



NDIA 16th Annual Expeditionary Warfare Conference

**Rear Admiral Jim Shannon
October 26, 2011**

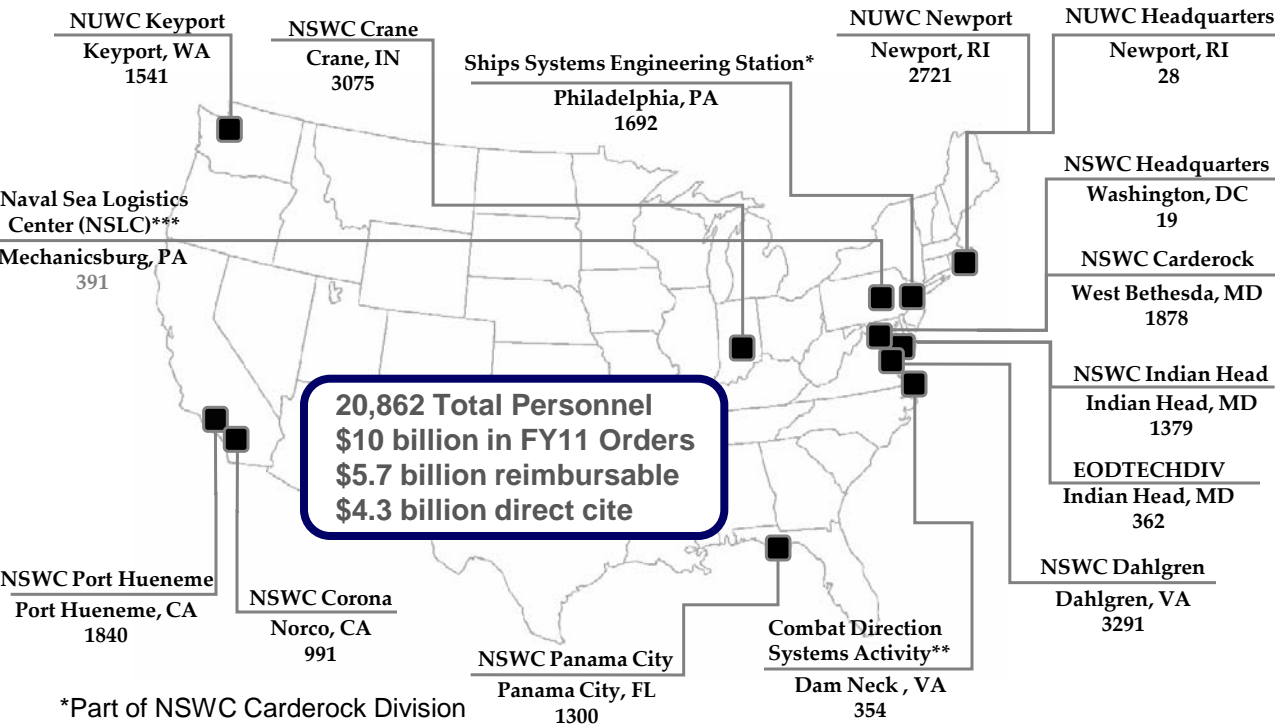
Decades of Experience and Lessons Learned...



Intellectual Capital of the Navy... Yesterday... and Today...



...evolved into a collaborative lab network

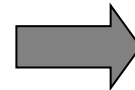


*Part of NSWC Carderock Division
 ** Part of NSWC Dahlgren Division
 *** Part of NUWC Keyport Division

- Provide research and development (R&D), test and evaluation (T&E) for the future Navy and in-service engineering and logistics support to the current Navy Fleet
- Business-based enterprise operating under the Navy Working Capital Fund
- Critical concentration of scientists, engineers and technicians (~14,700) with over 600 PhDs
- Unimpeded access to unique military facilities and technical capabilities

Warfare Centers (WFCs) exist to:

- Understand the technical dimensions of military problems
- Liaison with industry and academia to define the best solutions
- Provide quality assurance for Navy Programs
- Provide lifecycle support for Navy ship and submarine systems

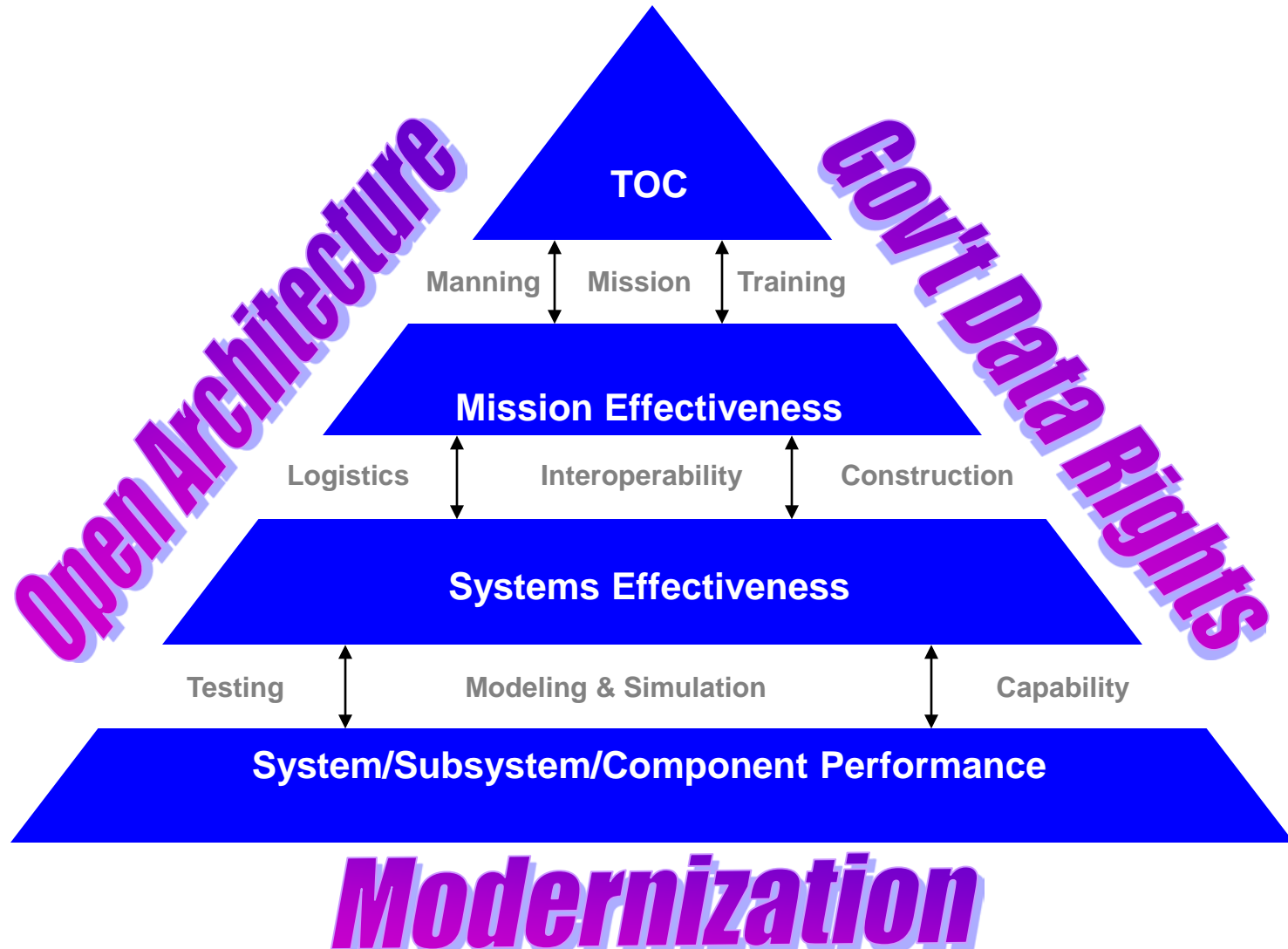


Products and Services Output

- In-Service solutions for Today's Fleet
- Technical Authority Advice and Decisions
- Interoperable Warfare Systems
- Innovation to provide technology solutions and facilitate technology transition to Tomorrow's Fleet

Finding the right balance to optimize Fleet conditions

All Roads Lead to the Cost Challenge



Building Trust and Transparency is Critical

And we count on our Industry Partners to help us with the cost challenge

Total In-House Capacity					Outsourced Workload			
Core Capability = Gov't Role					Industry Role			
Work Government Must Do	Technical Pipeline	Work Industry Can't or Won't Do	Best Value	Economic Viability	Design & Build	Unique Skills/ Capabilities	Best Value	Economic Viability
<ul style="list-style-type: none"> • Technical Authority • Smart Buyer • Independent Assessment • Avoid technical surprise (innovation) • Directed by higher authority • Title 10 	<ul style="list-style-type: none"> • Hands-on work • Sustain Knowledge Areas 	<ul style="list-style-type: none"> • Last source • High risk • Not profitable • WFPP 	<ul style="list-style-type: none"> • Data Rights • Design Disclosure • No fees • Life Cycle Maint. • Cost • Schedule • Performance 	<ul style="list-style-type: none"> • Generate sufficient OH • Sustain affordable rates • All other technical work 	<ul style="list-style-type: none"> • Produce end products and services 	<ul style="list-style-type: none"> • Only source • No compelling reason for government source • Not available in govt & critical to successful task completion 	<ul style="list-style-type: none"> • Efficient Production • Commercial gains • Cost • Schedule • Performance 	<ul style="list-style-type: none"> • Work is needed to sustain critical assets that are fragile in the private sector
Total Force Requirement								

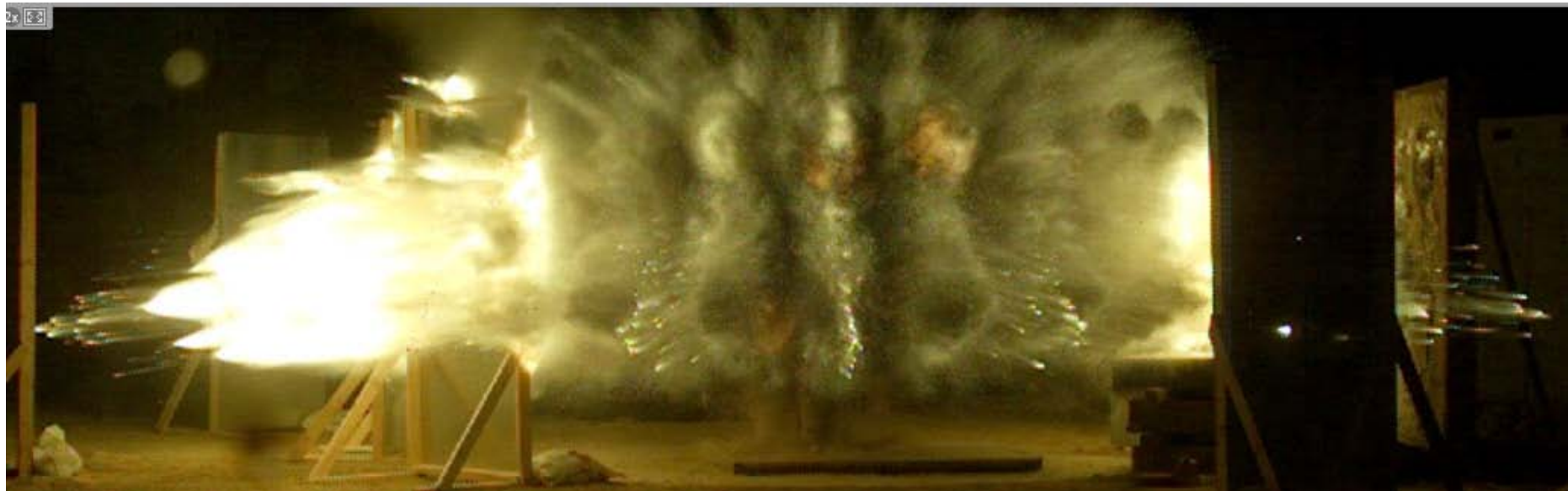
Finding the right balance to optimize Fleet conditions



With an eye on cost, we can't lose sight of keeping our technical asymmetric advantage

High Density Reactive Material

- ONR
- NSWC Indian Head Division
- NSWC Dahlgren Division
- Small Business (SBIR)
- Academia



Additional examples of keeping our asymmetric advantage



Mk28 UBA



**Marine Corps
Route Recon and
Clearance**



**LCAC Systems
Integration Lab**



**Small Synthetic
Aperture Minehunter**



RFID

Back to the Future

The Dahlgren Clock still Tickin'...



Intellectual Capital of the Navy... Yesterday... and Today...





Definitions

Criteria for In-House Performance	Criteria for Outsourcing
<p>Technical Authority: Is the work specifically required to establish technical standards, tools and processes; and to ensure adherence to those standards? Does the work require an independent evaluation and certification of suitability or effectiveness of warfighting solutions with respect to stated requirements?</p>	<p>Design and Build: Is the work appropriate for industry to perform; i.e., it involves support to the government decision making roles, it exceeds the level needed to right size the in-house technical capability, and meets the following conditions:</p> <ul style="list-style-type: none"> • Is a commercially available function/service • The commercial source has a good track record • The market is sustainable over time (sufficient workload and profit incentive for industry) • The work has a definable outcome or product and is measurable
<p>Smart Buyer: Does the work require delegated or derived authority and the resources to initiate actions or activities? Does this work involve selecting and authorizing a contractor/governmental entity to produce military products or services?</p>	
<p>Independent Assessment: Is the work needed based on the delegated or derived authority plus the ability to judge the absolute or relative worth, quality or value of an activity, product or process relative to national security requirements?</p>	
<p>Avoid Technical Surprise (Innovation): Is the work needed to advance a critical warfighting capability that is needed but does not exist today, and for which no private sector entity is willing to invest? Is the work needed to provide solutions to complex technical problems for which government must have a strong technical understanding and involvement? Does the work needed to anticipate and respond to current and future National needs?</p>	
<p>Technical Pipeline: Will this work provide “hands-on” engineering design and development experience necessary to grow future inherently governmental technical decision makers (smart buyers, honest brokers, technical authority warrant holders)? Will this work help to sustain knowledge areas critical to a needed in-house technical capability?</p>	<p>Unique Skills/Capabilities: Is Industry the only source for this work and is there no compelling reason to establish a government source as an insurance policy in the case of a national crisis? Does industry provide needed skills/capabilities that are critical to the successful completion of this task and are not available in government?</p>
<p>Last Source: Does the work require access to unique or national facilities that are not available in Industry (due to the associated facility maintenance and modernization costs)? Is industry not able to perform is work (due to issues of propriety, security, or special expertise only available in government)?</p>	
<p>High Risk: Is there a high risk of contractor default? Is there high risk to warfighting capability should the contractor default? Is industry unwilling to accept the work because they are unwilling to accept potential liabilities? Does the work ensure interoperability of warfare systems and integrated warfighting capability?</p>	
<p>Not profitable: Is the work not able to be performed by a private sector source due to profitability issues by the private sector</p>	
<p>Work For Private Party: Is the work within your mission area and being requested by a contractor because no similar capability exists in the private sector; and can be defined by a one-time product or service with a specific deliverable?</p>	
<p>Best Value: Can results be achieved soonest by employing the Government source while maintaining the least cost and delivering the greatest overall value?</p>	<p>Best Value: Is this work available in the private sector and is Industry the best value in terms of cost, schedule and performance?</p>
<p>Economic Viability: Will performing this work in-house help to sustain a needed, but fragile National asset, technical capability and/or Warfare Center Division.</p>	<p>Economic Viability: Is this work needed to sustain critical assets that fragile in the private sector.</p>