the SPAWAR Space Field Activity. SPAWAR must continue to build a world class team that is focused on leveraging technology to equip our warfighters with systems that

enable them to fight and win in the complex information warfare domain. We must ensure our warfighters have the upper hand in every conflict. SPAWAR products must be secure, reliable, resilient and intuitive. They must be interoperable across the fleet and agile in addressing threats that are changing with unprecedented speed. The nature of the cyber environment requires that we pursue a unique and comprehensive approach to achieving capability and security. Our focus is to deliver a platform that paces evolving technology and threats while delivering unparalleled capability to the warfighter for years to come.

To further prioritize, distill and align our efforts, SPAWAR focuses on three strategic objectives that directly impact our ability to achieve our vision, accomplish our daily missions and provide premier support to the warfighter. Every member of our SPAWAR team contributes, directly or indirectly, to the accomplishment of these strategic objectives. It is this broad framework that keeps us on course as an organization while still promoting the innovation, agility and urgency necessary to pace current and future threats. By executing these objectives and our daily tasks in accordance with our guiding principles, we make certain SPAWAR effectively and efficiently delivers on its mission.

Guiding Principles

Meet Our Commitments

Say as we do and do as we say. Engender the trust of others by meeting our commitments and demonstrating our accountability to ourselves and each other.

Be the Technical Expert

Display unmatched technical competence. Integrate our skills and knowledge into the broader enterprise to deliver interoperable, tested and affordable capabilities.

Be Trusted Partners

Hold each other up, hold each other accountable, and demonstrate ethics above reproach. Be bold and lean forward with transparent, timely and forthright communication.

Develop Our People and Our Organization

Invest in our people and our organization to meet the demands on our fleet. Create an environment that promotes respect. Refine our organization and tactics to remain relevant and effective.

Strategic Objectives

ACCELERATE AND STREAMLINE DELIVERY

DRIVE CYBER RESILIENCY

OPTIMIZE OUR ORGANIZATION, OPERATIONS AND WORKFORCE

Strategic Objectives

Accelerate and Streamline Delivery

We maintain urgency in identifying and delivering information warfare capabilities for our fleet and shore infrastructure from seabed to space. This requires us to accelerate all of our internal processes: from identifying and maturing advanced technology to developing, delivering and sustaining systems that enable information superiority across all warfare areas. The Information Warfare Platform (IWP) is the focus of this effort and spans the afloat and ashore Navy to provide the necessary warfighting capability and lethality for our warfighters. Digitizing our Navy based on a sound and robust cloud-based architecture provides for rapid upgrades and installations to support current and secure applications. The IWP requires a modular and open design with interoperability, agility and resiliency built-in. Applications must be developed and delivered conforming to a required set of services and standards, and run on top of a fully abstracted hardware platform providing a common end-user experience for our Sailors. Building, deploying and sustaining the IWP increases the lethality of our Navy. Finally, we must accelerate and streamline our ability to access the unique advantages that space brings to the fight through engagement with the broader space community, leveraging commercial capabilities in space and embracing rapid deployment capabilities such as nanosatellites to derive tactical, operational and strategic advantage in information warfare.

Drive Cyber Resiliency

We are the technical leader for Navy cybersecurity and ensure standards and processes for integrating cyber resilience and interoperability into all Navy systems – across the lifecycle from systems development through sustainment. We drive implementation of cyber standards Navywide, creating a secure, defensible information domain. By managing cyber baselines, we improve fleet cyber readiness. We articulate the operational risk of cyber threats to fleet capabilities, enabling successful operational planning for a dynamic cyber threat environment.

Optimize Our Organization, Operations and Workforce

SPAWAR exists to support naval operations. Whether that support is direct, or through partner organizations, competencies or programs, we deliver effective and efficient services through the strength and development of our workforce. We review operations at all our commands and at all echelons for opportunities for improvement to ensure optimization. Our organizations are aligned to provide mutual support between Headquarters, the Program Executive Offices, System Centers and Field Activity to deliver information warfighting capabilities to the naval warfighter. Moreover, we are continuously working to make SPAWAR the best place to work in order to provide an environment where a balanced, trained and highly motivated workforce can excel.



SPAWAR Strategic Vision 2018 - 2027

Mission Statement: SPAWAR identifies, develops, delivers and sustains information warfighting capabilities supporting naval, joint, coalition and other national missions.

Meet Our
Commitments

Be the Technical
Expert

Be Trusted Partners

Develop Our People
and Our Organization

Strategic Objectives

ACCELERATE AND
STREAMLINE DELIVERY

Implement Information
Warfare Platform

Digitize Our Navy

Rapidly Prototype
and Transition

DRIVE CYBER RESILIENCY

Design in Resilience
and Interoperability

Implement Cyber Standards
Navywide

Enable Fleet Cyber Readiness

OPTIMIZE OUR ORGANIZATION,
OPERATIONS AND WORKFORCE

Deliver Effective and
Efficient Services

Develop and Strengthen
Our Workforce

Make SPAWAR the
Best Place to Work

Vision: Rapidly delivering cyber warfighting capability from seabed to space

We rapidly deliver transformational capabilities via integrated baselines and responsive information warfare modernization packages that enable maritime superiority, overwhelming combat capability, operational readiness and resiliency against cyber threats.

Implement Information Warfare Platform

We implement an IWP model to integrate individual command, control, communications, computers and intelligence (C4I) capabilities within a platform into a single baseline. The IWP will strengthen combat capabilities by aggregating, fusing and exposing data and services across mission areas to provide actionable knowledge to the warfighter. The IWP will provide for rapid capability development and updates, integration of machine learning and artificial intelligence to augment warfighter decision making and reduce complexity in a cyber contested environment.

Digitize Our Navy

We keep pace with industry and provide the warfighter with modernized, mobile and integrated capabilities. By leveraging commercial cloud computing, we optimize Navy data as a lethal, force multiplier by providing faster, secure access to data through robust IT management processes. We focus on end-user capability to ensure the warfighter has efficient, effective and mobile access to relevant data while enabling enterprise analytics and metrics to support continual modernization of services.

Rapidly Prototype and Transition

We create an environment to reduce barriers for delivering warfighting capability by rapidly identifying, prototyping, experimenting with and transitioning information warfare technologies. Through improved alignment with information warfare and space requirements, concepts and technology insertion opportunities, we build the right capabilities and focus on field-able prototypes. We embrace industry investments and resources to speed “street to fleet” capabilities.

We are the technical leader for information warfare, driving standards and processes to ensure delivery and sustainment of interoperable and cyber resilient fleet warfighting capabilities.

Design in Resilience & Interoperability

We establish processes, with key standards in place, to enable consistent design and acquisition of C4I, enterprise business and space systems that are interoperable and inherently cyber resilient. We provide information warfare capabilities for prioritized missions that are available regardless of communications, network or cyber conditions. We deliver common capability suites with appropriate training solutions to provide consistent, reliable and sustainable warfighting capabilities throughout the fleet.

Implement Cyber Standards Navywide

We ensure all warfighter tools and capabilities are effective and cyber secure through consistent and pervasive implementation of cybersecurity specifications and standards. By deploying cyber resilient platforms we support mission success in cyber contested environments. We use a cybersecurity dashboard to provide metrics to fleet and type commanders on progress in improving cybersecurity while correctly balancing operational and cybersecurity requirements. We ensure platform designs align with a holistic enterprise defense-in-depth architecture to improve resiliency and provide a consistent implementation of cybersecurity across platform types through standardized requirements and processes.

Enable Fleet Cyber Readiness

We deliver cyber baseline configurations by platform to ensure “as designed” is validated “as delivered” with documented deviation from Information Technology Technical Authority (IT/TA) specifications. We provide a validated “end to end” cyber compliant network to include hosted and connected, afloat and ashore systems. We reduce vulnerabilities in the fleet by ensuring the ship or shore installation receives a system in a state of cyber compliance. We ensure the warfighter has confidence in operating platforms and systems in a dynamic cyber environment.



Strengthening our network of partners, USS Carl Vinson (CVN 70), USS Wayne E. Meyer (DDG 108) and USS Lake Champlain (CG 57) operate with Japan Maritime Self-Defense Force destroyers.

Optimize Our Organization, Operations and Workforce

We support the warfighter directly and through partner organizations, competencies and programs by continually developing and strengthening our workforce. We ensure the right training, career development opportunities and environment are available to make SPAWAR the best place to work.

Deliver Effective and Efficient Services

We continually measure and improve the quality of services we provide to our customers and to each other. Competencies, our Fleet Readiness Directorate and System Centers critically analyze key services and initiate efforts to improve their effectiveness and efficiency. Workforce members and customers have a common understanding of service expectations, constraints and mutually accountable measures of performance.

Develop and Strengthen Our Workforce

We invest in our employees and implement strategies to foster employee development, to expand our knowledge base and to strengthen our core values and attributes. We leverage high velocity learning and are a technologically savvy, knowledge seeking and solution-driven workforce. Throughout these efforts, we remain dedicated to equal employment opportunity, merit systems principles, and a diverse and inclusive workforce. We are engaged and committed to the execution of our mission, the success of our operations and the warfighting effectiveness of our Navy in defense of our nation.

Make SPAWAR the Best Place to Work

We make SPAWAR the best place to work every day by providing an environment where a balanced, trained and highly motivated workforce can thrive and provide exceptional support to our mission. We work to improve SPAWAR facilities and workplace infrastructure commensurate with new technologies, innovations and available resources. We are a world class team that is deeply connected to our Navy heritage and mission and are committed to delivering outstanding results on behalf of our warfighters.

SUMMARY

SPAWAR's Strategic Vision 2018-2027 is bold and aggressive, and requires the support of each and every member of our workforce in close coordination with our supported and supporting commands. While executing the strategic objectives described in this vision is a journey, we must maintain a sense of urgency in every specified and implied task along the path. The threats to our mission – and our nation – are evolving too rapidly for us to remain comfortable in the established pace of defense acquisition. At every opportunity we must innovate, lead and drive ways to speed delivery of advanced capability to the warfighter.

Our challenge is significant, but the talent and dedication of our team across SPAWAR is exceptional. Our nation is depending on us, and we are up to the task. Together, we rapidly deliver cyber warfighting capability from seabed to space for our Navy and nation.

It is not the critic who counts; not the man who points out how the strong man stumbles, or where the doer of deeds could have done them better. The credit belongs to the man who is actually in the arena, whose face is marred by dust and sweat and blood; who strives valiantly; who errs, and comes short again and again, because there is no effort without error and shortcoming; but who does actually strive to do the deeds; who knows the great enthusiasms, the great devotions; who spends himself in a worthy cause; who at the best knows in the end the triumph of high achievement, and who at the worst, if he fails, at least fails while daring greatly, so that his place shall never be with those cold and timid souls who know neither victory nor defeat.

— Theodore Roosevelt
United States President 1901 - 1909
Assistant Secretary of the Navy 1897 - 1898