Building and Modernizing Relevant Warships
for Force Deployment
Speed to Capability
Speed to Capacity
Speed to Relevancy

“Sea Power to the Hands of Our Sailors”

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PEO IWS – Future Ship Systems and Integration
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Future Force Objective

CURRENT STATE
- Disparity in capabilities
- Limited in force deployment
- Logistically challenged

FUTURE STATE
- Threat-based capabilities
- Flexible, networked and distributed force
- Logistically manageable
**Speed to Capacity**

**Force Level Upgrades Prior to Deployment**

**TRADITIONAL AVAILABILITIES**
Maintenance, repair, and combat system upgrades occur during CNO industrial availabilities.

**FUTURE AVAILABILITIES**
Maintenance and repair still occur as required

Force Level CS upgrades via modularity pier side

Battlegroup with latest capabilities
### Speed to Capability

#### Modular Compartments

- **Traditional Compartments**
  - 55 work DAYS for entire space, 10 foundation installation trades required

- **Modular Compartments**
  - <10 work HOURS for entire space, 5 foundation installation trades required

#### Foundation Installation Trades Required

- **Traditional Compartments**
  - Mechanical
  - Welder
  - Firewatch
  - Painter
  - QA Rep

- **Modular Compartments**
  - Mechanical
  - Welder
  - Firewatch
  - Painter
  - Assembly

**Potential 97.7% Reduction**
Speed to Capability
Component Based System Upgrades

Traditional Development

- Long technical insertion development time.

Component Based Development

- Common Ship Integrated Enclosures (CSIE) and COTS components will shorten technical insertion development time, improve combat system support system, and increase ship survivability.

Up to 9 years

LESS THAN 2 YEAR
Force Deployment Approach

OUTPACING THE THREAT

2018

Threat identified

CS identified

2022

CS integration
Rapid reconfiguration with CSIE and modularity

Integrated battlegroup
With latest capabilities

2020

Threat identified

CS identified

2024

CS integration
Rapid reconfiguration with CSIE and modularity

Integrated battlegroup
With latest capabilities

2022

Threat identified

CS identified

2026

CS integration
Rapid reconfiguration with CSIE and modularity

Integrated battlegroup
With latest capabilities

DEVELOPMENT
INSTALLATION
UPGRADE
DEPLOYMENT
Unlocking combat system development

CURRENT STATE
Upgrade in years

- Welded Foundation
- Computing equipment still being procured like it was MILSPEC equipment

FUTURE STATE
Upgrade in weeks

- Allocated component to ship
- Integrated enclosure: No rack integration/qualification needed
- Standard modular compartment: Rapid reconfiguration

DEVELOPMENT
INSTALLATION
UPGRADE
DEPLOYMENT