

# Naval Maintenance Vocational Consortium (NMVC)

Addressing the Lack of Journeyman Level Tradespersons  
in the Navy Ship Maintenance Industry

NSRP Workforce and Compliance Panel Presentation



June 7, 2024



# Outline

- ▶ The Issue
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- ▶ Benefits of NMVC
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# The Issue

## The Lack of Journeyman Level Maritime Tradespersons

- ▶ Current shortage of skilled tradespersons in the Navy shipbuilding, maintenance and repair industry leading to delays and over budget availabilities.
- ▶ Not capable of meeting the workforce requirements to build ships and submarines.
- ▶ Hampton Roads lacks that “what’s next” after STEM, entry level, apprentice training.



# Where does NMVC fit in - existing gap Level II & III

From VSRA presentation March 2024



# NVMC expedites VSRA MTT Phase Three

From VSRA presentation March 2024

## VSRA MTT Development Road Map

PHASE ONE:  
COMPLETED

### TASK

MTT Welding Level II & III  
MTT Structural Fitting Level II & III

### MECHANISM

HR STRONG (Pilot)  
Existing State Funding

PHASE TWO:  
CURRENT

### TASK

MTT Coatings Level II & III  
MTT Electrical Level II & III  
MTT Outside Machinist Level II & III

### MECHANISM

HR STRONG  
DOL Good Jobs Challenge Grant

PHASE THREE:  
FUTURE

### TASK

MTT Pipefitting Level II & III  
MTT Sheet Metal Level II & III  
Needs analysis for additional trades

### MECHANISM

Remaining Federal/State Funding  
NNS/EB provided curriculum rollout

Long Term Outlooks:

**Continue to expand the collaborative of the Marine Trade Training program into other Virginia community colleges and beyond**

**Incremental Development of VSRA Marine Trade Training (MTT) Level IV Courses**

# Introduction to NMVC

## Naval Maintenance Vocational Consortium

### ▶ Purpose:

- Provide a pipeline of Journeyman Sailors and Industry tradesmen in support of the Naval shipbuilding and maintenance industry.

### ▶ Goal:

- To address the current shortage of skilled tradespersons in the Navy ship maintenance industry.
- Shorten the path to Journeyman skills through stackable credentials.

### ▶ Importance:

- Ensuring the readiness and effectiveness of the Navy fleet – NorthStar 75.

### ▶ Proposed Solution:

- Establishing NMVC as the training grounds where entry level tradespersons work toward journeyman status via stackable credentials.

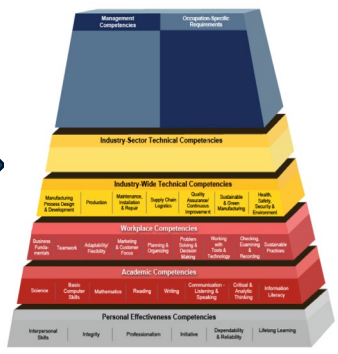
# Naval Maintenance Vocational Consortium

1<sup>st</sup> it is a shared training environment for Government and Industry.

**Advanced ATDM  
in Hampton Roads**



2<sup>nd</sup> it is a standard for maritime trades competencies that are stackable and tracked throughout a career.



**Navy / Industry Competency  
Management Collaboration**

+

**Stackable Competencies**

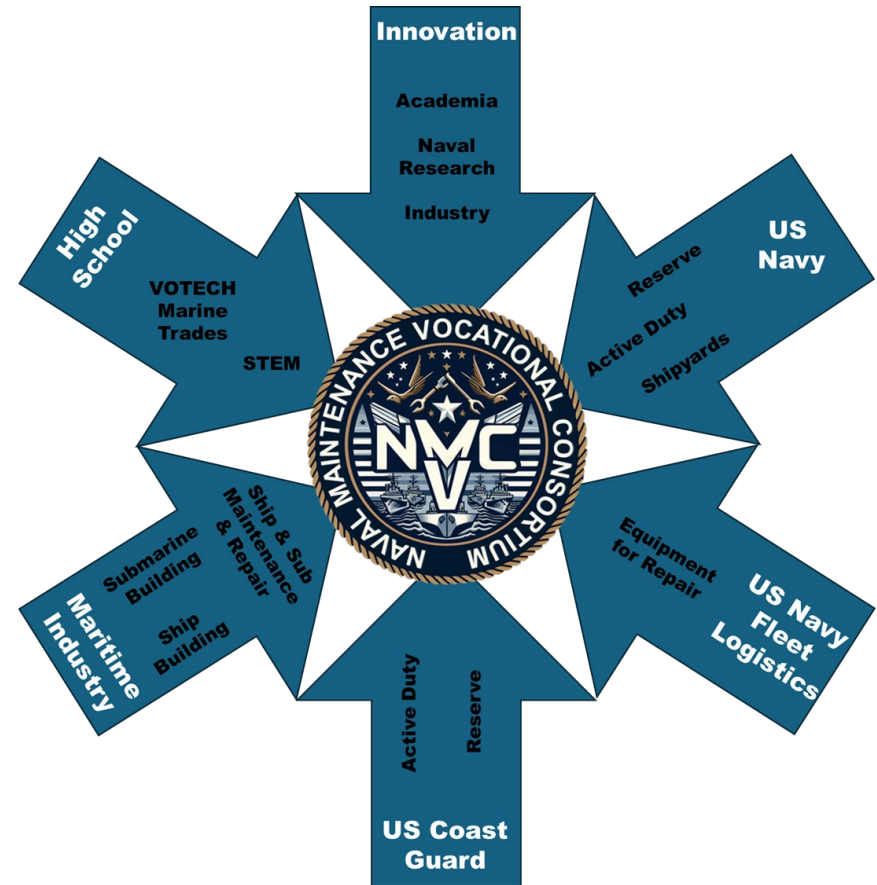
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**Competency Resume**

# Naval Maintenance Vocational Consortium

NMVC is:

- ▶ A consortium comprised of maritime shipbuilding and maintenance stakeholders
- ▶ Established to standardize competency-based shipbuilding, maintenance and repair training.
- ▶ Provides full collaboration training
  - Military, government civilian and private industry all train in the same classroom & facility
  - Real-world production work as training devices
  - Builds a rotatable pool of serviceable Navy / Coast Guard equipment
- ▶ High School vocational trades training & STEM
- ▶ A Sandbox of maritime innovation.
  - A place to collaborate, experiment and innovate in best of breed technology, practices and processes.





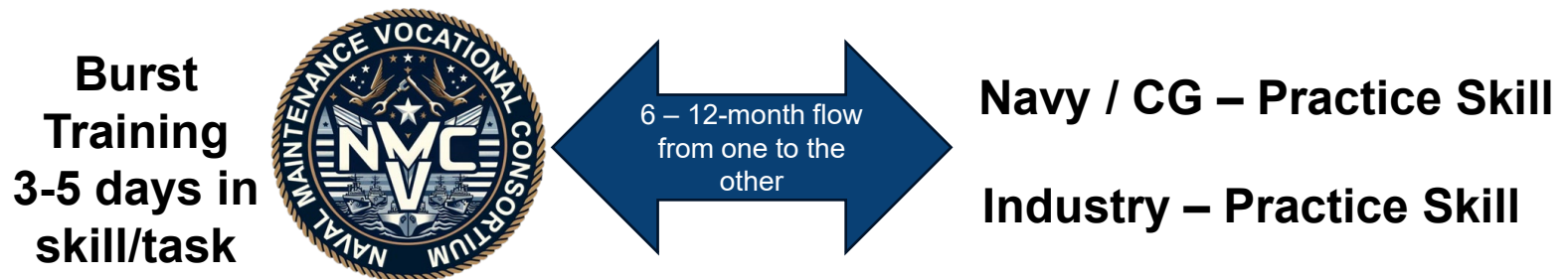
# Where can NMVC be hosted?

Anywhere that is accessible to Industry and Navy Personnel.

- ▶ The premise is to replicate the training that happens at the Mid-Atlantic Regional Maintenance Center (MARMC) in ship maintenance and repair.
- ▶ MARMC trains 500+ Navy Hull, Mechanical & Electrical competencies and tasks. These same competencies are needed in Industry shops.
- ▶ Training can happen at individual location such as a trades training center, or at individual companies using NMVC standardized training.
  - TCC Skilled Trades Academy.
  - Local Businesses and Shipyards with training infrastructure.
  - **New facility at the Military Circle Mall site for example.**

# How is the training conducted

- ▶ Training is short duration / quick hands-on instruction in individual competencies. Build Journeymen in skills/tasks vs. entire trade.
- ▶ After initial training such as MTT or Navy A schools the training takes place in stackable competencies/tasks that address the needs of a journeyman qualified tradesmen.
- ▶ Apprentice students attend NMVC for burst training, 3-5 days on average to learn a skill. Then the student returns to the Navy or business to practice the learned skill to gain proficiency (10 days).
- ▶ Next the apprentice returns to NMVC for an additional skill/competency in another short burst of training and returns to the Navy or business to practice the skills and repeats the process until all competencies are trained in that trade.



# Benefits of NMVC

- ▶ Improved recruitment and retention of journeyman level tradespersons, enhanced readiness of the Navy fleet, and a more efficient and effective maintenance and repair training system.
- ▶ Shared resources. Neither Navy nor Industry can afford separate training pipelines with different training standards.
- ▶ Industry participants may enter Active Duty already prepared for their assignments. (A recruiting ground for USN)
- ▶ Becomes the proving ground for innovation in maintenance.
- ▶ Becomes a hub of maritime vocational training and education for local school systems.

# NMVC as a sole source Phase III SBIR

NMVC can be a Phase III SBIR technology sole source contract.

NMVC leverages Valkyrie technology of the

- ▶ Competency Evaluation System Phase I SBIR and
- ▶ Phase III technology of a competency-based learning management system

NMVC as a Phase III SBIR provides expedited contracting ability and can receive funding from Federal, State, Local and Industry partners.

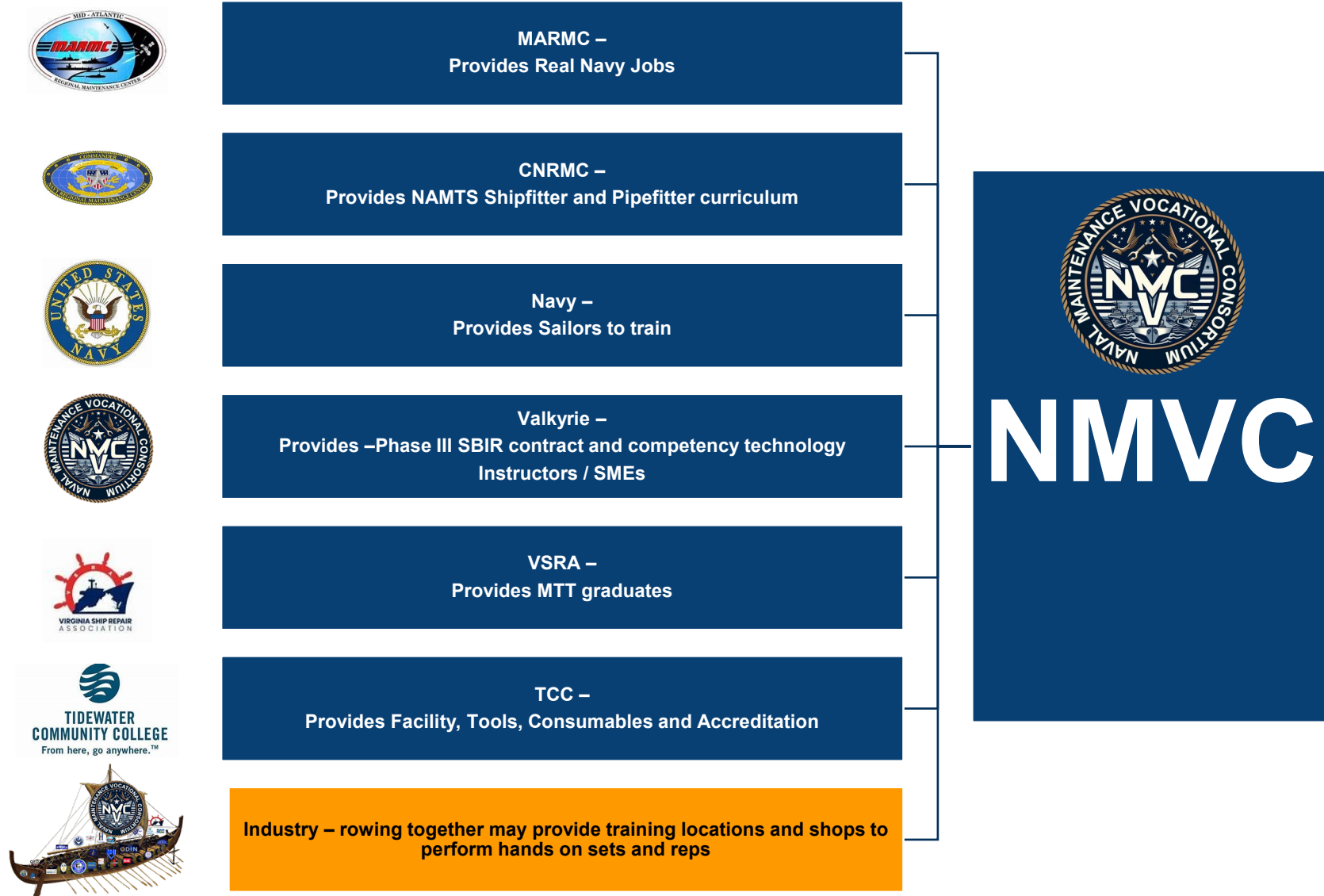
NMVC SBIR statement of work supports not just the training but also the infrastructure needed to train journeyman trades skills.

# Proposed Pilot of the solution

## Objectives:

- ▶ Initiate a pilot program for NMVC to prove value of a joint Journeyman maintenance training program.
- ▶ Prove decreased time in training to be able to positively contribute to the mission.
- ▶ Facilitate Industry and Naval participation.
- ▶ Prove feasibility of financial & “in kind” collaboration from both DoD and private industry.
- ▶ Prove value of standardizing maintenance and repair training across the maritime industry trades.
- ▶ Establish the value of using a stackable competency-based maintenance and repair proficiency management system.

# Potential Participation in NMVC Pilot



# Purpose of this Presentation

- ▶ This proposal is to initiate the discussion for:
  - Establishing an NMVC consortium.
    - » NMVC will foster collaboration, standardization and modernization of maritime ship/sub building, maintenance and repair training.
  - Gather interest in NMVC and interest in participation on the NMVC Board of Directors
    - » BOD comprised of DoD, DoN and maritime maintenance/repair industry professionals, city leaders.
  - Obtain agreement to establish a competency-based maintenance and repair Talent Management System.
  - Propose DoD and private industry freely collaborate, both professionally and financially.
  - Propose standardization of maintenance and repair training across the maritime industry trades.

# Call to Action Industry

- Engage:
  - Participate in future NMVC meetings, workshops, and initiatives to contribute industry expertise and resources.
- Collaborate:
  - Offer training opportunities and real ship repair and maintenance jobs to NMVC for industry personnel training.
- Advocate:
  - Support the growth and expansion of NMVC by leveraging existing infrastructure, facilities, and training centers.
- Innovate:
  - Explore opportunities to modernize and digitize maritime maintenance and repair training in collaboration with NMVC.
- Lead:
  - Volunteer to join the NMVC Board of Directors to shape strategic decision-making and policy development for the future of maritime maintenance training.



# Call to Action Department of the Navy

- Provide Financial Support:
  - Allocate funding to support the establishment and operation of NMVC, ensuring its sustainability and success.
- Collaborate:
  - Foster collaboration between DoN, private industry, and academia to standardize competency-based maintenance and repair training.
- Support Research and Development:
  - Invest in research and development efforts to enhance training technologies and methodologies within NMVC.
- Promote NMVC:
  - Raise awareness of NMVC within the DoN community and encourage participation and support from other Navy commands and organizations.
- Streamline Processes:
  - Work with NMVC to streamline processes and reduce administrative burdens, enabling efficient and effective training delivery.
- Lead:
  - Volunteer to join the NMVC Board of Directors to shape strategic decision-making and policy development for the future of maritime maintenance training.