



Facilities Integrated Product Support (IPS) Program

Informational Brief

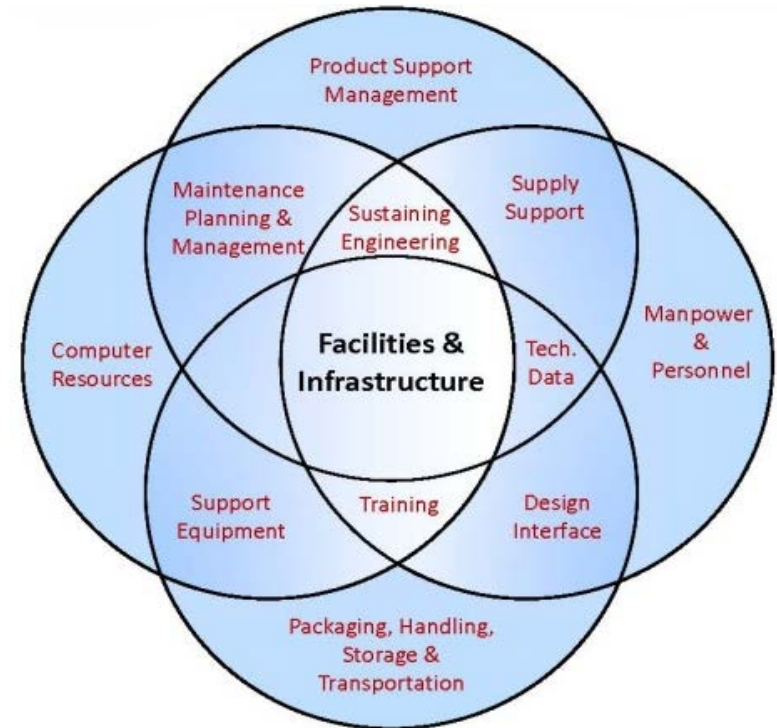
NAVFAC Facilities IPS Mission & Goals



NAVFAC Facilities IPS is a reimbursable resource to PEOs to ensure that, upon delivery, a new ship, submarine or aircraft is fully supportable by the shore enterprise.

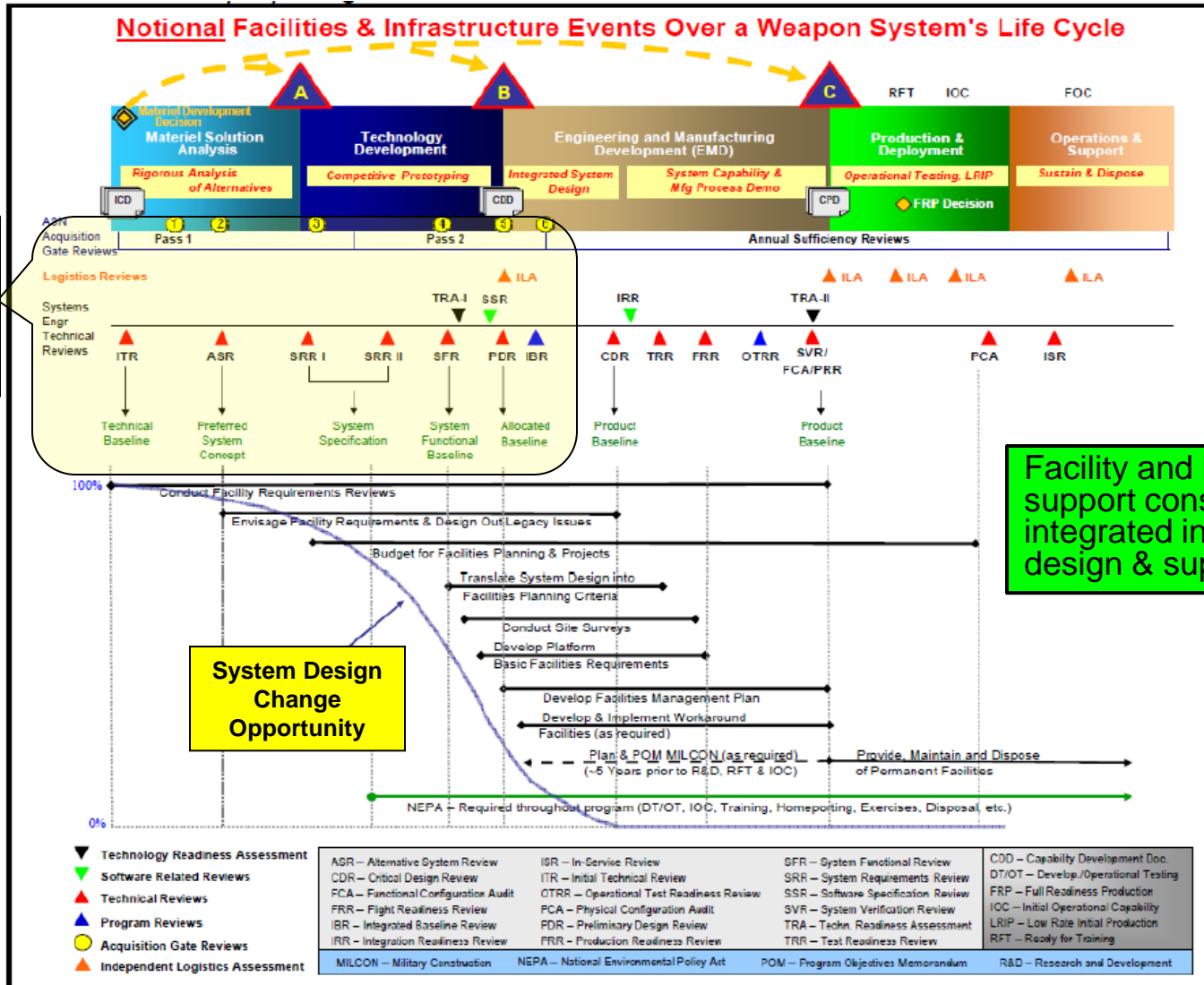
NAVFAC Facilities IPS Goals:

- Ensure shore interface & operational supportability requirements are an integral part of platform design
- Ensure all necessary shore infrastructure elements are identified, planned for and acquired
- Ensure platform shore supportability is *cost-effective throughout its life-cycle*

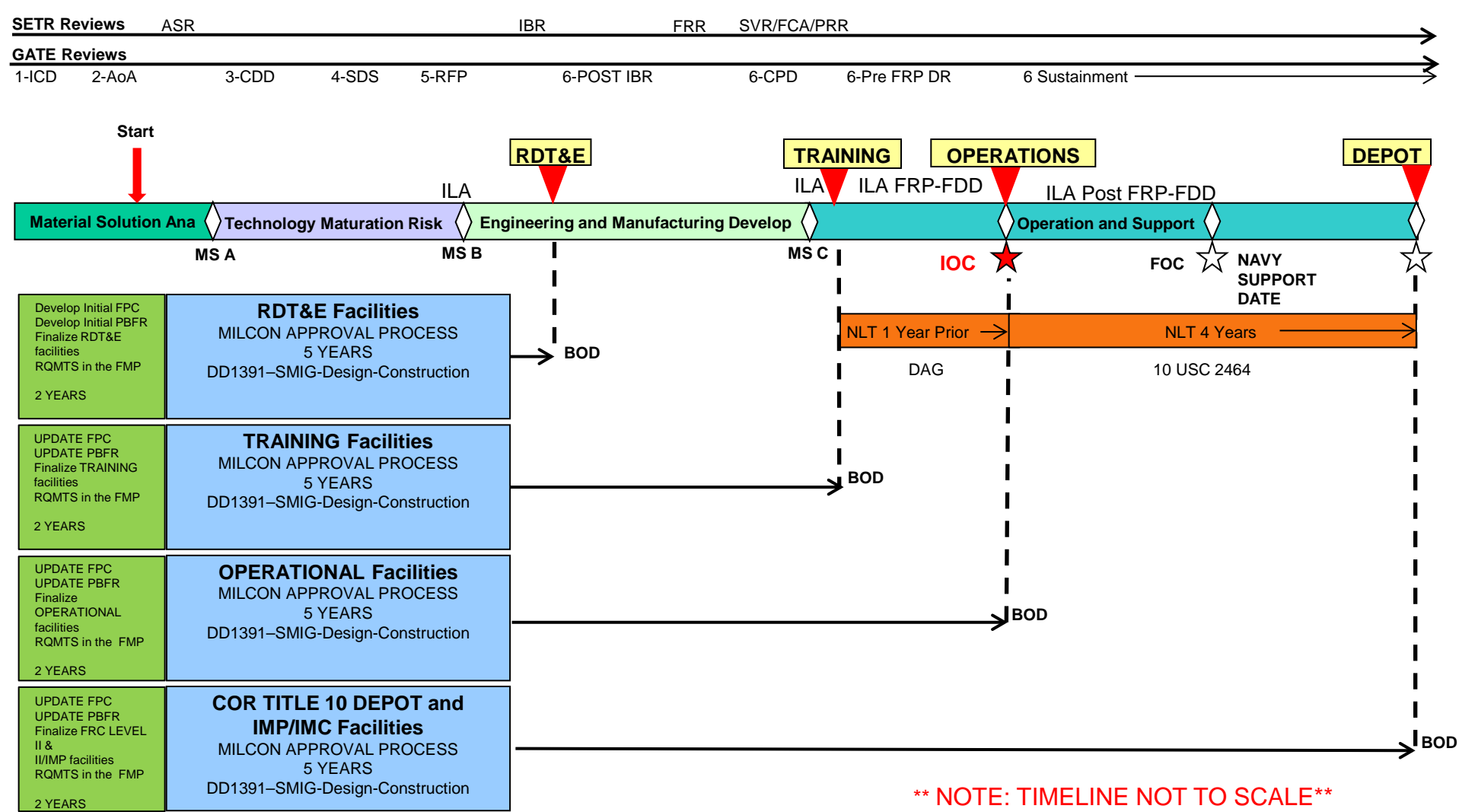


Facilities Integrated Product Support

"Harmonizing Platform Design for the Shore"

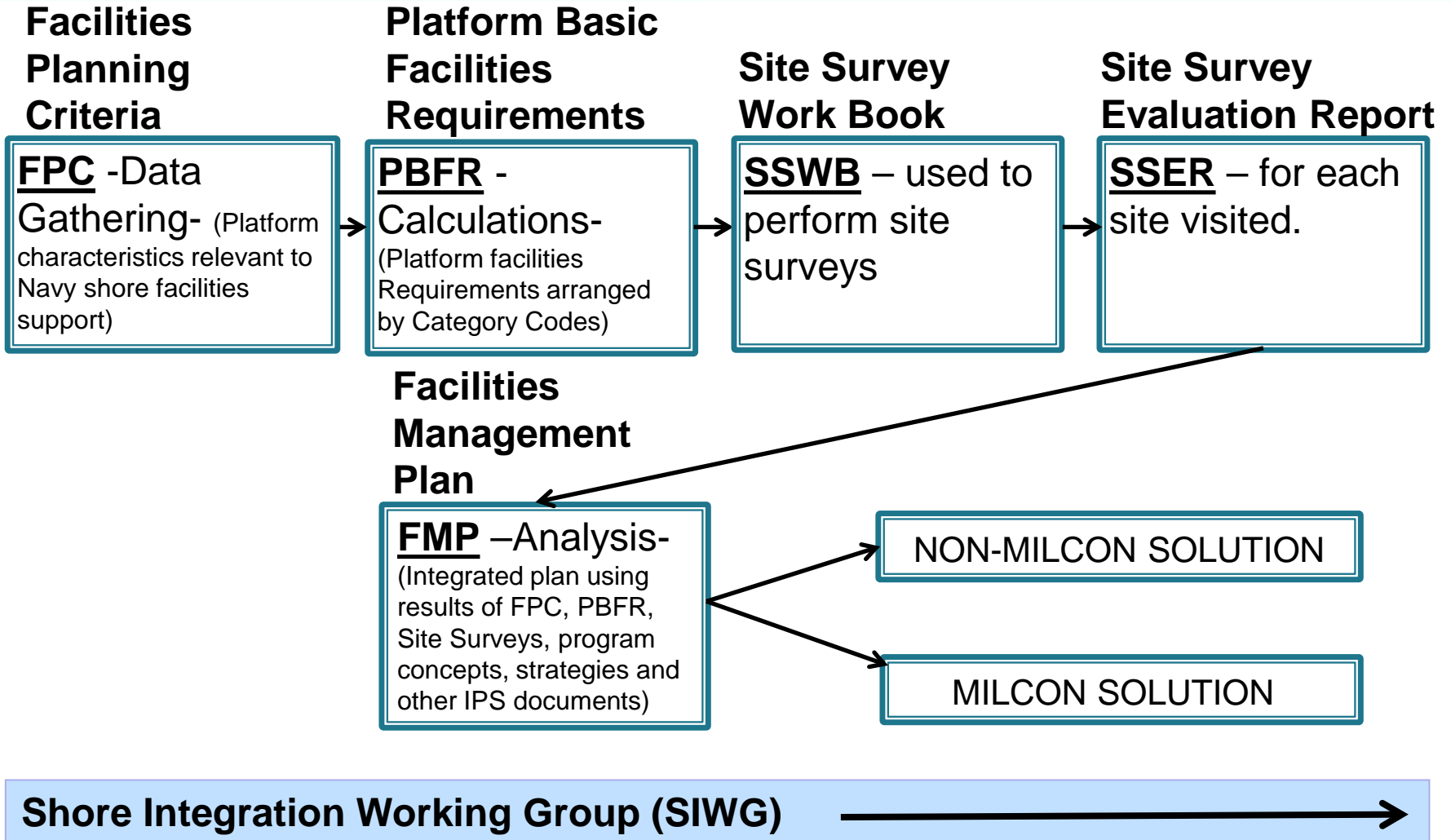


Facilities & Infrastructure Requirements Milestones in the Major Defense Acquisition Program Process



Standardized Facilities Requirements Process

SYSCOM Approved*



* ASN RDA Chartered Systems Engineering Stakeholders Group (SESG)

Shore Integration Working Group (SIWG)



Shore Integration Working Group (SIWG)

- Co-Chaired by Weapon Program Product Support Manager (PSM) Representative and NAVFAC LANT IPS support lead
- Fosters communication between stakeholders to collaborate and adjudicate issues related to facilities and infrastructure requirements
- Ensure all weapon system/platform logistics and engineering elements with potential shore infrastructure impacts are properly analyzed to mitigate shore supportability risks throughout the system/platform's life cycle
- SIWG ends at FOC

Key Enabler for Facilities IPS Products and Risk Assessment Activities

- FPC, PBFR, Site Surveys, and FMP
- Identify recommended studies (shore power, pavement thickness, storage, etc.)
- Milestone Decision Activities
 - Independent Logistics Assessments and System Engineering Technical Reviews

Facility Planning Criteria (FPC)



PLATFORM DESIGN CHARACTERISTICS / SHORE SUPPORT INTERFACES

- **FPC identifies the weapon platform design characteristics that require a shore interface, and potentially impact shore facilities and infrastructure for life-cycle supportability**
 - Number of platforms, homeport/basing locations, arrival dates
 - Platform characteristics, manning, operating cycles
 - Shore maintenance (operational, intermediate, depot) strategies and equipment
 - Berthing services: mooring, brows, tugs, dry dock
 - Shore power/utilities requirements, hotel services and lifting capacities
 - Ordnance handling and storage support

- **FPC is developed early in design process and refined commensurate with platform maturity**

- **FPC is a PEO technical document**

- **FPC is the key technical source for the development of the Platform Basic Facilities Requirements (PBFR) document**



Platform Basic Facilities Requirements (PBFR)

SHORE FACILITIES PLANNING REQUIREMENTS TO SUPPORT NEW PLATFORM

- **PBFR defines the minimum operational shore facilities and infrastructure requirements to support a new or modified weapon platform**
- **PBFR defines the facility requirements (e.g. square feet, linear feet of berth) for operational facilities, defined by DoD Unified Facilities Criteria Category Codes (100-400), to support a new or modified weapon platform:**
 - Piers/wharves/dry docks (e.g. CAT CODE 151.20 – General Purpose Berthing Pier)
 - Hangars (e.g. CAT CODE 211.05 Maintenance Hangar)
 - Maintenance/ordnance/refueling facilities (e.g. CAT CODE 213.30 Shore Intermediate Maintenance Facility)
 - Training facility (e.g. CAT CODE 171.20 – Applied Instruction Building)
- **PBFR facility requirements are applied to proposed homeports/transient basing installations to identify infrastructure gaps and support facility project planning**
- **PBFR is the key technical source for supporting site surveys and Facilities Management Plan (FMP) development**

Facilities Management Plan (FMP)



NEW PLATFORM INTRODUCTION AND SUSTAINMENT STRATEGY AT PROPOSED HOMEPORTS/ TRANSIENT SITES

- FMP identifies required shore facilities and infrastructure at potential homeports/transient sites to inform advance shore planning and Navy PPBE decision process, in support of deployment of new or modified weapon platforms
- Homeport capabilities defined include berth availability, hotel services, pierside and dry dock maintenance support, fueling, cargo handling, mooring, storage and training
- FMP supports new platform's Milestone B decision and is generally complete by Milestone C
- PEO promulgates FMP to stakeholders in support of homeport/transient basing decision-making process
- FMP is iteratively updated to reflect system/platform design maturity, supportability planning and final homeporting/transient basing decisions

3D Visualization of Platform-Shore Interface Design

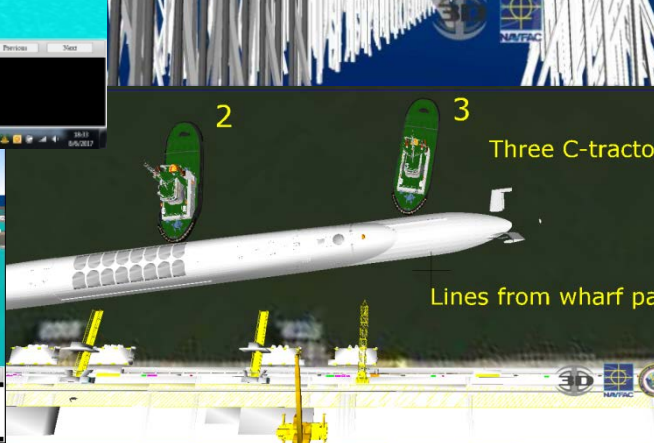
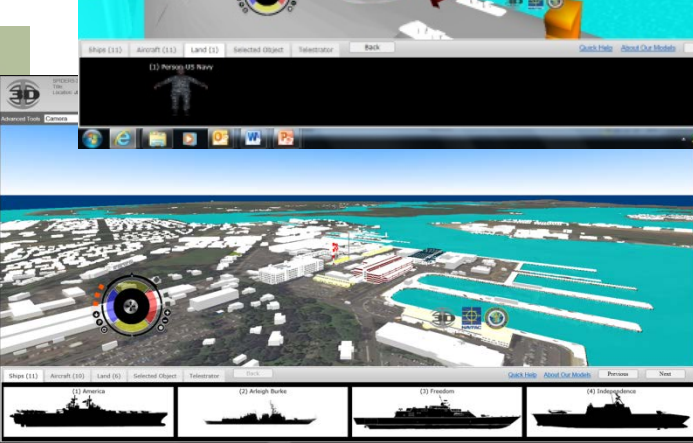
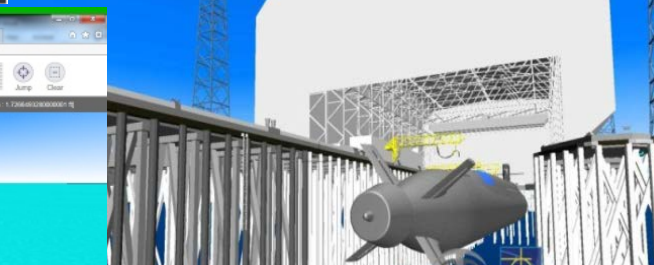
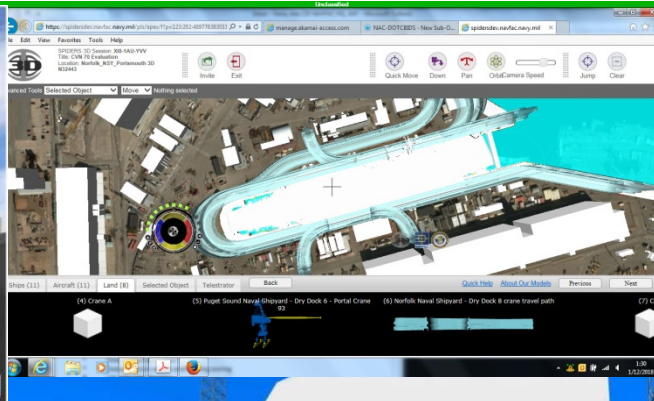
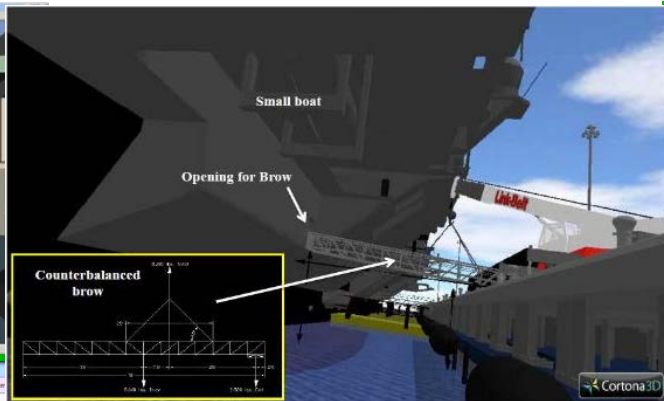
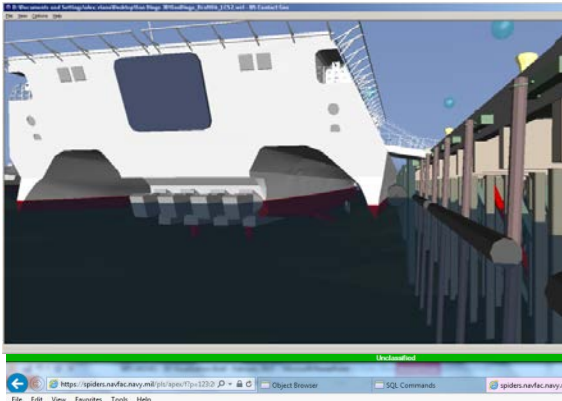
- NAVFAC has implemented an open source, web-based 3D Virtual Environment capability
 - Repurpose and contextualize wide range of disparate geospatial and CAD based data investments
 - Provides the shore enterprise an accessible, easy to use desktop tool for enterprise collaboration and facilitate cross-SYSCOM systems engineering

- Model-based 3D Virtual Naval Installation Environments support PEO design teams with contextual visualization of notional platform-shore interfaces
 - Berthing/laydown, equipment and new footprint siting concepts
 - Providing stakeholders a common intuitive and interactive 3D view to inform technical reviews/accelerate decision making

- Accelerating group learning and consensus processes

- Successfully addressing the common question associated with spatial quandary – “what does that look like?”

Systems Engineering Tools Platform-Shore Interface Design 3D Visualization



Summary



- NAVFAC Facilities IPS provides cost effective advanced shore facilities & infrastructure planning to assess and mitigate Facilities & Infrastructure Element risk through the platform acquisition's milestones (to FOC)
- The Facilities IPS process:
 - Provides a consistent and standard method to determine facilities and infrastructure requirements, risks and mitigation opportunities
 - Supports/informs auditable decisions
- NAVFAC assists the PEOs in navigating programming challenges that include but are not be limited to:
 - MILCON
 - Sustainment/Restoration/Modernization (SRM)
 - Conversion

CROSS-SYSCOM COLLABORATION IS CONTINUOUS!