## **Product Support Requirements**

Presented by:

Josh Erlien, Chief of Product Support (WX)

Dr. Randall Walker, Chief of Product Support (JX)



CAPT Duncan McKay, USN Commanding Officer



Dr. Angie Lewis, SES
Technical Director



- Workforce and Cultural Change
- Define Product Support
- Demand & Workforce Shaping
- Product Support & Logistics Objectives and Initiatives
- Collaboration



# **Workforce and Cultural Change**

## Workforce changes

- NSWC Crane will attrit 35% of logistics workforce of which 2/3's are Experts or Senior Leaders
- Grow 110 positions in traditional logistics workload

## Cultural Change

- Make / Buy
- Reinvent the entry level logistician
- Embrace remote support



## What is "Product Support"

- Product Support ensures delivery of optimal Warfighting capabilities and Operational
   Availability with balanced performance and cost. This result is obtained by integrating the logistics
   competency with data science, reliability and maintainability engineering, and operations research
   analysts to effectively model complex systems of systems and their environment, while managing
   the ever increasing scale of data and required decision responsiveness.
  - Logistics is the detailed coordination of a complex support/sustainment infrastructure involving many resources, products, processes, facilities, or supplies for maximizing system Operational Availability.
  - Data Science is the field of study that combines domain expertise, programming skills, and mathematics and statistics knowledge to extract meaningful insights from data, analyses, and trends.
  - Operations Research Analyst use statistical analysis, simulations, predictive modeling, or other
    methods to analyze information and develop practical solutions to business problems. Analysts weigh the
    costs and benefits of alternative solutions or approaches in their recommendations.
  - Reliability Engineering is an engineering discipline utilizing system analyses and the application of scientific know-how to a system, component, product, plant, or process to ensure it performs its intended function, without failure, for the required time duration in a specified environment or mission scenario to meet the Operational Availability requirement.
  - Maintainability Engineering is the discipline that applies engineering principles to the design and maintenance of products, both hardware and software, ensure the system is sustainable throughout the lifecycle.

### **Design for Support – Design the Support – Support the Design**

### **Demand**



- NSWC Crane is experiencing a high demand for PS&L professionals. (Maritime EO/IR, UxS, Radar, NGJ, SLQ-32/Decoy, Hypersonics)
  - The current and future PS&L demand <u>exceeds</u> NSWC Crane Government staffing <u>capacity</u>
  - NSWC Crane needs strong industry <u>partners to provide capability</u> and <u>capacity</u> to meet current and future requirements
  - Digital transformation is driving requirements for new skills and capabilities
    - We can't do product support like we used to and be successful
    - Reeducating the workforce to perform in the digital environment



# **PS&L Workforce Shaping**

- NSWC Crane will lose 35% journey, expert and senior leader PS&L Government Employees to attrition over the next 5 years
- NSWC Crane is forecasting a growth of 110 new logistics (0346) positions
  - Reshape what we deliver for product support
  - Digital transformation
  - NSWC Crane must fill these Gov PS&L vacancies <u>without adversely</u> <u>impacting our contractor base</u>
  - Solutions of the future will depend on <u>remote capabilities</u>
  - Capability and capacity gains should <u>not be constrained by</u> <u>geographical location</u>



## **Objectives and Initiatives**

### Objective:

Provide customers with the Product Support and Logistics (PS&L) products and services they require to maximize Readiness at Cost for the Warfighter.

- A). Understand the needs and requirements of the customer (refer to as demand signal)
- B). Understand the capability and capacity of the workforce
- C). Assign resources to demand
  - i.) What is total # of positions required?
  - ii.) What portion of those will be executed by government resources?
- D). When considering C (ii) above,
  - i.) What is the targeted size of the government labor pool?
  - ii.) What gaps exist between the current capability and capacity that is required?
  - iii.) What action will be taken to close gaps?
  - iv.) If action requires adding resources, will it be internal or external hire?
- E). When considering C (ii) above, what workload will be allocated to contractor partners?
- F). Measure performance (Readiness/Cost) and support continuous improvement.
- G). What portion of those will be executed by contractor partners?

### **Ongoing Initiatives:**

#### **Develop/Improve workforce**

- PS&L Competency Develop Program to provide our leadership with an approach and tool set to enable them to evaluate the capability of the workforce, identify gaps, and proactively remediate the gaps.
- Command PS&L Community of Interest to engage our PS&L leadership (over all series engaged in PS&L workload) and share knowledge among the competency and greater Navy/DoD enterprise.
- Establish local academic opportunities to train incoming new hires to a higher level than currently experienced (IVY Tech/ROI initiative)

#### Become intentional in content of work partnerships

 Developing Make/Buy criteria to enable a business unit to balance work across Govt/Commercial resources

NOTE: There are two uses of Make/Buy in conversations: (1) determine whether position is developed internally or hired from outside, and (2) define distribution of workload executed between government and commercial partners. Both are relevant.



### Strategically Government

Positions classified by Division Managers as critical to their business

### Gray Space

- Positions that can be filled by <u>either</u> Government or Contractor personnel
  - Serves as the pipeline to grow future "strategically government positions"
  - Diverse in tasking Includes <u>meaningful</u> work for the contractors
  - Gives the domains the ability to expand and contract their workforce

### Strategically Contractor

- Positions that NSWC Crane will consistently rely on industry partners to staff.
  - Inventory Tracking / Management
  - Warehousing
  - Asset Tracking
  - Shipping / Receiving



## **Strategically Contractor**

### Leadership Role

 The contractor has the in house knowledge and tools to provide the capability and capacity

### Assume Leadership Roles:

- Supply Support
- PHS&T
- Support Equipment
- Training and Training Support
- Legacy / sunset product lines

### Modeling:

- Ability to perform Product Support Analysis
- General knowledge in big data including application and implementation of AI/ML

## Collaboration



## Establishing a shared vision for the competency

- Common / compatible set of tools and processes
- Initiate interchange on Best Practices in Digital Logistics for modeling, tools, and processes.

### Improve requirements

- Contracting for capability not just capacity
  - Capability Bring intelligence and experience to make us "bigger"
  - Capacity Giving us more of what already have
  - Gov to provide program requirements and priorities and the ktr will define the specific task to achieve performance goals.