

# STRATEGIC PLAN

Naval Surface Warfare Center Indian Head EOD Technology Division





## From the Commanding Officer and Technical Director

In 2015, the Naval Surface Warfare Center Indian Head Explosive Ordnance Disposal Technology Division (NSWC IHEODTD) celebrated its 125th anniversary of service to the nation and our warfighters. Today, IHEODTD serves as the principal agent for the development and deployment of energetic materials and systems to the fleet.

Over the past two decades, too much risk has been accepted in the area of energetics materials research. As a result, our ability to impact next-generation warfighting systems is severely limited. A naval energetics renaissance will reinvigorate the nation's energetics research approach and provide the Navy and Marine Corps with solutions to emerging operational challenges.

Our mission accomplishment depends on our people. The IHEODTD team is our greatest asset and we must continue to invest in professional development and quality-of-life initiatives because every member of the command has a role in the execution of our vision. The entire workforce must embrace our commitment to on-time/on-cost delivery of products and services to our customers.

While our mission defines our impact, we remain a working-capital funded organization. To achieve our strategic goals, we must increase the availability of internal funding. The best ways to do this are to provide world-class customer service, the most innovative research and development, and to continue capturing new business opportunities for smart growth. Our vision is sound and our goals are measurable: if properly executed, our team will be 400 work-years stronger by 2025.

To achieve our vision, we will reshape our industrial complex; capture new business opportunities; and continue to provide reliable, quality, and affordable products and services. As an organization, we must accept this challenge and look forward to the next 125 years of service to our nation.

This document provides a strategic vision that ensures an efficient, vibrant and responsive naval energetics capability.



**Capt. Vincent R. Martinez, USN**  
Commanding Officer



**Mr. Ashley G. Johnson**  
Technical Director

As a field activity of the Naval Sea Systems Command (NAVSEA) and part of the Naval Research and Development Enterprise, IHEODTD is the leader in ordnance, energetics and EOD solutions for the Department of Defense. This strategic vision provides tiered planning to drive change and align efforts that support the warfighter on current and future battlefields.

### **VISION**

In 10 years, IHEODTD will grow 400 work-years stronger by reshaping our industrial complex; capturing research, development, test and evaluation (RDT&E) opportunities in energetic systems; and providing reliable, quality and affordable products and services.

### **MISSION**

RDT&E, manufacturing and providing in-service support of energetics and energetic systems. Provide Soldiers, Marines, Sailors and Airmen with information and technology to detect, locate, access, identify, render safe, recover, exploit and dispose of explosive threats.





**FLY FARTHER.  
HIT HARDER.  
SAVE LIVES.**

Whether at sea, in the air, or ashore anywhere in the world, IHEODTD provides our naval, joint and coalition military forces the ability to **Fly Farther, Hit Harder and Save Lives.**

**Fly Farther by** conducting research, development and testing of new energetic materials and by innovating solutions to enhance speed, range and signature capabilities.

**Hit Harder by** using world-class expertise in energetics applications such as warheads, propulsion, fuzing, modeling and safety to develop and improve warfighting systems and enhance lethality.

**Save Lives by** ensuring our warfighters' critical tools, equipment and information provide an unfair advantage over our adversaries' capabilities.



# GOAL 1

MODERNIZE, RESTORE AND/OR RESHAPE IHEODTD FACILITIES, UTILITIES AND INFRASTRUCTURE TO ENSURE MISSION ACHIEVEMENT AND FISCAL SUSTAINABILITY

- OBJECTIVE 1.1:** Modernize and maintain critical IHEODTD utilities to ensure mission achievement and efficient operations.
- OBJECTIVE 1.2:** Invest, divest or optimize selected facilities, equipment and capabilities to maximize fiscal health and enhance operational efficiency.
- OBJECTIVE 1.3:** Develop a responsive, cost-effective partnership with Naval Support Activity South Potomac and Naval Facilities Engineering Command that accommodates IHEODTD's unique industrial mission to facilitate mission accomplishment, timely project execution, and workforce quality of life.

For more than 125 years, IHEODTD has developed, tested and manufactured energetic materials and systems. A majority of the base's infrastructure constructed years ago is still in use today. In order to remain responsive to current and future requirements, selected facilities must be optimized and modernized over the next 10 years. This may include new construction, renovation, consolidation, decontamination and/or demolition.

Our workforce deserves buildings and facilities that inspire productivity and pride and are reliable, safe and secure. There can be no compromise when it comes to our team's safety. A dedicated investment strategy in infrastructure will provide a vibrant naval energetics capability for the next 125 years.



# GOAL 2

## ESTABLISH PUBLIC-PRIVATE PARTNERSHIPS (P3) TO ENHANCE ENERGETIC MATERIALS AND SYSTEMS SUPPORT TO THE FLEET

- OBJECTIVE 2.1:** Identify and pursue the right P3s to facilitate infrastructure modernization, overhead cost reduction, and work-year growth.
- OBJECTIVE 2.2:** Identify and overcome barriers associated with the establishment and execution of P3s to attract and maintain private industry interest.
- OBJECTIVE 2.3:** Develop and execute procedures for integrating P3 operations within IHEODTD's product line to maintain seamless customer support.

The Navy and Marine Corps rely on IHEODTD for a broad set of critical energetic and EOD capabilities. Maintaining our readiness level requires a significant amount of resources that are increasingly difficult to realize in the current budget environment. When workload decreases or becomes unpredictable, it is challenging to maintain such a large and diverse industrial complex, as well as the intellectual capital necessary to operate it. Establishing additional private partnerships provides IHEODTD options to address expenses and maintain the unique capabilities needed for our nation's defense.

IHEODTD has been designated a Center of Industrial and Technical Excellence. This provides increased flexibility and local control over P3s. These partnerships allow IHEODTD to improve and maintain our capabilities by sharing under-utilized plant capacity, supporting the modernization of existing facilities, while also optimizing costs.



# GOAL 3

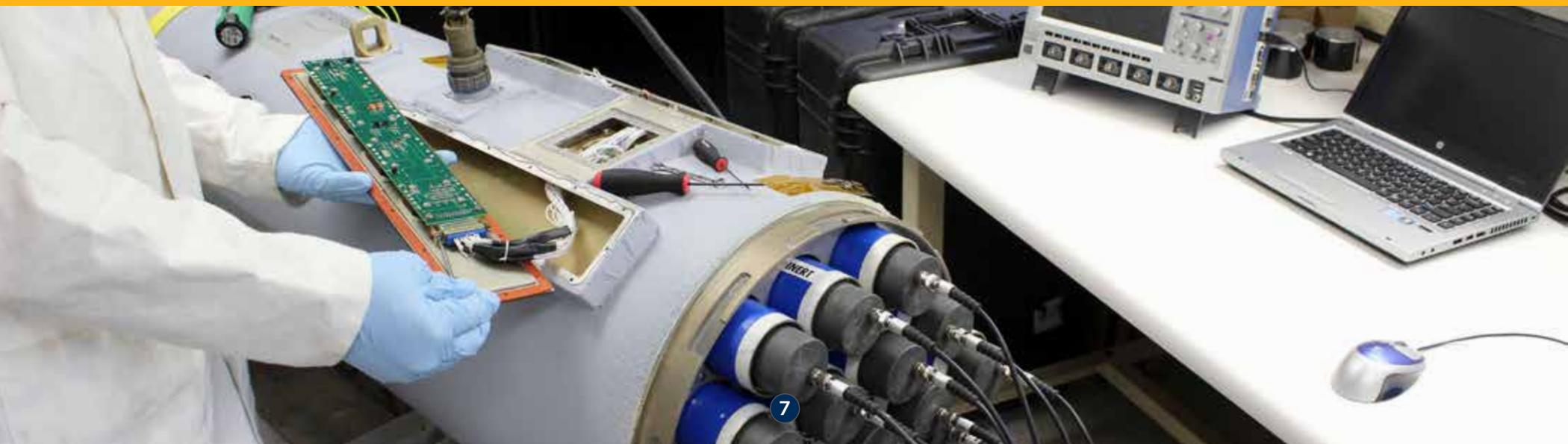
DEVELOP NEW PRODUCTS AND SERVICES ACROSS IHEODTD CORE COMPETENCIES TO SUPPORT STRATEGIC INVESTMENTS AND TO TRANSITION ADVANCED WARFIGHTING CAPABILITIES

- OBJECTIVE 3.1:** Conduct market research and analysis of warfighter demand signals to identify new business opportunities and profitable capability investment areas.
- OBJECTIVE 3.2:** Conduct analysis of emerging technology applications to identify new business opportunities and profitable capability investment areas.
- OBJECTIVE 3.3:** Identify, prioritize and resource investments in new capabilities to facilitate the capture of new business.
- OBJECTIVE 3.4:** Conduct informed business development efforts to acquire enduring new work to help maintain a relevant workforce and lower overhead costs.

IHEODTD must develop new products and services across its core competencies to stay relevant to the future warfighter and support the Chief of Naval Operations' (CNO) "A Design for Maintaining Maritime Superiority," expand the Navy's capabilities for power projection, and meet the goals of the National Military Strategy. As the principal agent for energetics to the fleet, IHEODTD's specialized expertise will be leveraged to develop new technologies that address existing requirements and future warfighter needs.

CNO's 2016 direction states "as technology is introduced at an accelerating rate, it is being adopted by society just as fast - people are using these new tools as quickly as they are introduced, and in new and novel ways." Energetic materials and systems are no different: We must stay current in emerging technologies and drive innovation to maintain the nation's maritime dominance.

To ensure the Navy avoids technological surprise and force potential adversaries to question their ability to successfully engage in armed conflict, IHEODTD will conduct technology scouting, forecasting and development activities to ensure our warfighter remains cutting-edge with enhanced kinetic and non-kinetic options enabling them to win.



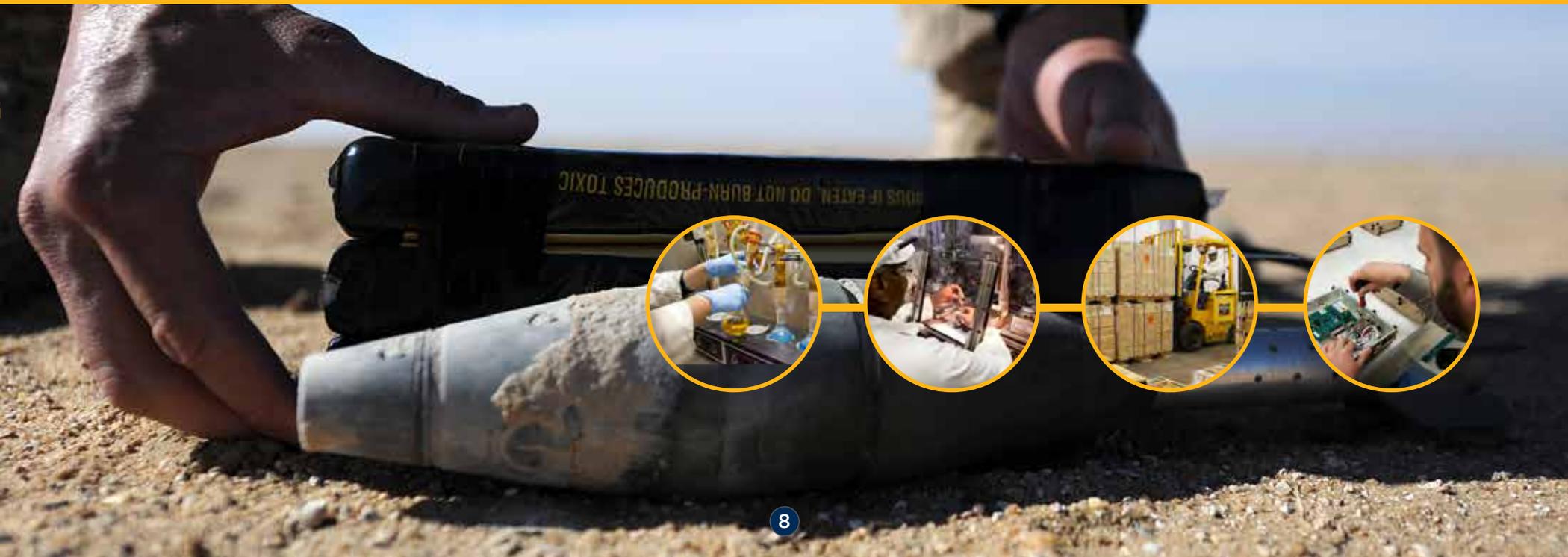
# GOAL 4

ESTABLISH IHEODTD AS THE ENERGETIC MATERIALS AND SYSTEMS PROVIDER OF CHOICE TO PROTECT THE NAVY'S INTELLECTUAL CAPITAL WHILE EXPANDING DELIVERY OF CORE PRODUCTS AND SERVICES

- OBJECTIVE 4.1:** Make process improvements to reduce execution lead times and meet delivery dates that help enhance the command's organizational reputation.
- OBJECTIVE 4.2:** Capture IHEODTD intellectual capital and effectively transfer it to the next generation of energetics and EOD professionals.
- OBJECTIVE 4.3:** Conduct analysis of existing customers to identify opportunities that responsibly expand the level and scope of support.
- OBJECTIVE 4.4:** Conduct informed business development efforts to expand core products and services.

IHEODTD is the only activity in the Department of the Navy that delivers energetic materials and systems technology solutions from initial product research throughout the end of the product's life cycle. Given historical fleet and force dependence on the command's products and services, it is imperative that we thrive in the future. Every effort will be made to sustain and grow IHEODTD's core business areas to deliver more high-quality products faster and at a lower cost.

We must focus our attention to on-time/on-cost delivery of products and services, as well as the exploration of progressive approaches to achieve compliance with relevant regulations and policies. Our customer service must be world-class and ensure that we do what we say we are going to do.



# GOAL 5

INVIGORATE INTEREST IN ENERGETICS TO PROMOTE NEW RDT&E INVESTMENT AND THE CONSIDERATION OF ADVANCED ENERGETICS OPTIONS WITHIN THE CAPABILITIES DEVELOPMENT AND ACQUISITION PROCESSES

- OBJECTIVE 5.1:** Develop and execute a key stakeholder engagement plan that establishes and maintains broad support for a naval energetics renaissance.
- OBJECTIVE 5.2:** Create, resource and sustain an advanced RDT&E program to address existing technology gaps, prevent future technology surprises, develop/sustain critical technical expertise, and create new capability options for the warfighter.
- OBJECTIVE 5.3:** Establish an innovation lab to enable agile energetics development, facilitate external partnerships, and retain/develop critical expertise.

Naval weapon systems use energetics across all warfighting domains: undersea, surface, air and land. Energetic materials are critical components of every weapon system, platform and warfighting capability. However, given competing priorities and the high operational tempo of war, the following risks are identified:

- “Technological surprise” is occurring as scientific advances of potential adversaries are outpacing those from the United States and our allies;
- Capabilities are not adapting or advancing to meet emerging warfighter needs;
- Access to critical energetic precursors is controlled by potential adversaries or limited by unstable domestic sources;
- IHEODTD competency is jeopardized by a sun-setting workforce.

The nation is rapidly losing its superiority over potential adversaries with regards to the range, speed, lethality, size, weight, signature and safety of our weapon systems. A naval energetics renaissance led by IHEODTD is needed to reinvigorate the nation’s RDT&E and provide solutions to emerging naval operational challenges. This command will develop a long-range technology plan, execute a sustainable RDT&E investment, re-establish a collaborative community, assure technical competency is sustained, and allow for a graceful transition to future naval weapons systems.



## COMMAND TENETS

- **Proficiency:** High degree of skill and confidence that enables mission; relentless pursuit of excellence.
- **Discipline:** Assertion of will; ensuring prompt initiation of appropriate action in the absence of orders and working at the highest level possible even in the absence of supervision.
- **Motivation:** Born from a clear understanding of purpose, freedom to self-direct activity, and ability to pursue mastery of their skills.
- **Morale:** A feeling of confidence and well-being, enabling one to face hardships with courage, endurance and determination. The armor that protects one from those daily “slings and arrows” that distract from accomplishing the mission.
- **Esprit de Corps:** The loyalty, pride and enthusiasm one shows for their teammates. It is a common bond that provides intense solidarity along with a deep regard for unselfishness, self-discipline, duty, energy, honor, patriotism and courage.



# PEOPLE INITIATIVES

ENSURE IHEODTD'S WORKFORCE IS PROPERLY INFORMED, ALIGNED, TRAINED, ENGAGED, MOTIVATED AND REWARDED

- INITIATIVE 1:** Invigorate internal communications to inform the workforce of organizational activities, successes and opportunities to increase morale, motivation, recognition of individual/team achievement and esprit de corps.
- INITIATIVE 2:** Develop and implement a personnel acquisition program that anticipates organizational needs and proactively acquires the human capital required to achieve the command's strategic goals.
- INITIATIVE 3:** Develop and implement a personnel development program to maintain proficiency, advance mastery, establish purpose, encourage autonomy, and instill discipline throughout the workforce.
- INITIATIVE 4:** Develop and implement a performance assessment program to recognize and reward proficiency, mastery, purpose, autonomy and discipline.
- INITIATIVE 5:** Develop and implement a quality of work-life initiative to enhance organizational morale, motivation and esprit de corps; reduce attrition; and protect critical expertise.

Strategy development identified a set of initiatives that impacts all five goals. These initiatives were captured into two supporting plans: people and processes. The power of IHEODTD is our people, and it is crucial that everything possible is done to ensure an engaged, motivated and rewarded workforce.



# PROCESS INITIATIVES

PROVIDE FAST, RIGOROUS, REPEATABLE, ACCURATE AND SAFE WORK SYSTEMS

- INITIATIVE 1:** Improve the rigor in the pillar programs of quality, safety, systems engineering and project management to enhance project execution effectiveness.
- INITIATIVE 2:** Streamline operations and support services to enable the on-time delivery of reliable, quality and affordable products and services.
- INITIATIVE 3:** Develop and implement an enhanced cybersecurity awareness and compliance program to prevent unauthorized information technology activity, secure industrial systems, and integrate cybersecurity into all products and services.

It is vital for IHEODTD to renew its rigor in the four pillar programs: quality, safety, system engineering and project management. Achieving this renewed discipline in its technical pillar and business areas is essential to realizing consistent product excellence in all business areas regardless of the project type, size or complexity. Excellence in fundamentals is imperative to achieving the command's strategic vision of 400 additional work-years.

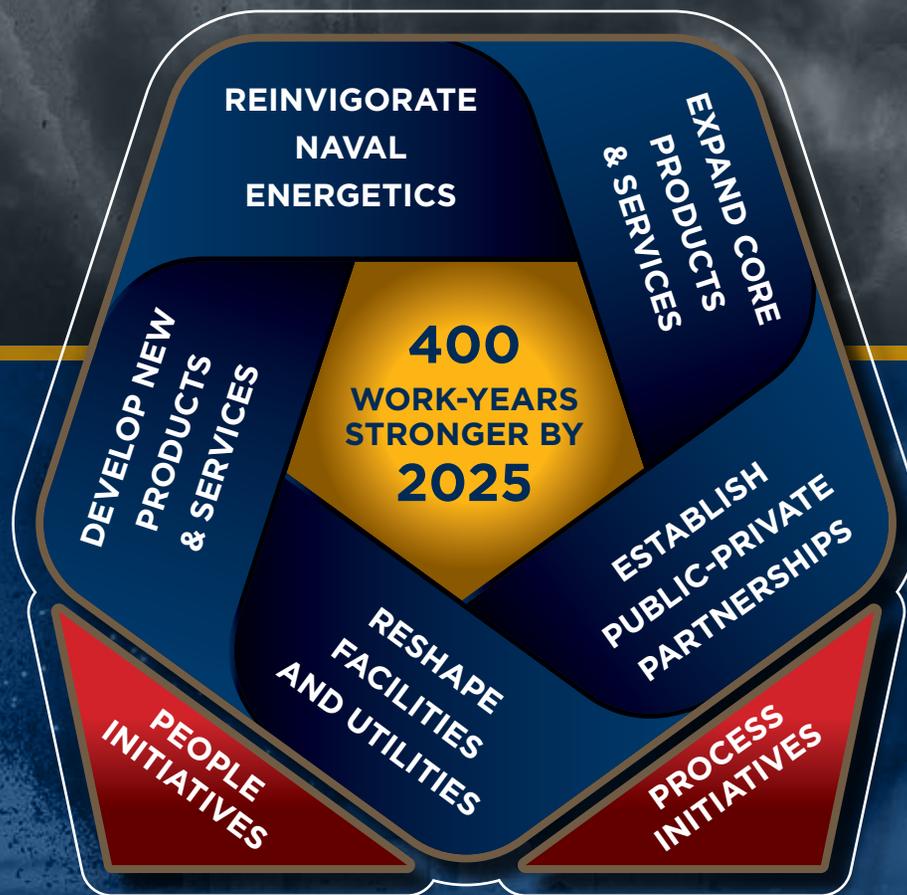


For more than 125 years, Indian Head has flourished and provided the nation with energetics solutions that impact every warfighting domain and naval weapon system. IHEODTD evolved with changing naval priorities: established as the Naval Proving Ground in 1890 to the Naval Powder Factory in 1932, the Naval Propellant Plant in 1958, the Naval Ordnance Station in 1966, the Indian Head Division, Naval Surface Warfare Center in 1992, and finally Indian Head EOD Technology Division in 2013.

With the implementation of this strategic vision, IHEODTD will lead our naval energetics renaissance and continue to shape the next 125 years of ordnance technical excellence.

**FLY FARTHER.  
HIT HARDER.  
SAVE LIVES.**





# STRATEGIC PLAN

Naval Surface Warfare Center Indian Head EOD Technology Division

2016 - 2025



3767 Strauss Avenue  
Indian Head, MD 20640  
(301) 744-6505  
[nswc.iheodtd.pao@navy.mil](mailto:nswc.iheodtd.pao@navy.mil)

Distribution A: Approved for public release; distribution unlimited.