

The Leader in Warfare Systems Development & Integration



NAVAL SURFACE WARFARE CENTER DAHLGREN DIVISION DAHLGREN | DAM NECK



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Commanding Officer, NSWCDD

For over a century, Naval Surface Warfare Center Dahlgren Division (NSWCDD) has led the U.S. Navy to worldwide superiority in innovative, integrated warfare systems. Today, our Navy is competing globally with skilled adversaries intent on surpassing us. NSWCDD's urgent obligation to our Navy and Nation is to anticipate and rise to every challenge, embrace our proud traditions, and deliver timely, superior naval combat power that will ensure U.S. Navy supremacy over the next 100 years.

To that end, this strategic plan charts our course for the next five years to ensure we remain focused on our purpose: to be the leader in warfare systems integration for the Navy and the most sought-after research and development command within the Department of Defense. To realize our purpose, we must balance our attention to present demands with our vision for the future. Over the next five years, we will concentrate our technical efforts on the following:

- Intelligent Automation
- Software Engineering Revolution
- Digital Engineering
- Hypersonic Weapons Advancement
- Information Superiority

We fully understand a healthy command is balanced; a strong technical team must be paired with a world-class business and functional operations team to deliver superior combat power efficiently. Therefore, we will focus our business and functional efforts on:

- Facility Modernization
- Information Technology Modernization
- Business Operations Modernization
- Rigorous Business Practices

We will undertake these efforts as "One Team," vigilant and able, actively supporting the Navy's protection and defense of our Nation and its interests abroad. We will cultivate a spirit of collaboration across organizational lines, internally and externally, to ensure our resources are efficiently managed, our efforts are streamlined, and capability is delivered expeditiously. We will continue to build a diverse, inclusive workforce to ensure our greatest asset, our people, are drawn from the best and the brightest across all of America. We will foster an innovative environment to engender the best technical solutions to deliver combat power.

As your commanding officer, I am honored and humbled to be a part of this organization's rich history. And, in partnership with the Technical Director, I am excited about the awesome opportunities and extraordinary future through working with you, our NSWC Dahlgren Division Team, to support the warfighter, warfighting, and build our future fleet.

Very respectfully,

CAPT S. C. Plew

Commanding Officer, NSWCDD



JOHN G. FIORE, SES Technical Director, NSWCDD

As I think about the next five years for NSWC Dahlgren Division, I am reminded of a quote by Søren Kierkegaard, "Life can only be understood backwards; but it must be lived forwards." We should all share in the anticipation and excitement looking forward to the next five years, because what we have accomplished in the last five years is truly remarkable. We have led the Navy in implementing new weapon systems; we have effectively taught the Navy how to separate hardware from software; we have taken processes and procedures created and executed in the private sector and made those mainstream within the government. We have introduced advances in computation technology, data sciences, threat engineering, mission engineering, and analytics. Our people have been recruited to take on some of the most difficult technical assignments and challenges facing our nation. Over these last five years, Dahlgren has focused its resources on enhancing our integrated warfare expertise. We are recognized by our stakeholders for adhering to technical rigor and discipline, and we are collaborating with those organizations that help further our efforts to deliver capability into the hands of our Sailors and Marines faster, more efficiently, and more cost effectively.

Looking forward, we will build upon these successes to make an even greater contribution to our naval capabilities and our nation's security. We will move our data storage, high performance computing, and portions of our software development environment off legacy hardware and onto the cloud. This move will allow us to procure the resources we require as we need them, and to better pace advances in technology. We will focus on enablers through digital engineering. We will adopt a software manifesto that will align the talents and skills across the organization to allow us to deliver more lethal capabilities. We will lead in supporting our nation's challenges in delivering new weapon systems designed to outpace our adversary's capabilities. We will collaborate across the Naval Research and Development Enterprise, industry, and academia in the development of artificial intelligence and machine learning (AI/ML) technologies. We will create the systems engineering environment that will ensure we can deliver and integrate certified AI/ML technologies safely into the fire control loop of our weapon systems. We will pursue horizontal integration with the alignment of the right actors, not only across the Warfare Centers, but also from across multiple parts of national security and high tech industry partners. Through horizontal integration, we will attain a desired outcome not possible by any single institution. We will enhance our governance processes through automation, allowing us to use that information to reduce costs, remove inefficiencies, enhance decision-making, and hold each other accountable. We will continue to mature internal innovation processes developed by our Chief Technologist by partnering with innovators external to the fence line who are willing to pursue our naval mission's success and our national security needs.

Executing this strategic plan takes a world-class workforce. Dahlgren has the advantage of having this today. We will continue to invest in this advantage, as our people are our greatest asset and have made us - and will continue to make us - the crown jewel of the warfare centers. We will continue to recruit and develop elite talent. We will continue to educate them and provide the best tools in support of our workforce and their technical performance. It is my opinion that our award-winning workforce will not only meet but exceed the goals laid out in this strategic plan. I would like to thank you for the remarkable things you have done, and for the extraordinary things that you will do on behalf of this great country.

Finally, everything we do will align with our mission, vision, and our values.

Very respectfully,

Mr. John G. Fiore, SES Technical Director, NSWCDD

STRATEGIC GOAL 1

TECHNICAL THRUSTS

Naval Surface Warfare Center Dahlgren Division (NSWCDD) has a broad and diverse research, development, test and evaluation (RDT&E) portfolio, with an emphasis on warfare systems development and integration. As we look at the next five years and beyond to develop future technologies for the Surface Navy and, in the process, strengthen ourselves, our technical priorities will include these five specific technical thrusts:

THRUST 1 Intelligent Automation

THRUST 2 Software Engineering Revolution

THRUST 3 Digital Engineering

THRUST 4 Hypersonic Weapons Advancement

THRUST 5 Information Superiority

We will closely track our plans and investments in these areas while continuing to advance our core RDT&E portfolio. The next five sections will delve into each of the technical thrusts in detail.











Intelligent **Automation**

GOAL

Establish NSWCDD as the Surface Navy Lead for Intelligent Automated Warfare Systems as enabled by the application of intelligent automation systems. Intelligent automation systems lie at the intersection of autonomy, artificial intelligence (AI), and unmanned systems.







Background

Peer and near-peer competitors across the world are aggressively pursuing autonomous warfare and the application of artificial intelligence (AI) and machine learning (ML) across the warfighting spectrum. Ultimately, our naval surface warfare combatants will need to operate in environments that will require the ability to defend against these autonomous systems, as well as employ offensive own-force systems. These capabilities and technologies will be game changers, as the speed of battle will soon exceed human-in-the-loop capabilities. The country that can quickly and successfully develop and integrate autonomous warfare technologies will have a decisive military advantage.

Objectives

Establish a national autonomous warfare presence. We will build upon our previous work in autonomous warfare and AI/ML to establish ourselves as nationally recognized practitioners of autonomous warfare. We will lead development of naval unmanned and autonomous systems and provide solutions to meet warfighter needs and pace and exceed adversary threats and technologies. We will lead rapid integration of unmanned and autonomous systems and technologies in Navy and Marine Corps systems, mobile systems, weapons systems, engagement systems, and combat systems.

Create a systems engineering (SE) environment for intelligent autonomous systems. Creating this environment includes establishing the development and test environment tailored for AI/ML, safety, information assurance, verification, validation, accreditation, and certification of AI technologies for unmanned and autonomous systems to ensure their behavior is well understood and trusted by the warfighter. Given that AI/ML systems' behaviors can be difficult to bound, hard to predict, and at times, difficult to understand, it is of prime importance to expand knowledge of the theoretical underpinning of AI/ML systems engineering and how that factors into the goals listed above. We will establish a workforce and partner with industry and academia to support this thrust.

Evaluate each of our ongoing work areas to determine the appropriateness of applying AI/ML. The basic premise for using AI/ML resides in answering the question "what problem do we need to solve?" With this in mind, we will conduct horizontal integration analyses across the NSWCDD portfolio, industry, and academia to determine the appropriateness and best means of

incorporating AI/ML to provide advantage to the warfighter. The incorporation of AI/ML will span the gamut from applied research to back end automation of verification and validation test capabilities. Human systems integration methodologies will be used to determine the appropriate and best methods for driving intelligence into automation. We will work in unison with the sponsor community to develop an AI/ML "incorporation roadmap" for each identified project.

Collaborate with stakeholders across the naval enterprise, services, Office of the Secretary of Defense, industry, and academia to advance the state of the art for unmanned and autonomous systems as well as AI/ML technologies. This will include collaboration with nontraditional Department of Defense (DoD) industry partners that are incorporating AI/ML into everyday consumer products.

Establish state-of-the-art facilities and laboratories. Support prototyping, experimentation, development, analysis, modeling and simulation (M&S), integration, testing, certification, and accreditation of unmanned and autonomous systems, and AI/ML technologies. We will utilize in-house and cloud-based computer resources for AI/ML-enabled autonomous warfare systems training.

Build the most talented workforce. Retain current high-performing employees and hire energetic scientists and engineers that will advance this strategic thrust in autonomy, artificial intelligence, machine learning, and data sciences. Focus on the development of our workforce through academic and informal training, especially through the prioritization of Naval Innovative Science and Engineering projects.

Software Engineering Revolution

GOAL

Establish software engineering practices that support modern coding practices and rapid delivery of capability to the fleet by instituting four core areas: education and training, policy, collaboration, and infrastructure. NSWCDD will adhere to and leverage the Navy and Marine Corps Digital Systems Engineering Transformation Strategy. This includes software factory capabilities using common processes and tools to improve our cycle time, allowing us to explore new software architectures quickly and to adapt rapidly to a changing software ecosystem. We will reduce delivery times to the fleet by working with the certification community to automate all certification processes. NSWCDD will employ test-driven design and continuous integration/continuous deployment within software factories to ensure high-quality products are delivered to our customers. We will train, foster, and facilitate technical staff in engineering world-class designs, architectures, and coding of weapon systems and supporting technologies for the Navy.





Background

Software is an enabling technology that will provide more than 80 percent of future combat systems' capabilities. Modern coding practices that deliver high-quality software with fewer errors and greater flexibility are critical to ensuring our national security and of our naval forces' capability to execute their missions. Implementing the following objectives will lay the foundation for delivering quality and capability to our Sailors and Marines faster, more effectively, and efficiently.

Objectives

Create a software development culture focused on rapid change. NSWCDD will employ a software paradigm embracing rapid prototyping, discovery, behavior- and test-driven design, and experiential learning techniques. The inception phase will employ vision, story, and value-stream mapping. We will initiate a culture shift that celebrates responsible failure, accepts a growth mindset, realizes that rank does not define priority, and practices the "strong opinions, loosely held" philosophy, adopting change to enable process speed and agility. Provide an environment with common tools that facilitate collaboration and cross pollination of coders across the organization, and adopt common processes and common quality measures that are wired to an automated dashboard for daily guidance and leadership review.

Develop software products to the highest quality and standards. NSWCDD will fully embrace test-driven development and continuous integration/continuous delivery to ensure that software is written correctly to minimize defects delivered to our customers. DevSecOps and future emergent practices will be used to build out software, which will be delivered regularly to a staging

area for further testing and certification. To facilitate this, a set of standards must exist that define the expectations for what "good software" looks like. These policies must be scalable to the level of effort. NSWCDD will leverage common practices to develop flexibility across the workforce, which will enable cross-pollination among personnel and teams.

Collaboration between teams. Through collaboration, one is able to tap into creative ideas and new skills from a diverse field of software professionals to extend a project beyond the capabilities of an individual developer. Collaboration will also have a positive effect on morale, as one will have a community of software professionals to help guide, think through, and suggest novel approaches to solve complex software problems. This may be accomplished through formal or through informal channels.

Modernize our infrastructure and provide ubiquitous access to all. NSWCDD will utilize cloud capabilities and infrastructure to reduce the time and expense required to stand up new efforts.

Digital Engineering

GOAL

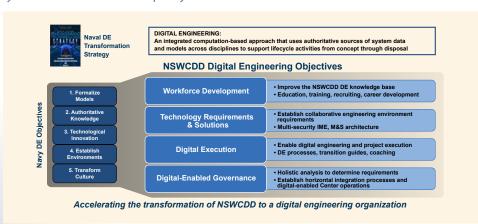
To accelerate the transformation of NSWCDD to a digital model-based and data-driven organization.





Background

Traditional naval engineering processes and methods are not well suited to managing the complexity, interconnectivity, and interoperability of current and future systems of systems. Further, the dynamic nature of our threat environment requires that the Department of the Navy (DON) quickly transition from manually assimilating the vast amounts of document-based data, necessary to understand such complex designs in their totality, to a new digital engineering methodology. The Naval Digital Systems Engineering Transformation Strategy of June 2020 defines digital engineering to be an integrated computation-based approach that uses authoritative sources of system data and models across disciplines to support lifecycle activities from concept through disposal. Implementation of this strategy will transform both technical and business processes. This requires the digital interconnectedness of tools, models, and data required for mission success as well as a workforce with relevant skills and experience. The ability to make this transformation quickly will enable NSWCDD to continue to meet urgent national needs in the face of accelerating system and environmental complexity.



Digital engineering transformation requires a change in the way that we execute. This includes changing from the traditional document-based approach to a digital-centric process. It also includes transitioning from independent sets of models that focus on individual products to an integrated model-based and data-driven digital method, where models are digitally integrated and acting on authoritative data sets. This construct also becomes a technology enabler for the holistic introduction of new capabilities into systems-of-systems design efforts.

Objectives

Workforce Development. Expand and improve our digital engineering knowledge base through academic courses, certificates, and focused training. A role-based approach will be defined and include tier-based qualification requirements for each role.

Technology Requirements and Solutions. Identify requirements for the network, infrastructure, and tool improvements needed for integrated, digital execution both across our internal technical and business operations and externally to enable NSWCDD to interoperate with broader enterprise digital engineering efforts. These requirements will be provided as inputs to those executing NSWCDD digital modernization. We will prioritize digital engineering within our internal Science and Technology investments.

Digital Execution. Define digital methodologies for project execution with the goal of replacing paper products with model views. This includes the definition of adaptive systems engineering processes that maintain technical rigor, the use of model-based systems engineering as a means to rethink project execution and future performance assessments, and the standup of a Task Execution Support Team to aid project leads and their teams in digital transformation.

Digitally Enabled Governance. Define the NSWCDD governance structure from an integrated and data-driven digital perspective. This includes the identification of integrated processes and methods using tool and infrastructure improvements to digitally integrate NSWCDD as an organization, from business to technical to line operations.



Hypersonic Weapons Advancement

GOAL

Establish NSWCDD as the Surface Navy Lead for Offensive and Defensive Hypersonic Weapon Systems Integration.





Background

Our nation faces fierce competition from our adversaries in the development of offensive hypersonic weapons and the weapon systems designed to defeat them. With our expertise in strategic weapons systems, the development and use of advanced gun systems, and tactical defensive missile systems, NSWCDD has significant hypersonic weapons experience. The hypersonic weaponry thrust will build on, foster, and develop this nascent capability into a sustained hypersonic technologies workforce.

Objectives

Prioritize hypersonic weapons defense within our threat engineering activities – In collaboration with the intelligence community, we will develop industry-leading digital and physical representations of threat and target vehicles, complete with vulnerability and lethality models.

Establish a national hypersonic technology presence – We will establish ourselves as nationally recognized practitioners of hypersonic expertise. This will be accomplished by extending the knowledge base of our world-class workforce through academic and informal training and by recruiting the best and brightest scientists and engineers (both graduating students and seasoned professionals). We will prioritize hypersonic technology within our internal science and technology investments. We will aggressively contribute to the national body of hypersonic knowledge by publishing in professional journals and presenting at conferences (including one hosted by us). We will establish strong ties with industrial, academic, and research institutions to collaborate on national needs and to augment expertise not resident at Dahlgren.

Aggressively pursue opportunities to support the development of defensive weapon system capabilities – We will continue working with the Missile Defense Agency to facilitate the deployment of weapon systems capable of protecting our nation, allies, and warfighters from the hypersonic weapons of our enemies.

Expand our roles and responsibilities in the development of offensive systems – We will expand our work in support of the services developing offensive hypersonic capability to provide them with expertise in critical component and system development. We will leverage our extensive high-speed test execution knowledge to support the testing of representative offensive systems.

Establish the Railgun (RG) Testbed as a national asset for hypersonic systems development and testing – We will aggressively pursue the national use of existing railgun assets to provide ready testing access to the hypersonic flight regime. We will work with the developers of offensive and defensive systems to determine their testing requirements and tailor railgun capability to augment the capabilities available via wind tunnels, sled tracks, shock tubes, and sounding rockets.



Information Superiority

GOAL

Lead warfare system design, development, and integration supporting the Future Naval Network Infrastructure enabling delivery of the right information into the right hands, ready to observe and then use to orient, decide, and act faster than our adversaries can. Recognize and act on the motto that "Information is Combat Power."





Background

As stated above, information superiority is delivering the right information into the right hands, ready to observe and then use to orient, decide, and act faster than the adversary. Every warfighting function and mission area entirely depends on information (both transient and at rest) and rapid decision-making throughout the entire competition-conflict continuum. Warfare systems must be designed, developed, and developed in tandem with the Future Naval Network Infrastructure, inclusive of the Naval Operational Architecture (NOA) Framework and Naval Tactical Grid (NTG), to maintain decision-making superiority and continue to expand our competitive advantage. Aspects of this thrust require personnel to utilize concepts that increase the persistent collecting and sharing of data and then turn that data into knowledge that enables rapid warfighting decision-making and increased capability.

Objectives

Align warfare system developments to the NOA Framework and to utilize the attributes of the NTG. As NSWCDD develops warfare systems, we must think in terms of warfighting capabilities enabled not only by increased integration of information on a single platform, but also in terms of wider naval and joint force interoperability and integration of information to provide decision-making superiority to accomplish objectives. We will develop warfare systems aligning to and supporting the concepts of the NOA Framework and its key technology areas enabling future distributed warfighting. We must continue to effectively innovate and engineer secure solutions into naval and joint systems across the warfighter domain in order to continually defend the information domain.

Solidify and grow our roles and responsibilities in the development of the Integrated Combat System (ICS) and evolution of warfare systems enabling Distributed Maritime Operations (DMO). We will grow our ICS and warfare systems portfolios to support development and technical maturation of required capabilities enabled by increased exposure to information resources. We will leverage our expertise to pursue experiments informing technical solutions enabling distributed warfighting. These technical solutions

should address, but are not limited to, methodologies for warfare system data synchronization and attributes required to support a common pictures, data and sensor fusion concepts, dynamic UxV control and information exchange, advanced Integrated Fire Control (IFC) concepts, Electromagnetic Maneuver Warfare (EMW) concepts, and Battle Management Aid (BMA) developments. We will design warfare systems to fully support cross-platform/cross-domain integrated multi-mission operations enhancing warfighting performance by providing timely, clear, and concise information.

Capture opportunities to influence and support the development of the Future Naval Network Infrastructure. We will influence network designs by pursuing tasking defining network architectures, identifying data requirements supporting warfare system mission tasks, and performing studies allocating requirements between networks and warfare systems. We will directly support the definition of warfare system software services for integrating and enabling a digitized naval force to exploit information to enhance battlespace awareness, improve the effectiveness and speed of decision-making, and compose and coordinate/synchronize effects to achieve the commander's intent.

STRATEGIC GOAL 2

INFORMATION TECHNOLOGY (IT) MODERNIZATION

Deliver transformational information technology solutions that will increase innovation and collaboration and speed delivery of capability to fleet.







The current NSWCDD IT infrastructure and service delivery models lack the agility needed to support advanced digital engineering and the dynamic evolution of weapons systems development. Digital modernization will deliver an agile, rapidly scalable and adaptable IT "ecosystem" with on-demand network bandwidth, storage/compute power, and secure end-user data access from anywhere, at any time, from any device.

Objectives

Enable data access from anywhere, at any time, from any device. IT infrastructure components will be engineered to facilitate diverse device connectivity options allowing a variety of end-point computing devices to connect and access data. Remote network access capacity will be increased to equip our mobile workforce with data access and system capabilities that mirror what is provided when working onsite. Enterprise applications will be designed "from the ground up" to be device-agnostic and optimized to support mobile technology.

Provide diverse connectivity options with rapid bandwidth scalability. Network bandwidth will be provided "on-demand" where needed and when needed across the command. We will replace antiquated cabling and network infrastructure with technology capable of supporting highperformance computing requirements. Network connectivity options will be expanded to include WIFI as a standard as opposed to an "option" and cyber cafés equipped with a broad range of connectivity options will be strategically positioned on the command and within the cloud to facilitate internal/external collaboration.



Empower end users with mission-centric end-point devices. An increased variety of computing devices will be made available to include extreme performance PCs, highly mobile "0" client tablets/laptops, virtual PCs, and cutting edge scientific computing equipment capable of delivering on-target mission enabling data access and processing

Deploy transparent, adaptable, and secure cyber security solutions. Cyber security will be integrated into every new IT system at the ideation phase and will incorporate checklists that enable system owners to include transparent yet secure "cuttingedge" cyber security ingredients within the system design. IT system certification and accreditation will be expedited through standardization and automation. Alternative methods of user authentication (i.e., enhanced biometrics, "0" trust) will be introduced to facilitate expeditious access to IT resources and systems.

Deliver elastic computing power and data storage options. A hyper-converged, cloudbased IT infrastructure will deliver rapidly scalable data storage and computing power. The cloud will unify technical communities within a single "IT ecosystem" relieving the departmental burden of disparate IT infrastructure system sustainment and freeing up resources to be repurposed for other mission-critical activities.

Increase effectiveness and usability of IT services. We will deploy a "one-stop shop" IT self-help portal featuring an easy-access service/equipment catalogue comprising mission-centric technology, on-demand storage/compute options, and a commandwide IT knowledge database. The IT portal will expedite delivery of capability to the fleet by empowering individual users with the ability to rapidly order/acquire and track IT resources when and where needed to accomplish the mission.

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STRATEGIC GOAL 3

WORKFORCE DEVELOPMENT

Build the future workforce that maintains mission readiness of the future Navy through strategic planning, hiring, and development.







While our workforce is our most critical resource in shaping the future of NSWCDD, it is our responsibility to identify and access the skills we need and curate and engage the best career journeys for our people. We will seek the most talented individuals and we will leverage a diverse and inclusive workforce to drive innovation and optimize individual and team performance.

The Department of the Navy, guided by the DON Civilian Human Capital Strategy, plans to build a world-class workforce experience, motivated by the mission and operating within a modern environment with "always on" opportunities for continuous learning and career mobility to drive optimal organizational and individual performance powered by unfettered access to consumergrade digital platforms. We will build on this concept through tailored objectives and initiatives in response to global forces and events that alter our mission and talent needs.

Objectives

Establish an inclusive workforce culture aligned and engaged with organization mission, vision, priorities, and values. We will use modern tools to determine the skills needed for the future workforce and hire accordingly. Through a detailed skills evaluation of current and future workforce needs, a strategic hiring plan will be developed to guide recruiting and hiring investments. We will create an onboarding experience like that of our Industry partners enabling and including our new hires from their first day onward. Our workforce will be engaged, prepared, and empowered to lead us into the future.

Proactively shaping our workforce for the future Navy. Our "Dahlgren University" will include all of the learning an individual will need to be successful in his or her field. By expanding training opportunities targeted toward technical fundamentals, leadership development, and business program management, we will deliver the skills needs for excellence in an employee's given field. Technical fundamentals training will be complemented with training developed for targeted technical domains and disciplines. Senior and executive leadership development will be supported through leadership academy training with associated mentoring opportunities for those striving toward the senior executive service (SES) track. We will proactively assign our workforce the training needed to fulfill their job requirements. We will better utilize our **New Employee Development Assignments** to provide each employee the crucial foundation necessary in the early stages

of their career. Through enhanced virtual training opportunities, we will continue to support a more mobile workforce with the flexibility and speed required for their future success.

Intentional succession planning through coaching, mentoring, and knowledge sharing. We will build a robust "bench" of talent that is ready to step in and lead. We will further develop our successful business and technical leadership pipelines to ensure future skill needs are addressed. Finally, we will expand our mentoring program to offer additional opportunities to participate in mentoring and ensure best practices in coaching and mentoring are taught and followed.

We embrace the diversity that our employees bring to NSWCDD and believe this diversity inspires innovation and elevates unlimited success in pursuing our mission. We further commit ourselves to an inclusive workplace where we welcome and respect the views and perspectives of all employees by recognizing and appreciating their unique skills, talents, and abilities.



STRATEGIC GOAL 4

COMMUNICATION

Communicate the right information to the right people at the right time.







Dahlgren Division communication, both internal and external, need to be effective, robust, clear, and reach our diverse workforce and stakeholders in multiple ways. Communication of our mission, vision, capability, and the value of our products and services is extremely important as we integrate into the regional ecosystem and face challenges to the value we provide the Navy and the warfighter. It is essential all employees and representatives of Dahlgren Division speak with one voice as they communicate and interact with our sponsors and stakeholders. A concise, clear message will help others understand Dahlgren Division's value to the community, the warfighters, warfighting and the future fleet as well as the nation.

Objectives

Reinforce NSWCDD's Customer Advocate Structure to ensure a consistent customer interface that articulates our values, mission, and expertise. Our Customer Advocates represent our core equities to external sponsors and should ensure that we are delivering the needed capabilities our customers need today and in the future. We will implement consistent roles and responsibilities that address strategic business development and sustainment, customer service, and execution management while allowing a flexible structure that can be adapted to the size and complexity of the customer's portfolio. We will explore new ways to forecast and analyze technical trends, provide exceptional customer service, and align customer advocacy with our mission, vision, priorities, and values. Consistency in our approach to customer service, along with horizontal integration across customer advocates, will allow us to coordinate, apply, and develop our capabilities to solve our customer's current and future problems.

Strengthen NSWCDD's roots in the regional ecosystem through expanded outreach efforts. Leveraging and strengthening our established relationships with the communities around us; local, state, and federal officials; schools and academia; as well as industry; we will continue to cultivate mutually beneficial relationships with regional businesses, schools, communities, and volunteer organizations, to name a few. Through synergy between our public affairs, small business, and chief technology office, we will strengthen Dahlgren's impact on and integration in the regional ecosystem by communicating clear, effective, and compelling messages to further the common goals of the regional ecosystem and the Dahlgren brand.

Establish and implement an improved internal communication model throughout the organization. Today's technology offers diverse methods and means by which to communicate a wide variety of information. We must coordinate our approach and invent or find the most effective ways to communicate with and align our workforce. Our communication methods must provide current, accurate, and easy to access information while placing greater emphasis on supervisor-to-employee direct communication to ensure information is being successfully received both horizontally and vertically throughout the organization.

STRATEGIC GOAL 5 BUSINESS

Provide effective, efficient, and modern business solutions.







Maintaining a competitive advantage in today's complex and dynamic global environment requires leading-edge business practices and continuous improvement in operations. NSWCDD must be able to respond to customer requirements with agility and accountability. This means balancing the constraints of compliance with innovative business solutions that drive a culture of affordability. The governance boards across all business areas provide an ongoing system of feedback and support directly from the customers. With them, we will increase our business rigor, simplify and streamline processes, and modernize business operations all within an infrastructure that seamlessly supports physical and virtual collaboration.

Objectives

Increase business rigor to ensure effectiveness. Fundamental to creating agile and accountable business operations is increasing rigor by managing work against disciplined performance metrics across all operations. Delivering effective capability to the fleet requires a business model that can efficiently define and prioritize customer requirements and quickly deliver integrated solutions. Ensuring visibility across projects through digital dashboards and real-time data will increase transparency, maintain accountability, and enable improved resource management.

Simplify and streamline processes to improve efficiency. A significant challenge to improved business solutions continues to be compliance directives. Now more than ever, NSWCDD must partner with its stakeholders to streamline processes and better balance compliance with cost, schedule, and performance. To reduce timelines, standardize processes, and ensure financial auditability, we will improve accessibility to business processes, establish automated end-to-end accountability, and leverage data analytics for continuous process improvement.

Modernize business operations. Transforming business operations will require NSWCDD to modernize its systems and processes. This means moving away from desktopbased accessibility and developing mobile applications for anytime, anywhere productivity. It also means developing easy-to-use customer interfaces for complex contracting and operations processes similar to public sector examples for tax preparation and lending. Promoting a future operating environment that supports technology solutions to improve operations will position us to become more agile and responsive to stakeholder demands.

Implement a state-of-the-art infrastructure plan. To create an agile operating environment, we need to divest ourselves of the need to be directly plugged into a network or sitting in a specific location. As virtual collaboration tools evolve, so should our physical footprint to allow for more flexibility in workspace needs. NSWCDD will need to implement a facilities infrastructure plan that fully utilizes authorities to renovate and modernize our physical footprint in concert with our virtual presence. This requires a holistic approach to space planning; integrating all IT; and network, security, and facilities requirements to optimize building use while considering collaboration, increased telework, and modular occupancy volume.

NSWCDD Strategic Plan 2021-2025



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