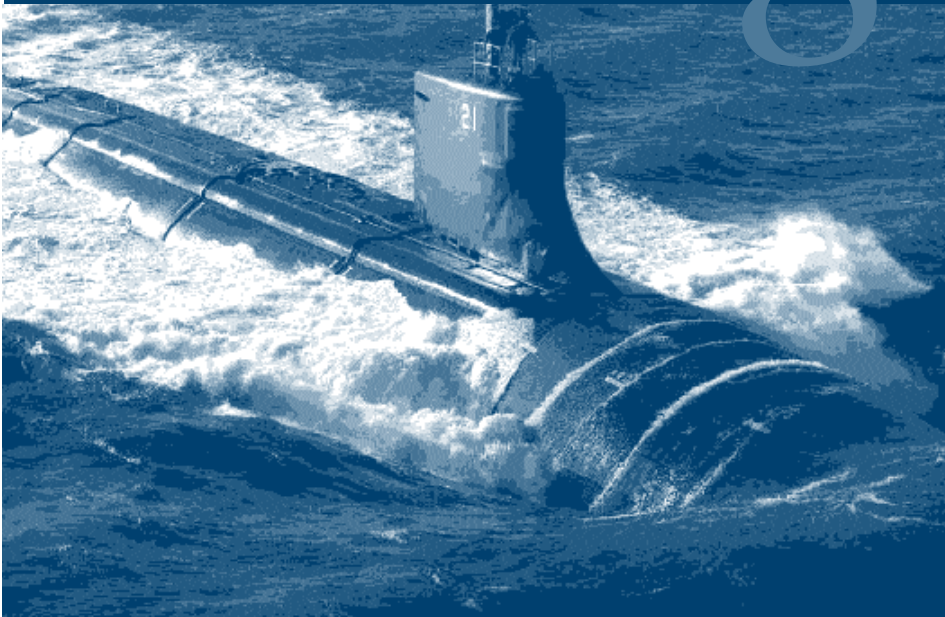


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N U W C

NAVAL UNDERSEA WARFARE CENTER

# Strategic



This Strategic Plan provides a conceptual framework for success in the 21st century. It requires the support of every NUWC employee to be effective. As a team that is focused on the future, we can provide the utmost support to NAVSEA, and more importantly, to the men and women of the finest Navy in the world.”

Innovation and creativity are critical to our success. We seek new and imaginative approaches in creating technologically advanced products and in developing effective business processes to meet our customers' current and future needs.

# Plan



## *Commander and Technical Director Message*

We are witnessing a new era in national security where the phrase “Post-Cold War” is losing its relevance. The promise of technology and the Revolution in Military Affairs (and the accompanying Revolution in Business Affairs) have brought us to the threshold of a new era, one where we have unprecedented opportunity to forge our future. Since the previous version of our Strategic Plan was published in January 1996, we have seen significant changes in DoD and Navy policy guidance and considerable progress in government reinvention and acquisition reform. These changes and the unfolding challenges of the future have precipitated a renewed assessment of our strategic planning processes and led us to publish this document, our 1998 Strategic Plan.

In our previous plan, we discussed the challenges associated with the shift in Undersea Warfare emphasis from open ocean to the littoral and emphasized our responsibilities to lower our costs to the taxpayer while implementing cutting-edge Undersea Warfare technologies. These imperatives remain and have been underscored in new military strategy documents, including *Joint Vision 2010* and *Forward...from the Sea*. Our joint warfighting role is integral to the concepts in these and other documents, and our contributions to Joint Warfighting Capability Objectives are continually expanding. Our broadening responsibilities and the constrained funding environment demand our vigilance in accomplishing every aspect of our mission.

The Naval Undersea Warfare Center, its Divisions, and its components are well situated to meet the complex challenges ahead. We have the right mix of highly trained and motivated employees, state-of-the-art facilities, and world-class processes to sustain our reputation for excellence that has been cultivated since our beginnings. Our record of accomplishment in support of the Naval Sea Systems Command and the end-users of our products in the Fleet stands as a tribute to the people who make up our workforce. As the pressures to provide more affordable and technologically-effective products and services continue apace, we will rise to the challenge, using innovative approaches and learning from the successes of others. Keeping pace with the rapid advances in a broad array of technologies and processes, we will play a vital role in preserving our Navy's Undersea Warfare superiority well into the next millennium.

This Strategic Plan provides a conceptual framework for success in the 21st century. It requires the support of every NUWC employee to be effective. As a team that is focused on the future, we can provide the utmost support to NAVSEA, and more importantly, to the men and women of the finest Navy in the world.

RADM John F. Shipway  
Commander

Dr. John E. Sirmalis  
Technical Director

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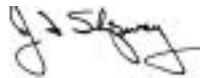
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## Statement of Purpose and Commitment

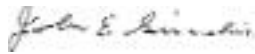
Achievement of the vision articulated in this plan and progress toward our strategic goals will result in providing the highest quality products and services to our customers. We commit ourselves to these goals and fully endorse the implementation of this strategic plan.

### Naval Undersea Warfare Center

RADM John F. Shipway  
Commander



Dr. John E. Sirmalis  
Technical Director



### Division Keyport

CAPT Larry Carter  
Commander



Mr. Daniel M. Viccione  
Executive Director



### Division Newport

CAPT Stephen J. Logu  
Commander



Mr. Juergen G. Keil  
Executive Director

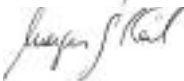


Photo Credit - Ingalls Shipbuilding

# Introduction

We must break down internal and external barriers to productivity and better understand our individual and collective roles in meeting the challenges ahead.



The Naval Undersea Warfare Center (NUWC) is the Navy's full-spectrum research, development, test & evaluation (RDT&E), engineering, and fleet support Center for submarines, autonomous underwater systems, and offensive and defensive weapons systems associated with Undersea Warfare. Having refined the roles of our two Divisions in supporting the operating forces of the Navy over the past five years, we are positioned to improve and expand our contributions in Undersea Warfare. We are revising our planning approach and our processes to provide high-quality, affordable RDT&E, in-service engineering, and total life cycle support for the Navy's Undersea Warfare systems and capabilities.

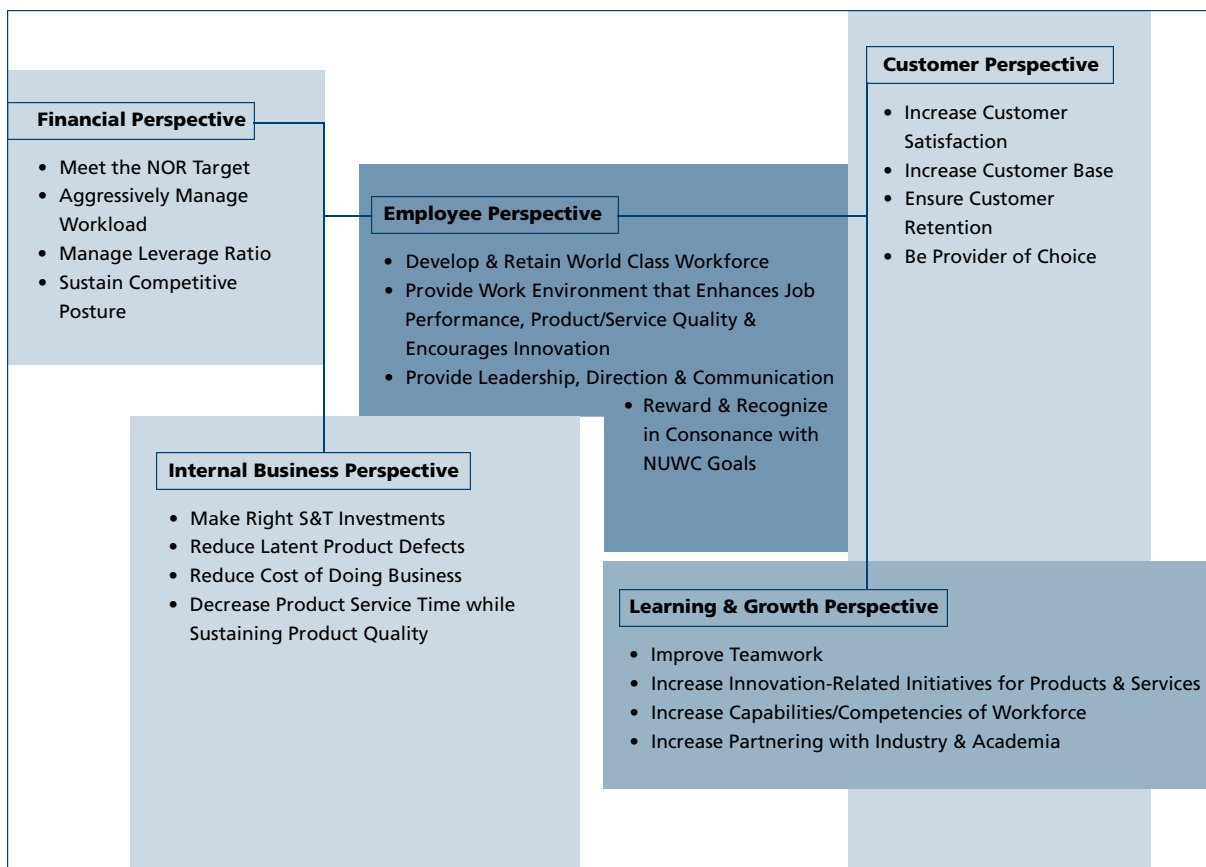
The NUWC Divisions today are lean, efficient, and focused on our customers' needs. We have evolved to adapt to diminishing resources and a diverse, diffused set of military threats; emphasized technologies that enable the Navy's Undersea Warfare operating forces to make better contributions in joint campaigns; and have established a position of leadership in government reinvention and acquisition reform. Nonetheless, the uncertainties ahead demand

that we redouble our efforts to provide effective and affordable products and services to our customers. In the absence of a single, highly capable and well-defined threat, we must establish a flexible technological vision to drive our Undersea Warfare capabilities in the future. With technology and innovation as our primary tools, we have the opportunity to develop processes, products, and services that will further enhance the value of the Navy's Undersea Warfare capabilities. To achieve the necessary progress, we will have to look beyond our own organizations for good ideas and best practices from industry and academia, and to forge mutually beneficial cooperative alliances with other organizations. We must break down internal and external barriers to productivity and better understand our individual and collective roles in meeting the challenges ahead.

As the challenges of the future unfold, we must assess our progress toward our vision and goals and adjust our strategic plans accordingly. Therefore we have revised our Strategic Plan to incorporate a new set of goals and action strategies to attain them. Our Strategic Plan complements national military strategy, the precepts of the National Performance Review (NPR), and the eight strategic goals outlined in NAVSEA's strategic plan. We fully embrace these strategic goals and will continue to integrate them into all aspects of internal planning. The NUWC Senior Management Team - consisting of the NUWC Commander and Technical Director; and the Division Commanders and Executive Directors - routinely meets to review NUWC's Strategic Plan, its implementation and its effectiveness. These reviews have reinforced the validity of our planning and have served as a forum to develop objective measures of effectiveness.

# Balanced Performance Measures

An important feature of our Strategic Plan is the establishment of a set of balanced performance measurements that allow us to assess our progress towards achieving our strategic goals. Our performance will be appraised in five key perspectives: our customers' perspective, our employee perspective, our internal business perspective, our financial perspective, and our learning and growth perspective. Within each of these areas, we have developed a list of more specific factors or requirements that provide standards against which we can better determine our progress. By integrating the performance measurements obtained in each of the five perspectives, we can adjust our processes or plans as necessary to stay on the appropriate path to the future.



# Strategic Overview

The NUWC Strategic Plan is published for our employees and stakeholders to keep them informed of our general direction and guidance.

The NUWC Strategic Plan is published for our employees and stakeholders to keep them informed of our general direction and guidance. It details our vision for the future and the strategic goals we have set to attain that vision. It is intended to focus our collective efforts on a common approach to meet future challenges and it defines our corporate philosophy.

The five strategic goals contained in this document are aligned with NAVSEA's strategic goals and support the spirit and intent of the Government Performance and Results Act (GPRA) and NPR by directing the establishment of measures that improve performance and reduce costs. Additionally, this plan's Operating Principles are related to and fully supportive of NAVSEA's Guiding Principles.

Our Strategic Plan is the cornerstone of our strategic planning process. In response to a broad array of external factors, including military strategy, funding constraints, and, most importantly, the Navy's warfighting

requirements, we must routinely evaluate our strategic approach and adjust our plans and processes to most effectively accomplish our mission. Based upon DoD, Navy, and NAVSEA guidance and anticipated resources, our plan assesses how best to accomplish our mission and achieve our vision. Our strategic goals and their associated action strategies were developed with the needs and expectations of our customers as primary considerations. Our plan also incorporates a key aspect of the GPRA by addressing performance measurement. By using a Balanced Scorecard approach, we will have defined performance metrics that help us assess our progress towards attaining each goal.

The NUWC Strategic Plan plays a fundamental role in our strategic planning processes. Figure (1) illustrates the overall strategic planning process, and demonstrates how the cycle is influenced continually by obtaining feedback and adjusting our processes or plans accordingly.

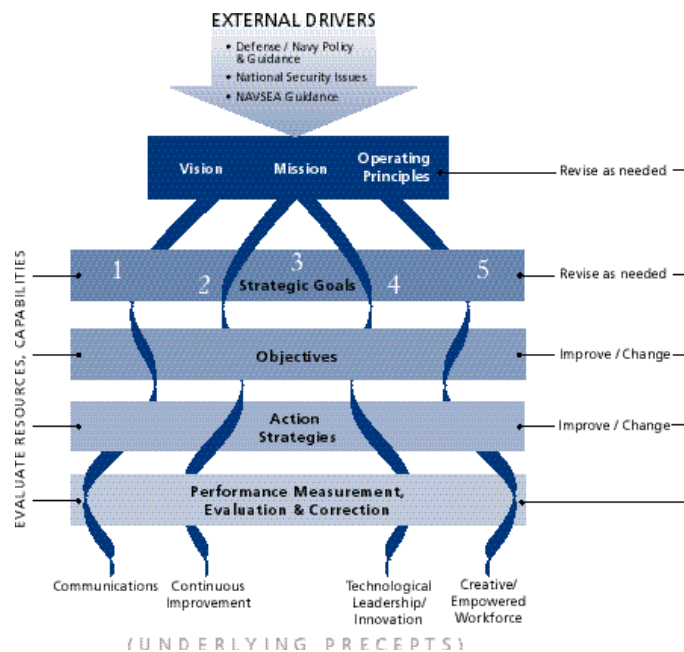


Figure 1. NUWC Strategic Planning Process

# Vision Mission Charter

## Leadership Areas

### Vision

Be our Nation's provider of choice for Undersea Superiority, satisfying today's needs and meeting tomorrow's challenges.

### Mission

**Undersea Superiority: Today and Tomorrow.**

We provide the technical foundation which enables the conceptualization, research, development, fielding, modernization, in-service engineering, modernization, and maintenance of systems that ensure our Navy's undersea superiority.

### Corporate Charter

The NUWC Charter promulgated in December 1992, established the top-level organizational relationships (Figure 2) and technical leadership areas for NUWC and expertise in the following technical areas:

### Technical Leadership Areas

As assigned by SECNAVINST 5400.16 of 18 December 1992, NUWC provides the Navy with leadership in the following technical areas:

- Undersea Warfare Modeling and Analysis
- Submarine Combat and Combat Control Systems
- Surface Ship and Submarine Sonar Systems
- Submarine Electronic Warfare
- Submarine Unique On-Board Communications Systems and Communications Nodes
- Submarine Launched Weapons Systems  
(except strategic ballistic missile systems, cruise missiles and related systems)
- Undersea Ranges
- Torpedoes and Torpedo Countermeasures
- Submarine Vulnerability and Survivability (except HM&E)
- Undersea Vehicle Active and Passive Signatures (except HM&E)
- Submarine Electromagnetic, Electro-optic and Nonacoustic-effects Reconnaissance, Search and Track Systems

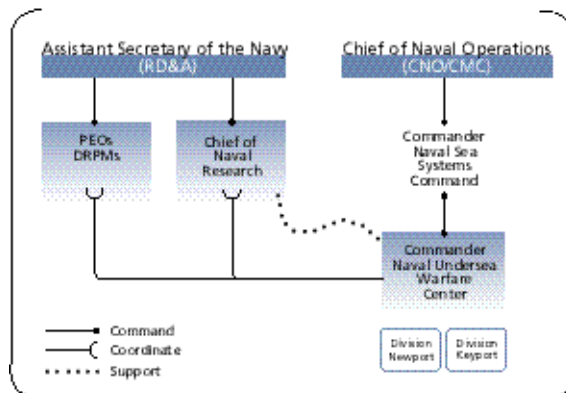


Figure 2. Naval Undersea Warfare Center Organizational Structure & Operating Relationships



# Operating Principles

Our Operating Principles provide a foundation that governs our approach to daily operations. They are interrelated by several underlying precepts that should influence everything we do:

- Open communications, internally and externally;
- Continuous improvement;
- Technological leadership and innovation; and
- A creative, empowered workforce.

## **NUWC's Operating Principles are:**

***Our customers come first.*** Understanding and responding to their current and emerging needs are our top priorities. We will collaborate closely with our customers and other stakeholders to ensure we meet their requirements for performance, affordability and timeliness.

***Teamwork is essential.*** We work as dedicated and effective partners with our family of customers, suppliers, and stakeholders. We will share and pursue the NUWC vision as a unified team.

***Innovation and creativity are critical to our success.*** We seek new and imaginative approaches in creating technologically advanced products and in developing effective business processes to meet our customers' current and future needs.

***We value diversity.*** We recognize and respect the benefits of diversity and are committed to recruiting and developing a diverse workforce.

***Environmental stewardship and safety are crucial.*** Our practices will foster a safe work environment for our employees, provide safe and environmentally sound products for our customers, and ensure we are prudent stewards of the environment.

***We conduct ourselves in an ethical manner.*** We are accountable to the American public and are committed to the highest ethical standards.

***Our employees are the key to our success.*** Our employees are our most valuable resource. We will provide them with a productive work environment and the necessary skill set, knowledge, and incentives to accomplish our mission.

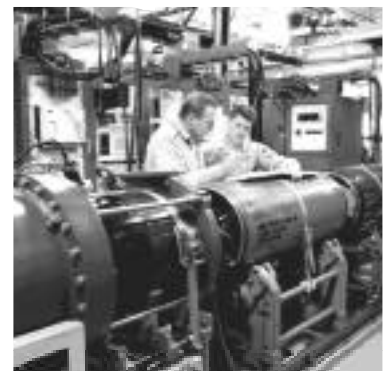
***We are committed to continuous improvement of products, processes, and services.*** Using the best management practices, we will make improvement decisions based on fact and knowledge. We will measure our performance and, using benchmarking, continuously evaluate our progress toward our goals.





# Strategic Goals, Objectives, and Strategies

This plan provides a blueprint that charts how we will make our vision a reality. The five goals presented below establish the direction we will take in accomplishing our mission and fulfilling our obligations to the Navy, DoD, and the taxpayer over the next several years. Each goal is supported by more specific objectives and strategies which help to further refine how we will satisfy current and future undersea superiority requirements. The objectives represent “what” NUWC intends to accomplish with respect to its overarching strategic goal, and the strategies indicate “how” we will achieve each goal. Pursuing these objectives and strategies will allow us to use the appropriate combination of best practices, in both our business and technical processes, and team spirit to enable our delivery of products and services that are effective, affordable, and timely.



## Strategic Goal 1

### *Customer Satisfaction.*

#### **Objectives:**

- Refine our ability to anticipate customer needs and expectations.
- Maintain an open, frank relationship with customers to enhance our responsiveness.
- Work closely with our customers to determine their needs.

#### **Strategies:**

- Enhance cooperative alliances with customers, sponsors, and suppliers to improve communication of expectations and needs and to encourage increased participation among stakeholders.
- Assign NUWC personnel where appropriate to improve customer satisfaction.
- Develop methods to systematically survey customer satisfaction in our performance as well as their anticipated needs and concerns.
- Foster a spirit of dedication to customers throughout NUWC.

## Strategic Goal 2

### *Enhance the effectiveness of the NUWC workforce by providing opportunity for all employees to realize their full potential.*

#### **Objectives:**

- Develop the tools to ensure a well-informed, skilled and innovative workforce that is empowered and best equipped to seek new opportunities while accommodating change.
- Expand cross-training, improve internal communications and promote sharing of ideas throughout NUWC.
- Provide a work environment that enhances productivity, safety, and quality of life.

#### **Strategies:**

- Refine human resources plans to achieve a flexible organization based on anticipated work requirements and critical technical capabilities and supporting skills.
- Provide for the professional development of a diverse and highly capable, right-sized workforce.
- Pursue innovative human resources policies to improve productivity through Reinvention Laboratory and Personnel Demonstration programs.
- Recognize and reward employee achievements.
- Encourage employee participation in decision processes that shape the future of the workforce and the organization.
- Detect and break down barriers to communications.

## Strategic Goal 3

### *Improve the responsiveness, performance and efficiency of NUWC in the conduct of all processes.*

#### **Objectives:**

- Implement process improvements and better business practices.
- Develop and implement cutting-edge acquisition reform and government reinvention measures.
- Improve our ability to provide decisive and prompt action in responding to short-fused requirements.

#### **Strategies:**

- Identify technical and business process improvements to achieve better performance, effectiveness, and efficiency.
- Explore internal and external sources for best practices, and implement those that will improve NUWC's performance.
- Eliminate redundant and non-value-added practices.
- Encourage sharing of ideas and lessons learned by promoting strong intra- and inter-divisional reliance programs.
- Pursue technologies that affordably enhance processes and business practices and add product and service value to the customer.

*Develop affordable products and services that fully address Navy needs and lower total ownership costs.*

**Objectives:**

- Maintain leadership in enabling the development and maintenance of technologically superior, affordable, and effective products and services.
- Sustain the capability to rapidly and affordably upgrade or correct problems in existing fleet systems.
- Provide best value products and services that meet customers needs.
- Improve maintenance capabilities and lower costs by improving work practices.
- Sustain capability to meet emergent customer requirements.

**Strategies:**

- Implement innovative processes that will eliminate inefficiencies and will improve overall cost effectiveness.
- Consider total ownership costs as a primary factor in all acquisition endeavors.
- Use applicable commercial practices and technologies and enhance our knowledge of best practices by capitalizing upon collaborative alliances with industry and academia.
- Strive to lower total life cycle costs without sacrificing warfighting capabilities.
- Encourage increased communications and collaborations across the Divisions to cultivate and share relevant undersea warfare technologies and best practices.
- Work with customers to explore alternative methods to address their needs and resource constraints.

*Apply innovative approaches to meet future challenges.*

**Objectives:**

- Aggressively seek and deploy innovative new technologies which will sustain the Navy's Undersea Warfare competitive advantage.
- Eliminate technical insularity and promote free exchange of ideas.
- Build on successful innovative approaches used by other organizations.
- Provide affordable, high-quality technical, support, and industrial facilities that are unique and essential to Submarine and Undersea Warfare.
- Develop advanced concepts in Undersea Warfare to meet future needs.

**Strategies:**

- Anticipate undersea superiority emerging needs and their potential implications.
- Consider current and projected customer needs in assessing innovative technologies or processes.
- Pursue advanced concepts that will lead to breakthrough technologies.
- Develop processes to quickly deploy new technologies that accelerate development cycles, improve performance, and lower costs.
- Expand our knowledge base in Undersea Warfare and joint warfighting mission areas.
- Pursue cooperative alliances with industry, academia, other government agencies, and allies to identify and capture technology insertion opportunities.
- Ensure our key technical and support facilities are appropriately used, refined, and revitalized to meet current and future requirements.

4 Strategic Goal

5 Strategic Goal

NAVAL SEA SYSTEMS COMMAND

NAVAL UNDERSEA WARFARE CENTER



# Together Reshaping Our Course...to the Future

Dedicated to Undersea  
Warfare Superiority

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