NAVSEA
WARFARE CENTERS
PORT HUENEME

NAVSEA Port Hueneme

BRAC Overview
July 2005

Captain Stephen Huber
Commander Naval Surface
Warfare Center Port Hueneme

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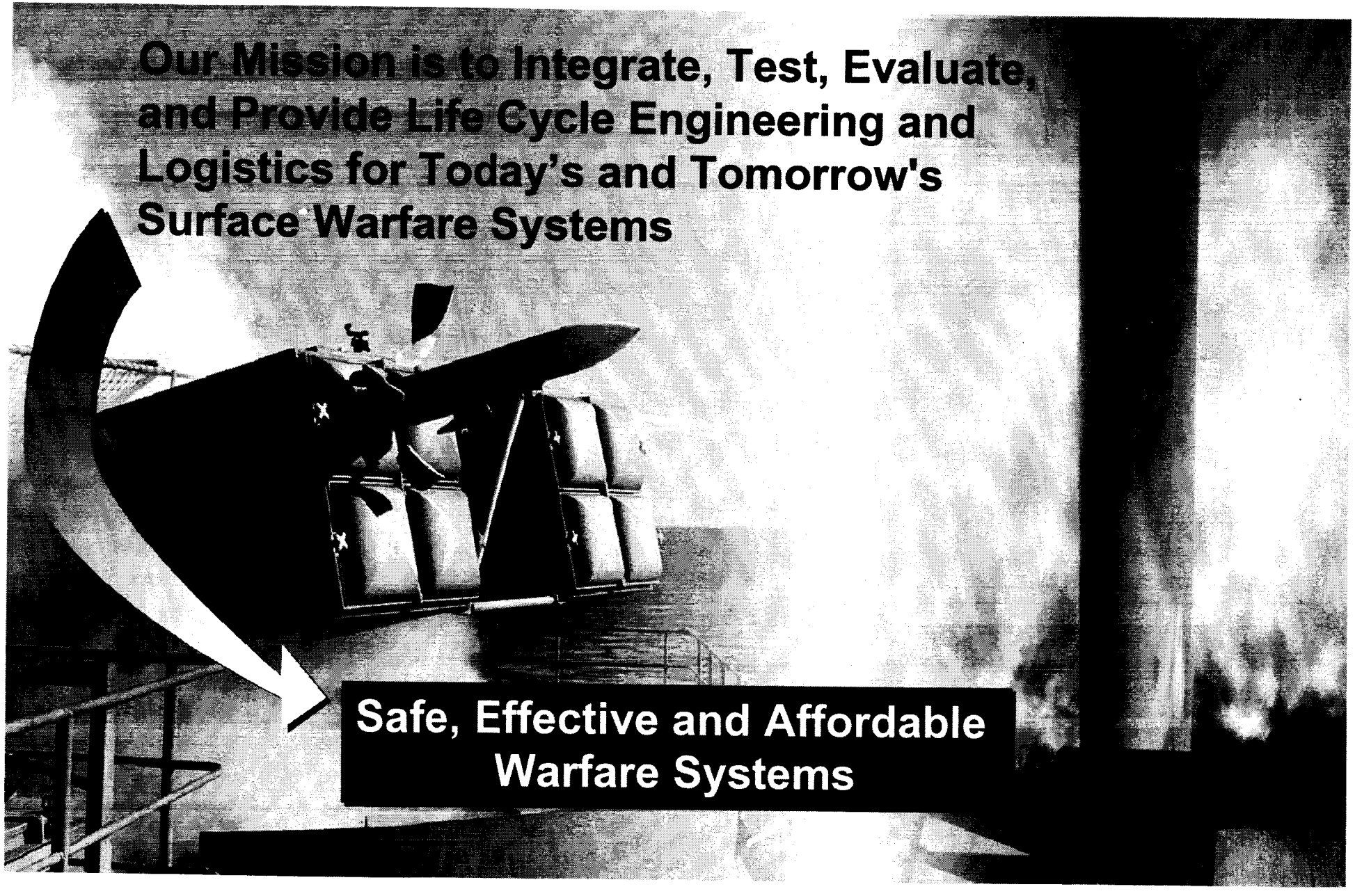
PORT HUENEME

Our Mission



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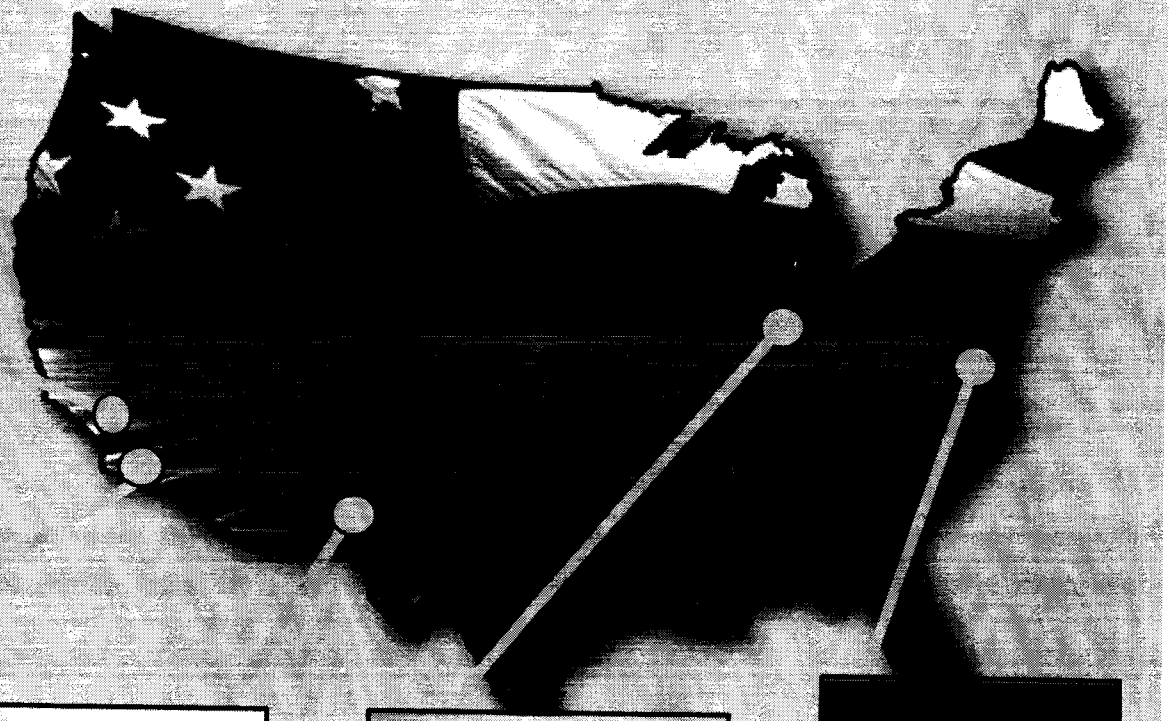
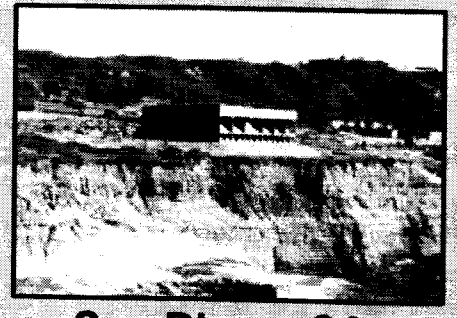
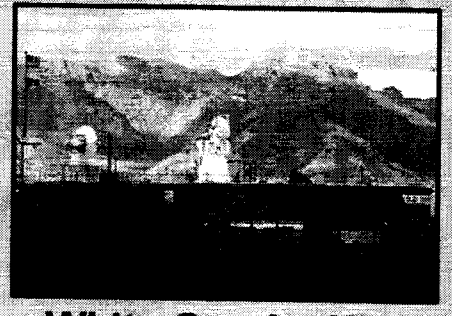
Where We Are



Port Hueneme, CA
- Combat & Weapon Systems
- In-Service Engineering
- Test & Evaluation
- Logistics



San Diego, CA
Combat Systems Integration Test

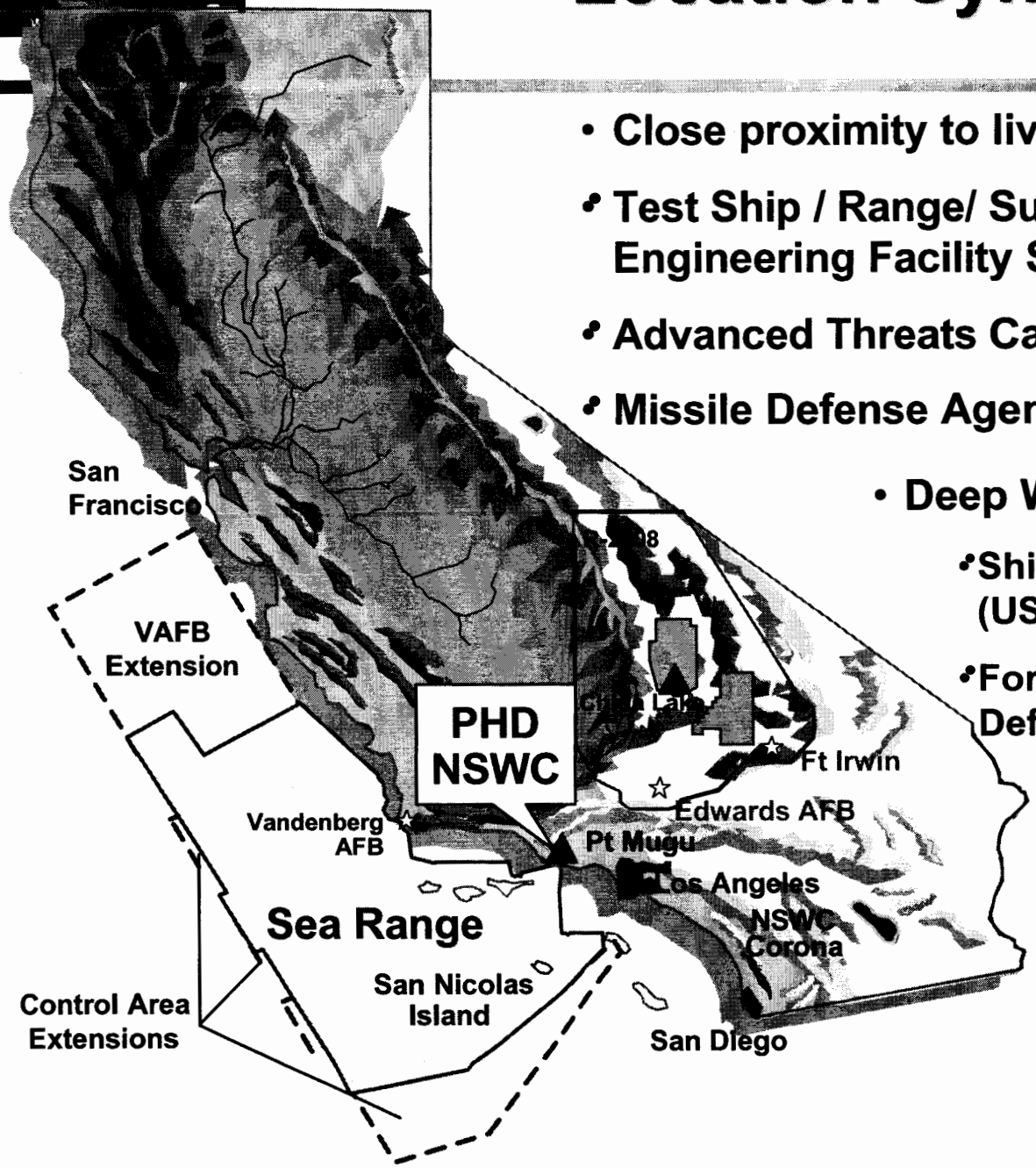


White Sands, NM
Weapon Systems Test Range
(Desert Ship)

Louisville, KY
Gun Systems

Virginia Beach, VA
Radar Systems

Location Synergy



- Close proximity to live fire at sea range
- Test Ship / Range/ Surface Warfare Engineering Facility Synergy
- Advanced Threats Capability
- Missile Defense Agency System Testing
- Deep Water Port
  - Ship Combat System Assessments (USN/CG/FMS)
  - Force Protection and Homeland Defense Exercises
- Littoral Environment

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PORT HUENEME

Workforce Team

ACTIVE DUTY MILITARY

23 Officers, 89 Enlisted

- Bring Fleet perspective and experience
- Gain technical leadership expertise

CIVILIANS

2,117 People (PH 1752 - Detachments 365)

- Long-term technical accountability
- Essential Core skills and expertise

INDUSTRY

1,200 People

- Complement government knowledge base
- Critical industrial and product development services

RESERVE MILITARY

- Unique mix of military and industry skills/experience
- Sustained Warfare Systems expertise

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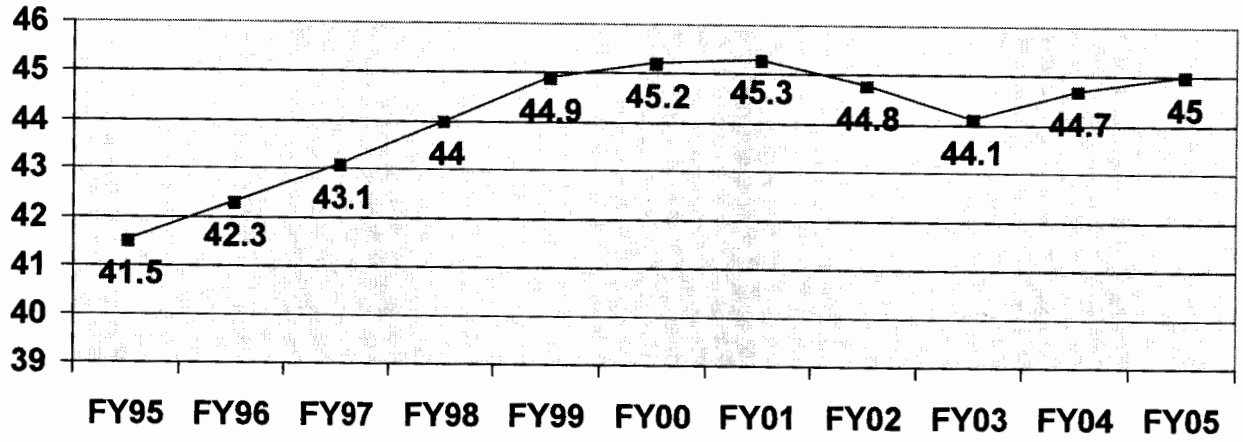
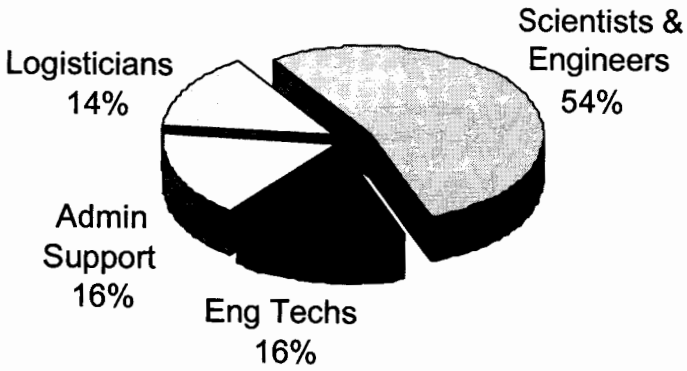
Workforce Profile

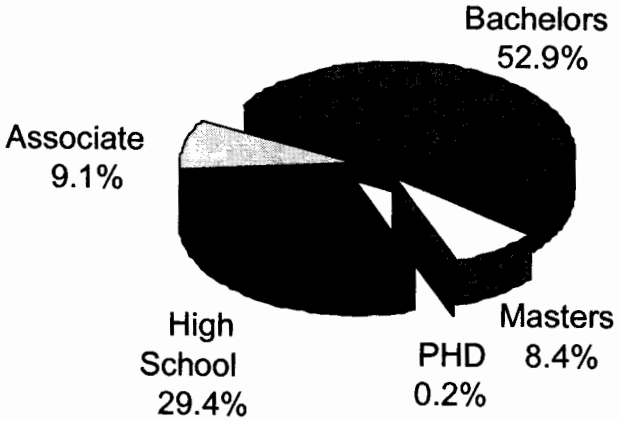
Average Age



Composition



Education



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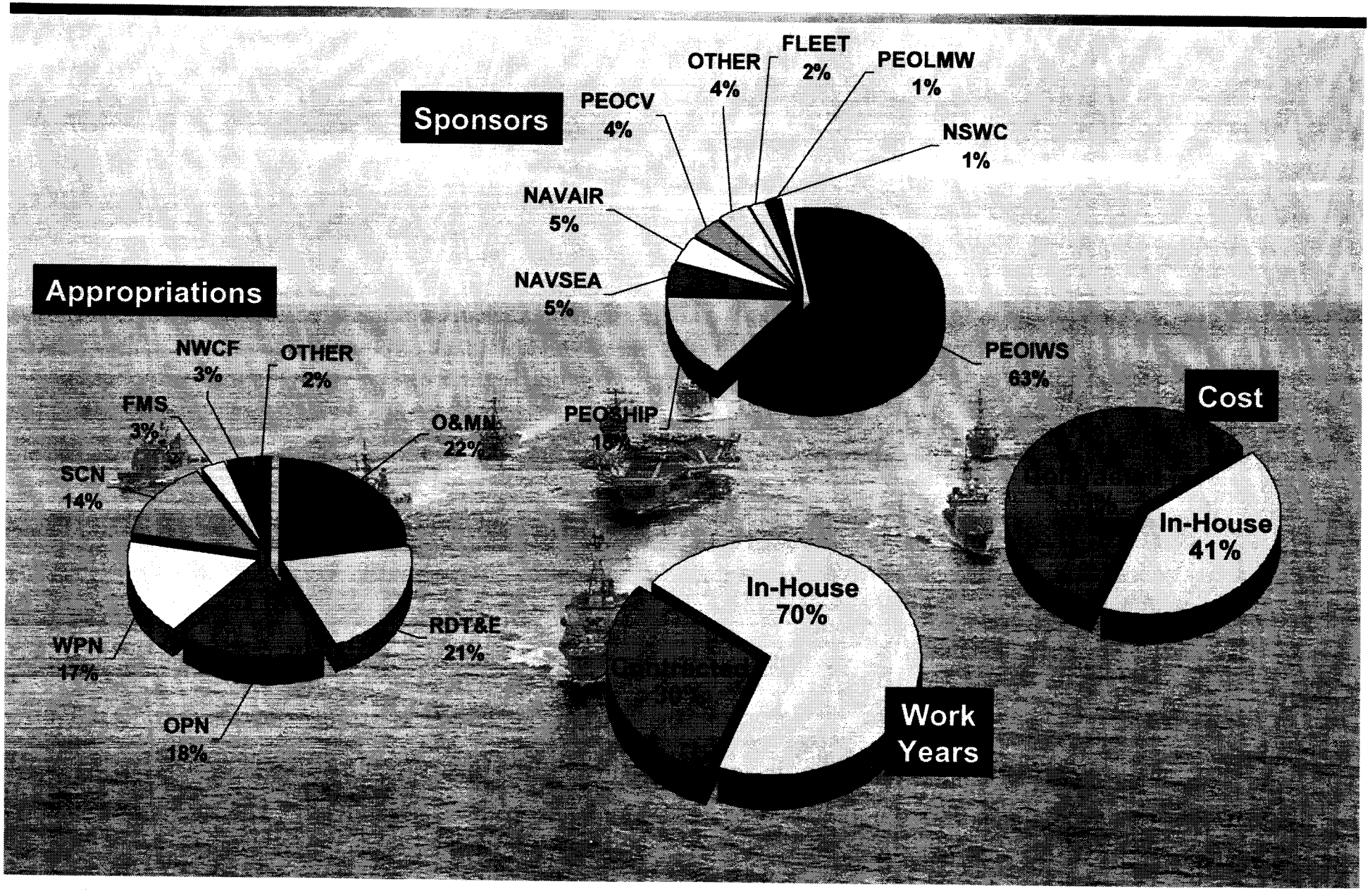
Business Base
FY06 Projected: $600M



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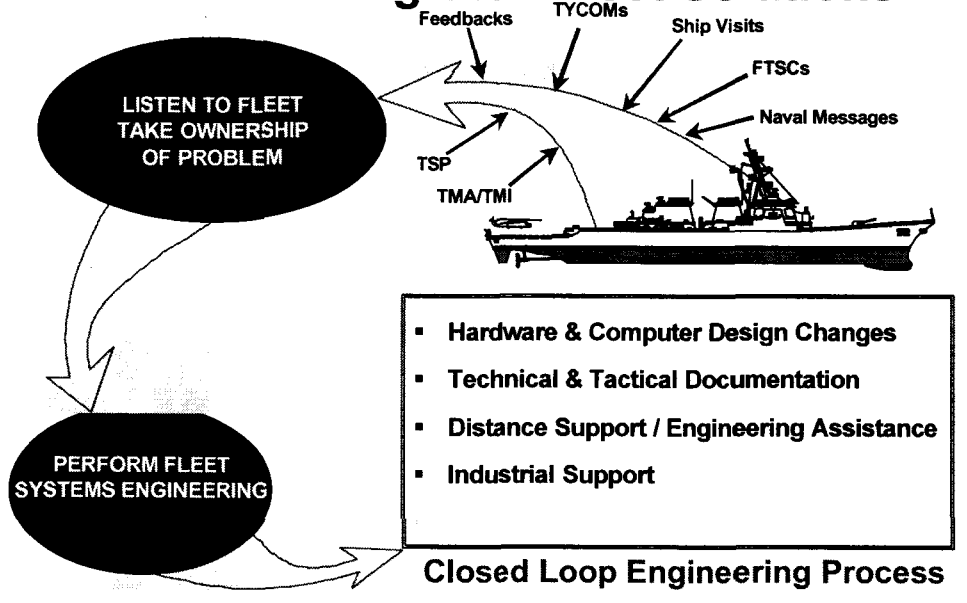
What We Do

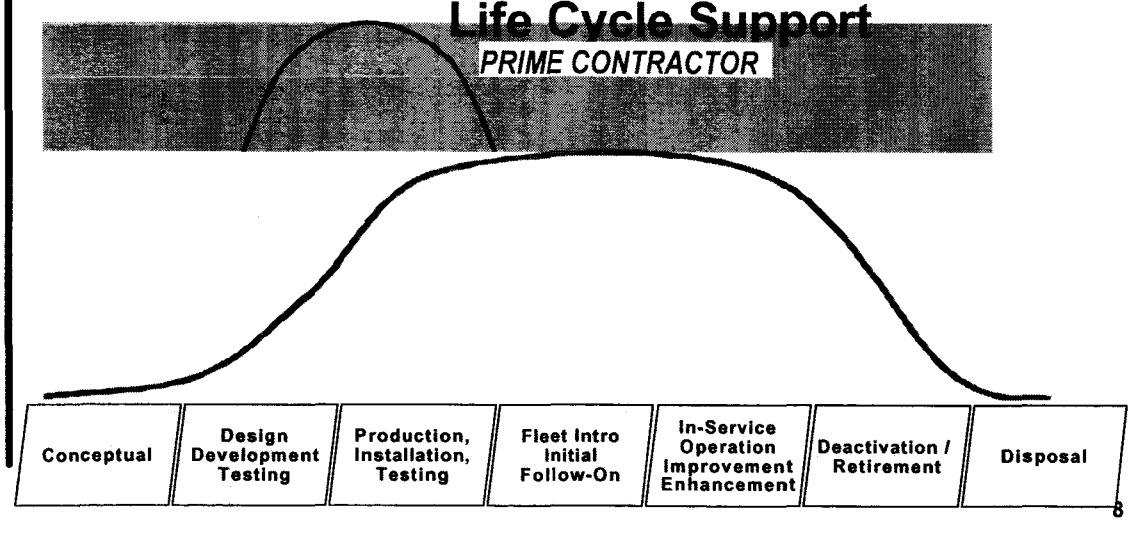
Combat Systems In-Service Engineering and Test & Evaluation

- Weapon Systems Integration
- Technical Authority
  - Safe, Effective, and Reliable Operation
  - Accountability and Technical Integrity
  - Technical Expertise
  - Systems Engineering
  - Engineering Stewardship
- Engineering and Logistics solutions for Fleet problems

Integrated Fleet Solutions



Life Cycle Support



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PHD Role

- PHD Satisfies a Unique Navy Requirement
  - Technical Authority for Weapon/Combat Systems ISE and T&E for all Surface Ships
  - Single Face to the Fleet for In-Service Combat Systems
  - Trusted Agent Throughout In-Service Life Cycle
  - Ensure Safe and Effective Operational Capability
- By Leveraging
  - Equipment to Systems Level Expertise
  - People and Unique Facilities Which Match Mission Objectives
  - Strategically Located Facilities to Perform Mission
  - Partnership Between Industry, Government and Military

Accountable Weapon/Combat System ISE Agent

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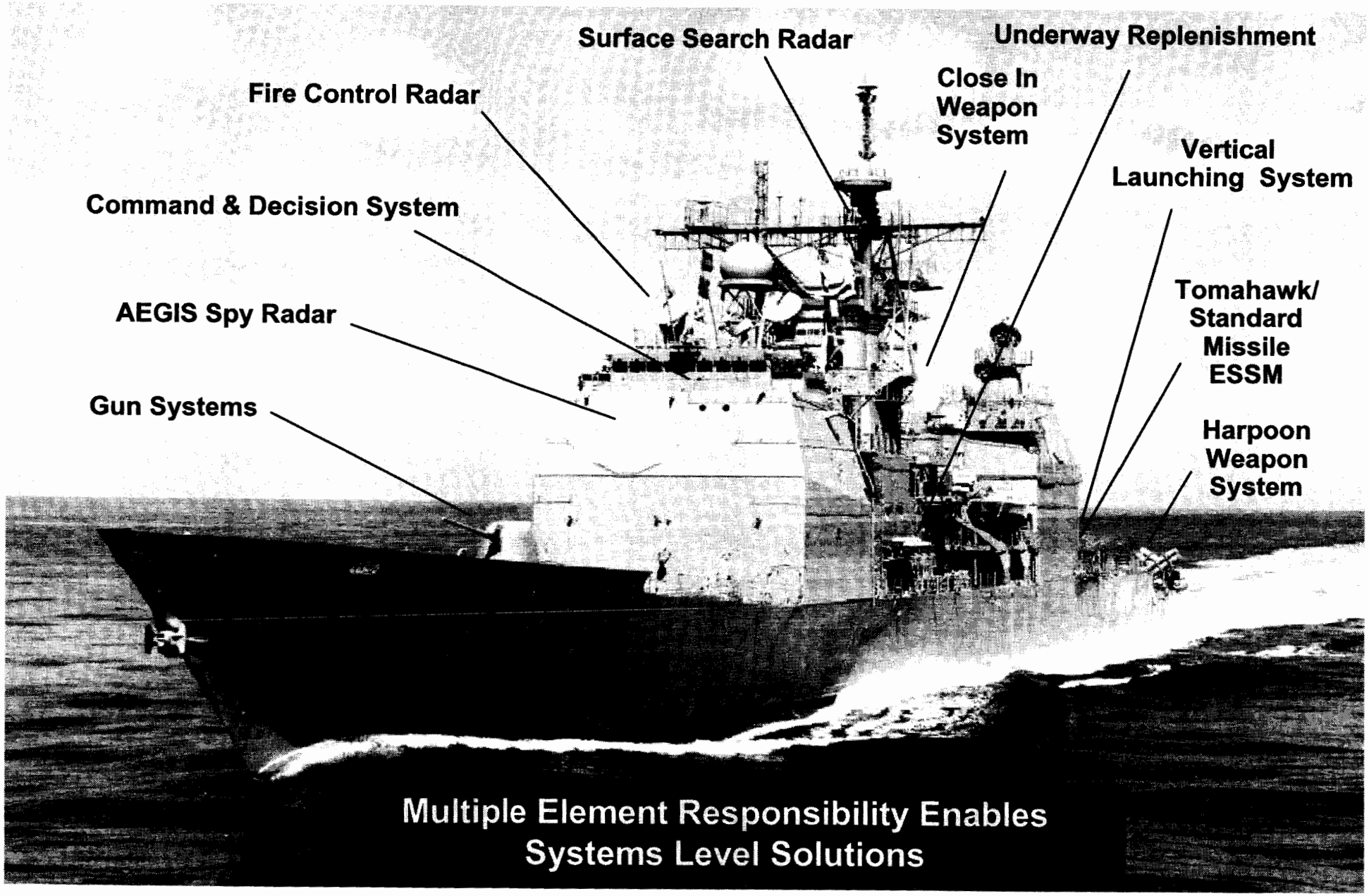
Combat Systems



Multiple Element Responsibility Enables Systems Level Solutions

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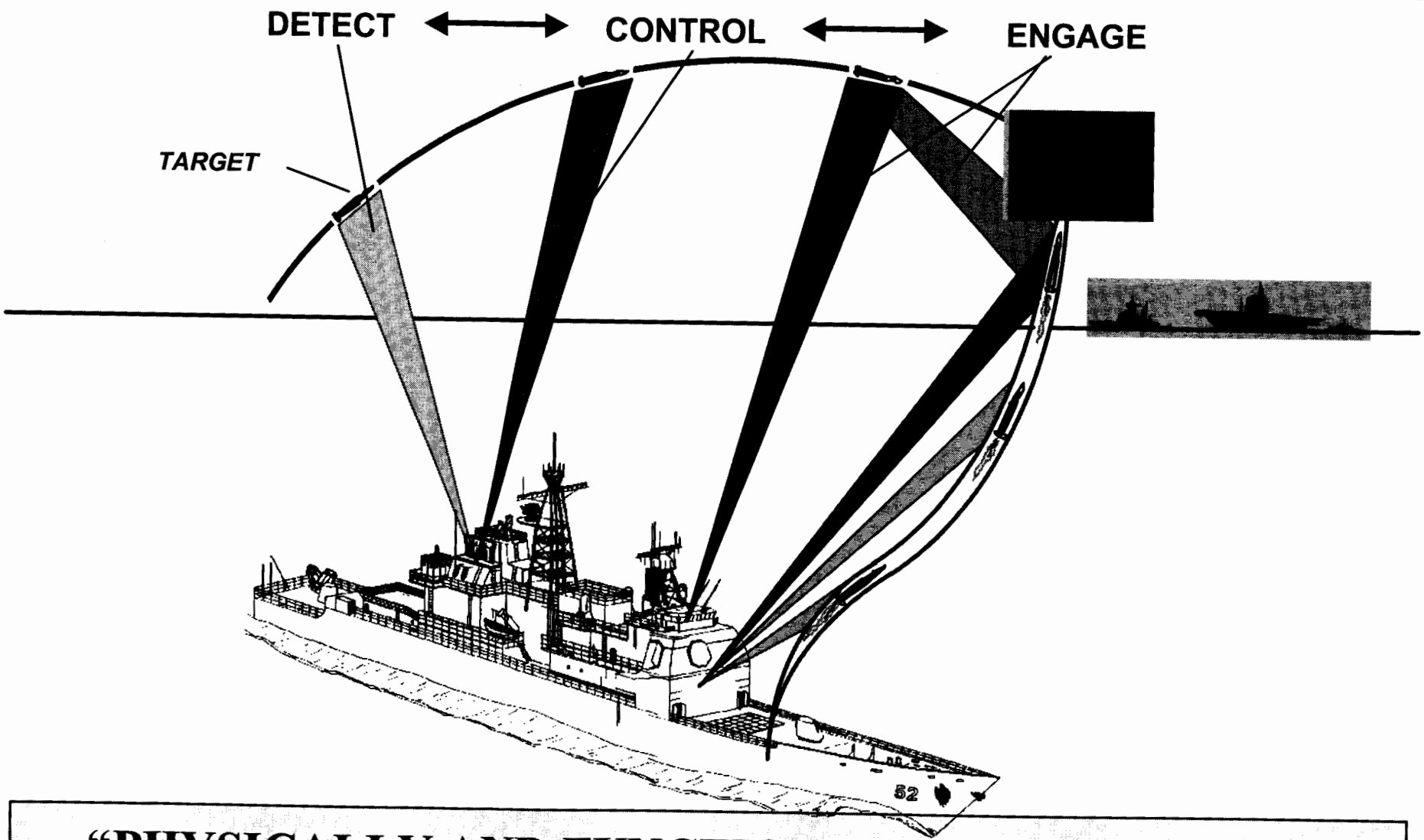
Surface Ship Combat System Operation



"PHYSICALLY AND FUNCTIONALLY INTEGRATED"

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Combat System Integration

Detect	Control	Engage
	Aegis Combat System Ballistic Missile Defense (BMD) Ship Self Defense System (SSDS) Cooperative Engagement Capability	
Radars • SPY-1 • SPS-48 • SPS-49 • SPS-55 • Multi Function Radar • Volume Search Radar • SPQ-9A • SPQ-9B Mk 46 OSS	Mk 92 Fire Control System Mk 86 Gun Fire Control System Target Acquisition System RAIDS Tomahawk WCS Harpoon WCS Naval Fires Control System Mk 160 Gun Fire Computing System Navy Tactical Command Support System Area Air Defense Commander Distributed Common Ground System SIAP Mk 74 Fire Control System (FMS) ICSTD – CSIT	Mk 34 Gun Weapon Systems Mk 38, Mk 42, Mk 45 & Mk75 Close In Weapon System NULKA Advanced Gun System Extended Range Guided Munitions Standard Missile Evolved Sea Sparrow Missile NATO SeaSparrow Missile Launching System Rolling Airframe Missile Launching System Vertical Launching System Vertical Launch ASROC

Strike Group Interoperability | NATO Sea Sparrow Depot | Combat and Interior Communications Switchboards

Naval Sea Data Support Activity

Underway Replenishment | Scientific Technical Intelligence Liaison Office (STILO) | Battle Force Tactical Trainer

Conceptual	Design Development Testing	Production, Installation Testing	Fleet Intro Initial Follow-On	In-Service Operation Improvement Enhancement	Deactivation, Retirement	Disposal

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BRAC Scenarios

- NSWC PHD is involved in 4 Scenarios
  - Weapons & Armaments (Missiles, Guns, Energetics) to NAWC China Lake (TECH0002 / TECH0018DR)
  - C4ISR to SPAWAR San Diego (TECH 0008B & TECH 0008F / TECH 0042A)
  - Integrated Combat System Test Detachment (ICSTD) to NSWC Dahlgren (TECH0002F & TECH0018DR)
  - Louisville to Picatinny Arsenal (TECH0002E & TECH0017 / TECH 0018B)

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Weapons & Armament (Missiles, Guns, Energetics) to NAWC China Lake

Scenario Action:

- Realign Port Hueneme Weapons and Armaments (except weapon system integration) and relocate to China Lake

Assumptions:

- Relocate most Weapons and Armaments e.g. missiles, energetics, guns, etc RDAT&E to China Lake

Recommendation:

- Realign Naval Base Ventura County, Port Hueneme, CA, by relocating all Weapons and Armaments Research, Development & Acquisition, and Test & Evaluation, except weapon system integration, to Naval Air Weapons Station China Lake, CA.

Justification:

- Consolidating the Navy's air-to-air, air-to-ground, and surface launched missile RD&A, and T&E activities at China Lake, CA, would create an efficient integrated RDAT&E center.

(TECH0002 / TECH0018DR)

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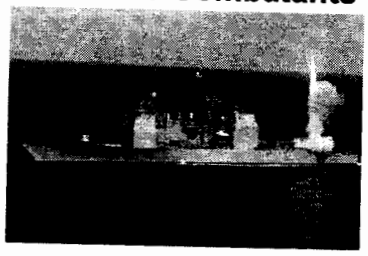
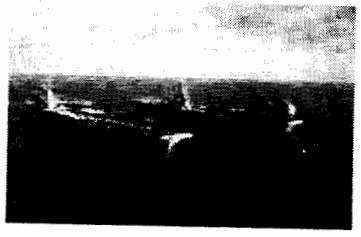
Weapons & Armament (Missiles, Guns, Energetics) to NAWC China Lake

NSWC PHD Weapons and Armament Programs

Surface Combatants



Aircraft Carriers



Amphibious Ships

Weapons Systems

- Vertical Launch ASROC
- Tomahawk WCS
- Harpoon WCS
- Mk 34 Gun Weapon System
- Mk 38, Mk 42, Mk 45 & Mk75 Guns
- Close In Weapon System
- Underway Replenishment
- Rapid Anti-ship Missile Integrated Defense System
- Distribute Common Ground System - Navy
- Area Air Defense Commander (AADC)
- Battle Force Interoperability
- Target Acquisition System
- Ballistic Missile Defense (BMD)
- Aegis Combat System
- Ship Self Defense System (SSDS)
- Mk 92 Fire Control System
- Mk 86 Gun Fire Control System
- Surface Search Radars
- Integrated Auto Detect & Tracking System
- Cooperative Engagement Capability (CEC)

Launchers (Non Missiles)

- NSSM Launching System
- Vertical Launching System
- RAM Launching System

Other

- NSDSA
- STILO
- Mk 74 FCS(FMS)
- NATO Seasparrow Depot

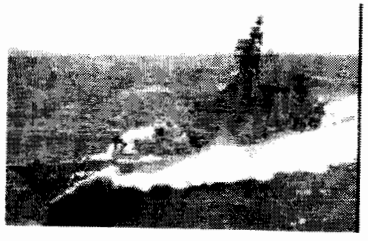
Missiles/ Energetic

- Standard Missile
- ERGM
- ESSM

Replenishment Ships

Strike Groups

Allied Forces



(TECH0002 / TECH0018DR)

NAVSEA WARFARE CENTERS
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C4ISR to SPAWAR San Diego

Scenario Action:

- Consolidate Maritime Information Systems RDAT&E functions at NSWC PHD with SPAWAR San Diego

Assumptions:

- This Scenario intends to consolidate the workload that is common with specific areas of C4ISR.

Recommendation:

- Realign Naval Base Ventura County, CA, by relocating Maritime Information Systems RDAT&E to Naval Submarine Base Point Loma, San Diego, CA, and consolidating with the Space Warfare Center to create the new Space Warfare Systems Command Pacific, Naval Submarine Base Point Loma, San Diego, CA.

Justification:

- These recommended realignments and consolidations provide for multifunctional and multidisciplinary Centers of Excellence in Maritime C4ISR.

(TECH 0008B & TECH 0008F / TECH 0042A)

NAVSEA WARFARE CENTERS
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C4ISR to SPAWAR San Diego

NSWC PHD C4ISR Programs

DCGS-Navy

AADC

Cooperative Engagement Capability

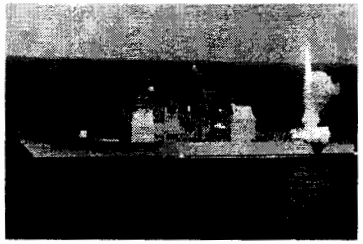
Single Integrated Air Picture

Strike Group Interoperability Test and Evaluation

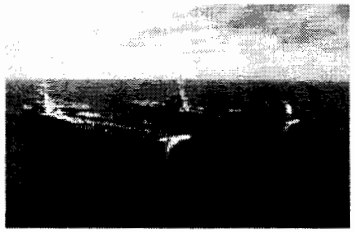
Battle Force Tactical Trainer

Combat System / Interior Communications Switchboards

Surface Combatants



Aircraft Carriers

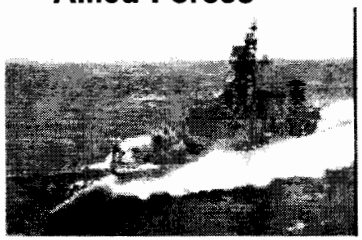


Amphibious Ships

Replenishment Ships

Strike Groups

Allied Forces



(TECH 0008B & TECH 0008F / TECH 0042A)

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ICSTD to NSWC Dahlgren

Scenario Action:

- Realign Port Hueneme (SD) and relocate to NSWC Dahlgren

Assumptions:

- This Scenario intends to consolidate the workload that is common with specific areas of Weapons and Armament.

Recommendation:

- Realign Fleet Combat Training Center, CA (Port Hueneme Detachment, San Diego, CA), by relocating all Weapons and Armaments weapon system integration Research, Development & Acquisition, and Test & Evaluation to Naval Surface Warfare Center Dahlgren, VA.

Justification

- The Naval Surface Warfare Center, Dahlgren, VA, is a receiver specialty site for Naval surface weapons systems integration and receives a west coast site for consolidation. This construct creates an integrated W&A RDAT&E center in China Lake, CA, energetics center at Indian Head, MD, and consolidates Navy surface weapons system integration at Dahlgren, VA.

Programs

- All ICSTD Programs

(TECH0002F & TECH0018DR)

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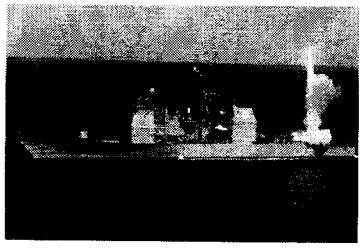
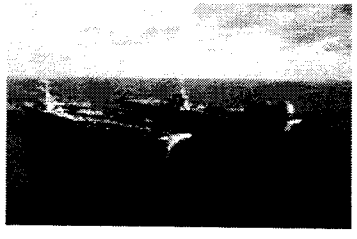
ICSTD to NSWC Dahlgren

NSWC PHD ICSTD Programs

Surface Combatants



Aircraft Carriers

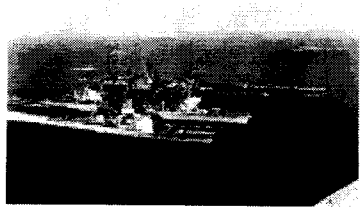


Amphibious Ships

Non-Aegis Combat Systems Integration

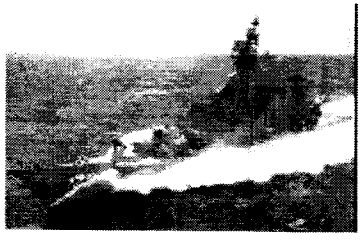
AEGIS BL 6 Phase 3

Replenishment Ships



Strike Groups

Allied Forces



(TECH0002F & TECH0018DR)

NAVSEA WARFARE CENTERS
PORT HUENEME

Louisville to Picatinny Arsenal

Scenario Action:

- Realign Detachment Louisville Guns/ammo RDAT&E and relocate to Picatinny Arsenal

Assumptions:

- Definition of Guns & Ammunition: Includes all RDAT&E associated with small, medium and large caliber gun systems, and any barrel launched ballistics rounds/systems. Includes but is not limited to mortars, tank rounds and systems, artillery, Navy Gun systems. Include all work associated with gun systems, materials and propelling charges, Does not include guidance and control, and rocket motors. Does not include weapon systems integration.

Recommendation:

- Realign the Louisville, KY, detachment of Naval Surface Warfare Center Division Port Hueneme, CA, by relocating gun and ammunition Research and Development & Acquisition to Picatinny Arsenal, NJ.

Justification:

- This recommendation realigns and consolidates those gun and ammunition facilities working in Weapons and Armaments (W&A) Research (R), Development & Acquisition (D&A). This realignment would result in a more robust joint center for gun and ammunition Research, Development & Acquisition at Picatinny Arsenal, NJ.

Programs:

- All Louisville Programs

(TECH0002E & TECH0017 / TECH 0018B)

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Louisville to Picatinny Arsenal

NSWC PHD Louisville Programs

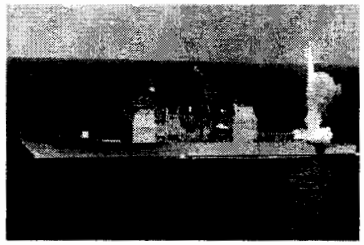
Mk 34 Gun Weapon Systems

Mk 38, Mk 42, Mk 45 & Mk 75 Gun Mount

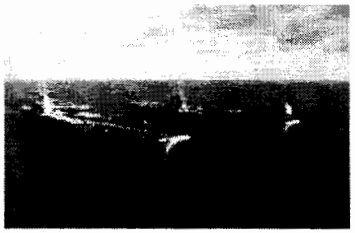
NULKA

AGS

Surface Combatants



Aircraft Carriers

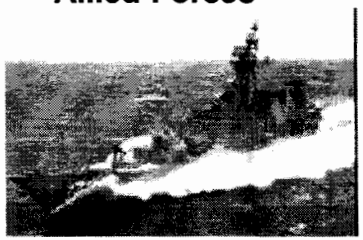


Amphibious Ships

Replenishment Ships

Strike Groups

Allied Forces



(TECH0002E & TECH0017 / TECH 0018B)

NAVSEA WARFARE CENTERS
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Potential Impacts

Detect	Control	Engage
	Aegis Combat System Ballistic Missile Defense (BMD) Ship Self Defense System (SSDS) **Cooperative Engagement Capability**	
Radars • SPY-1 • SPS-48 • SPS-49 • SPS-55 • Multi Function Radar • Volume Search Radar • SPQ-9A • SPQ-9B **Mk 46 OSS**	Mk 92 Fire Control System Mk 86 Gun Fire Control System Target Acquisition System RAIDS Tomahawk WCS Harpoon WCS Naval Fires Control System **Mk 160 Gun Fire Computing System** **Navy Tactical Command Support System** **Area Air Defense Commander** **Distributed Common Ground System** **SIAP** **Mk 74 Fire Control System (FMS)** **ICSTD – CSIT**	**Mk 34 Gun Weapon Systems** **Mk 38, Mk 42, Mk 45 & Mk75** **Close In Weapon System** **NULKA** **Advanced Gun System** **Extended Range Guided Munitions** **Standard Missile** **Evolved Sea Sparrow Missile** **NATO SeaSparrow Missile Launching System** **Rolling Airframe Missile Launching System** **Vertical Launching System** Vertical Launch ASROC

Strike Group Interoperability **NATO Sea Sparrow Depot** **Combat and Interior Communications Switchboards**

Naval Sea Data Support Activity

Underway Replenishment **Scientific Technical Intelligence Liaison Office (STILO)** **Battle Force Tactical Trainer**

[redacted] **Picatinny** [redacted] **China Lake** [redacted] **SPAWAR** [redacted] **Dahlgren**

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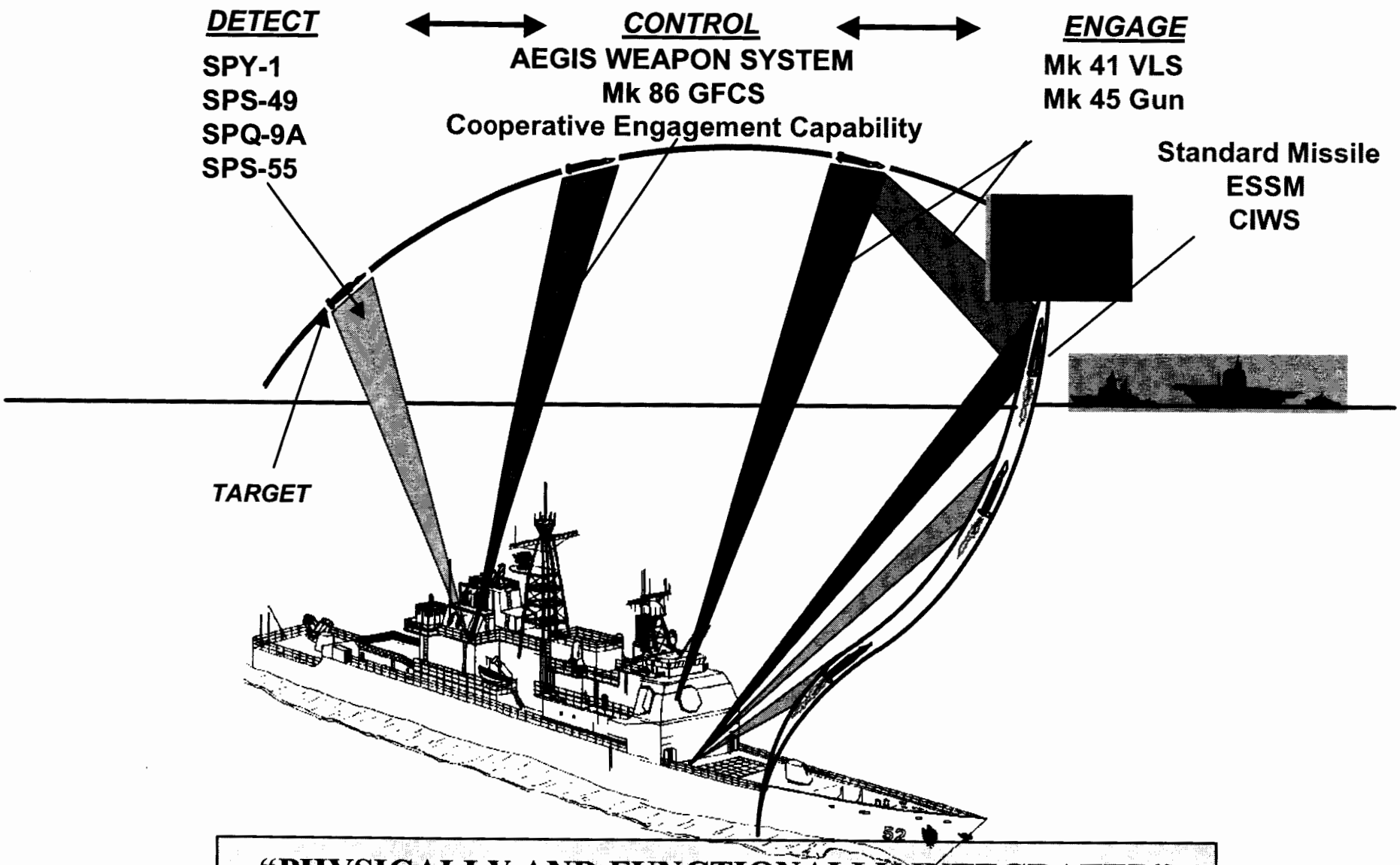
Surface Ship Combat System Operation
AEGIS Example



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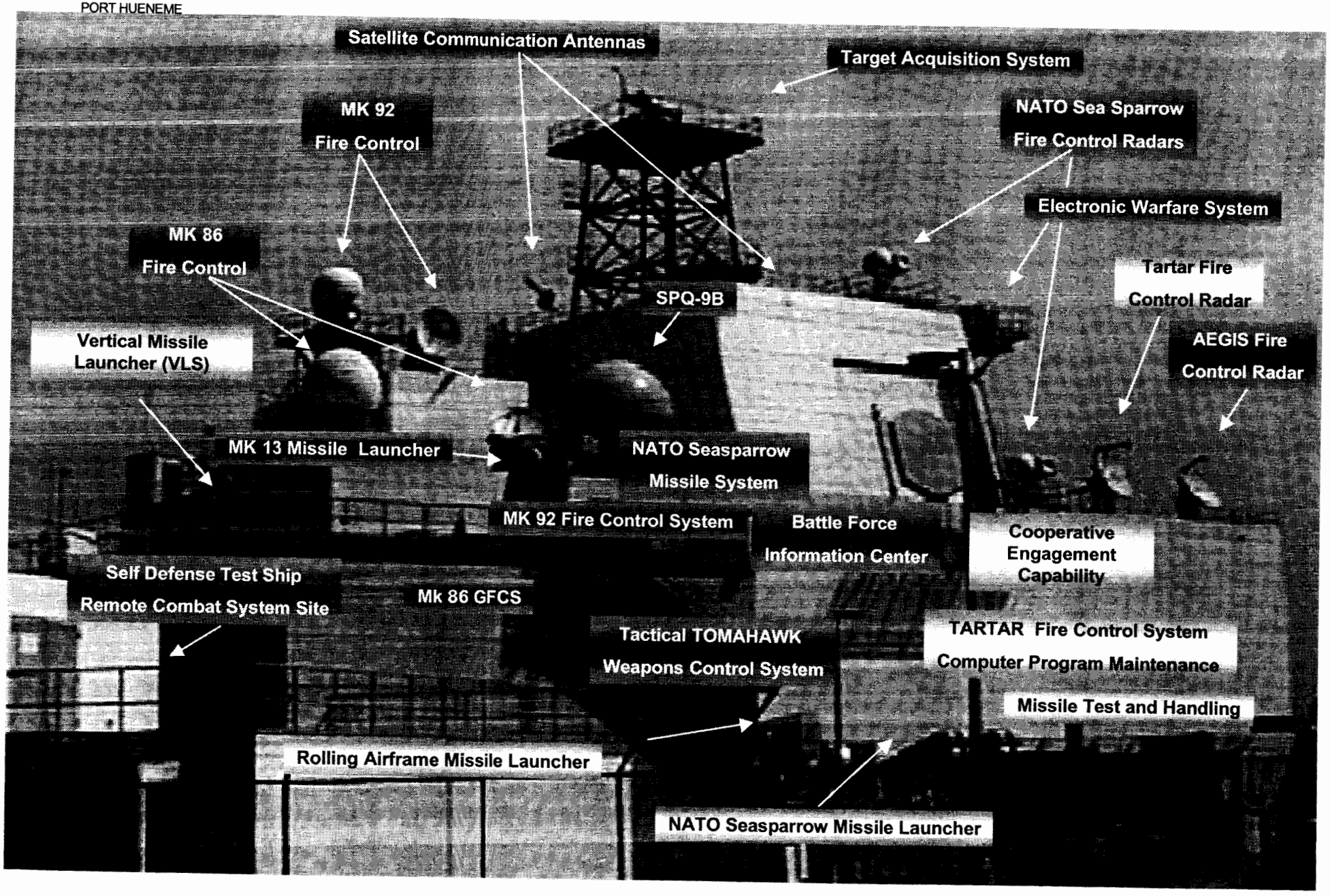
Impacted Facilities - SWEF



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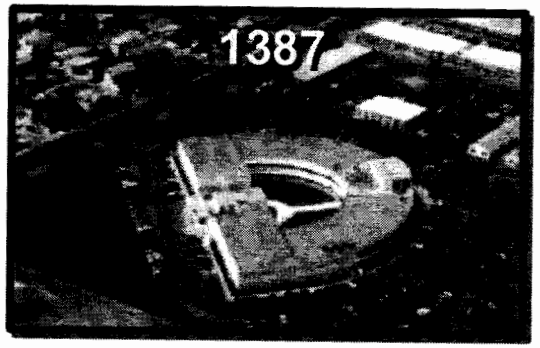
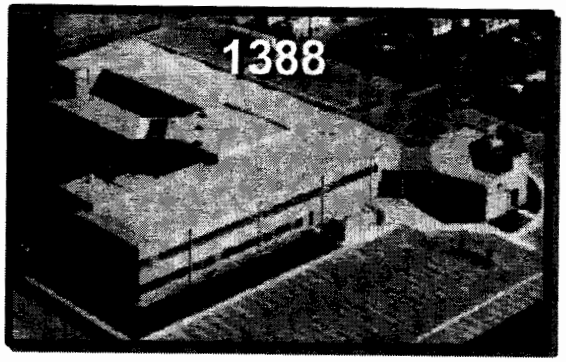
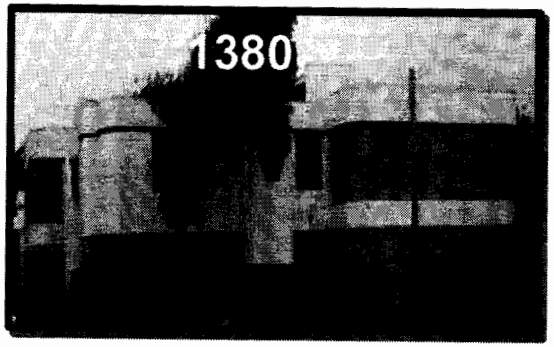
Impacted Facilities – (cont)



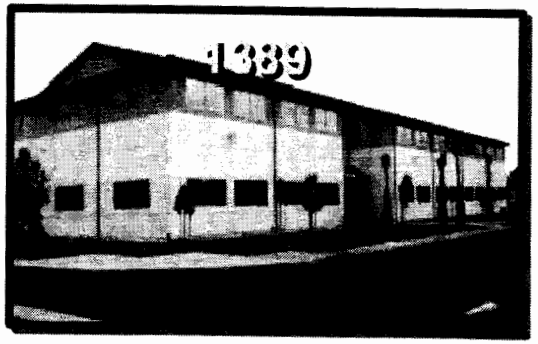
CEC
Mk 74
ESSM
Standard Missile
VLS
ERGM
AADC



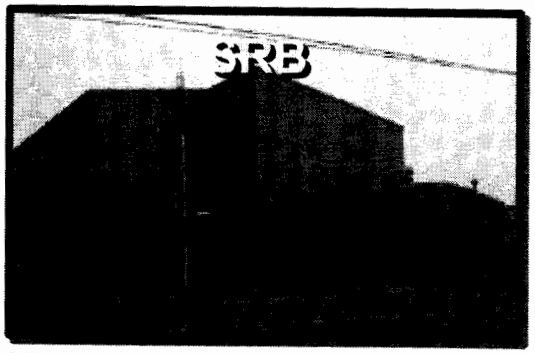
NSDSA
VLS
DCGS-N



Scientific Technical
Intelligence Liaison Office
(STILO)



NATO SeaSparrow
RAM System
CS/IC Switchboards
NSPO Depot

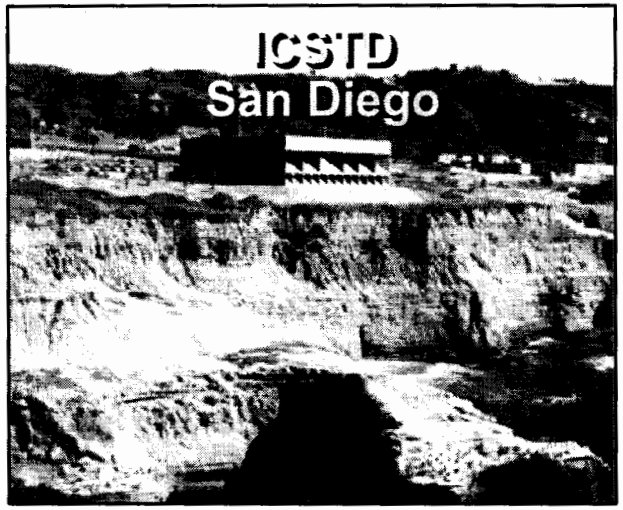


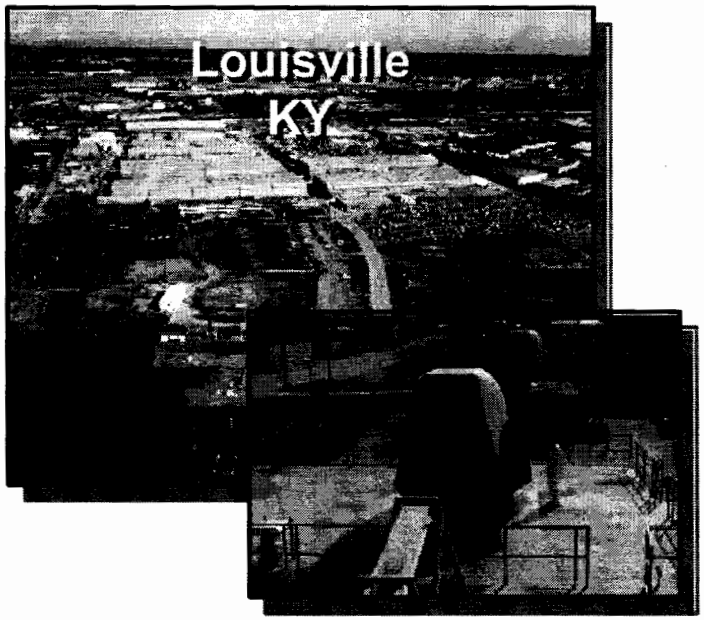
VLS Canister
Missile Maintenance

Combat and IC Switchboards
Laboratory

NAVSEA WARFARE CENTERS
PORT HUENEME

Impacted Facilities - Detachments





- Conduct Independent Combat System Computer Program Certification
- Provide Distributed Engineering Plant Node for Hardware/ Software Integration
- Provides Acquisition, Production & Operational Support of In-Service and Emerging Naval Gun Weapon Systems

NAVSEA
WARFARE CENTERS
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Take Away

"Naval shipborne warfare systems are specifically designed to be fully embedded within the form of a ship's hull design. The elements of the detect-to-engage sequence are physically and functionally integrated and not separable as independent components."

PHD PERFORMS WARFARE SYSTEMS INTEGRATION

Q & A